

A microscopic view of brain cells, showing various types of neurons and their intricate network of dendrites and axons. The image is overlaid with a semi-transparent purple gradient.

GARVEY INSTITUTE for BRAIN HEALTH SOLUTIONS 2nd Annual Meeting

JANUARY 27, 2023

Agenda



- 8:30 – 9:00 Introductions: Jurgen Unutzer & Ana Mari Cauce
Brief Overview
- 9:00 – 10:00 Innovations
- 10:00 – 10:50 Improving Care
- 10:50 – 11:00 Break
- 11:00 – 11:45 The Next Generation
- 11:45 – 12:00 Wrap-Up and Closing
- 12:00 – 2:00 Networking Lunch & Poster Session

Garvey Institute for Brain Health Solutions

Foundational gift, Fall 2019

Put together the best minds in the Pacific Northwest to:

- improve the lives of individuals and families living with brain health and mental health problems today.
- discover better treatments for tomorrow.
- inspire the next generation of scientists and health care professionals caring for our families.



Garvey Institute Community Advisory Board



Craig Cole



Rita Egrari



Joe Whittinghill



Ken Worzel

Staff



Jürgen Unützer



Becky Sladek



Andie Uomoto



Mary Pyper



Semhar Abraha



Mike Walker

Advisory Groups

Addictions

- Seema Clifasefi, PhD
- Susan Ferguson, PhD
- Ray Hsiao, MD
- Mary Larimer, PhD
- Michael McDonell, PhD
- Joe Merrill, MD
- John Neumaier, MD, PhD
- Myra Parker, JD, MPH, PhD
- Richard Ries, MD
- Andrew Saxon, MD
- Mark Sullivan, MD, PhD

Brain health and cognitive aging

- Barak Gaster, MD, FACP
- Tom Grabowski, MD
- Jeff Iliff, PhD
- Thabele (Bay) Leslie-Mazwi, MD
- John Neumaier, MD, PhD
- Elaine Peskind, MD
- Patrick Raue, PhD
- Michael Schrift, DO
- Mark Snowden, MD, MPH
- Michael V. Vitiello, PhD

Trauma

- Michele Bedard-Gilligan, PhD
- Jesse Fann, MD, MPH
- John Fortney, PhD
- Jeanne Hoffman, PhD
- Kristen Lindgren, PhD

Technology and Brain Health

- Trevor Cohen, MBChB, PhD, FACMI
- Anind Dey, PhD, MS
- Amelia Dubovsky, MD
- David Dunner, MD
- Charles Engel, MD, MPH
- Brad Felker, MD
- Kevin Hallgren, PhD
- Ryan Kimmel, MD
- Sarah Kopelovich, PhD
- John Neumaier, MD, PhD
- Michael Schrift, DO
- Jaime Snyder, PhD
- William Solan, MD

Adolescent and young adult mental health

- Jason Kilmer, PhD
- Elizabeth McCauley, PhD
- Laura Richardson, MD, MPH
- Carol Rockhill, MD, PhD, MPH
- Ann Vander Stoep, PhD
- Larry Wissow, MD, MPH

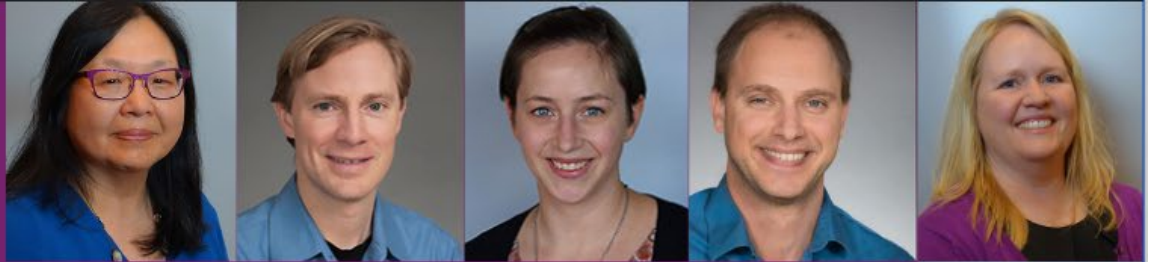
Innovation Grant Awardees, 2020

Cognitive aging, trauma, addictions

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**Congratulations to our
Innovation Grant awardees!**



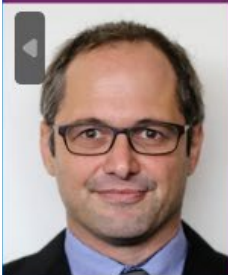
Innovation Grant Awardees, 2021

Technology-driven solutions

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**Congratulations to our
Innovation Grant awardees!**



Innovation Grant Awardees, 2021

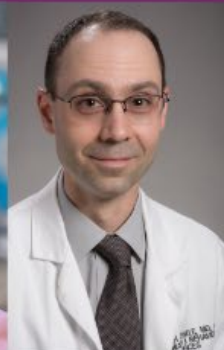
Young adult and adolescent mental health

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**Congratulations to our
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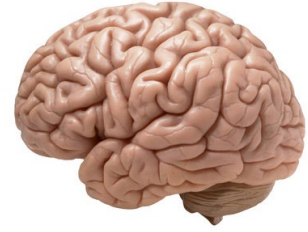




Welcome from President Ana Mari Cauce, PhD



The Brain 101



3 pounds (2% of body weight). 75 % Water. Uses ~ 20 % of our body's energy.

- ~100 billion neurons (nerve cells)
- ~100 billion glia (support cells)
- ~100 trillion connections
 - complex circuitry (connectome) - modified until our mid 20s
 - by far the most complex organ we have

Healthy brains

- Process information
- Create consciousness & experiences
- Create memories
- Solve problems
- Control our thoughts, feelings, behaviors, action & speech
- Shape who we are (personality; we are not all 'wired the same')



WHEN THINGS GO WRONG ...

Severe mental illnesses

- e.g., autism, schizophrenia, bipolar disorder

Common mental health problems

- e.g., depression, anxiety, addiction

Cognitive impairment & dementia

- e.g., Alzheimer's disease, stroke

Risky health behaviors

- e.g., alcohol / drug use, suicide



The costs of mental illness and addiction

Mental health / addiction problems affect **nearly half of the world's population** at some point.

50 % present by the age of 14; 75 % present by age 24

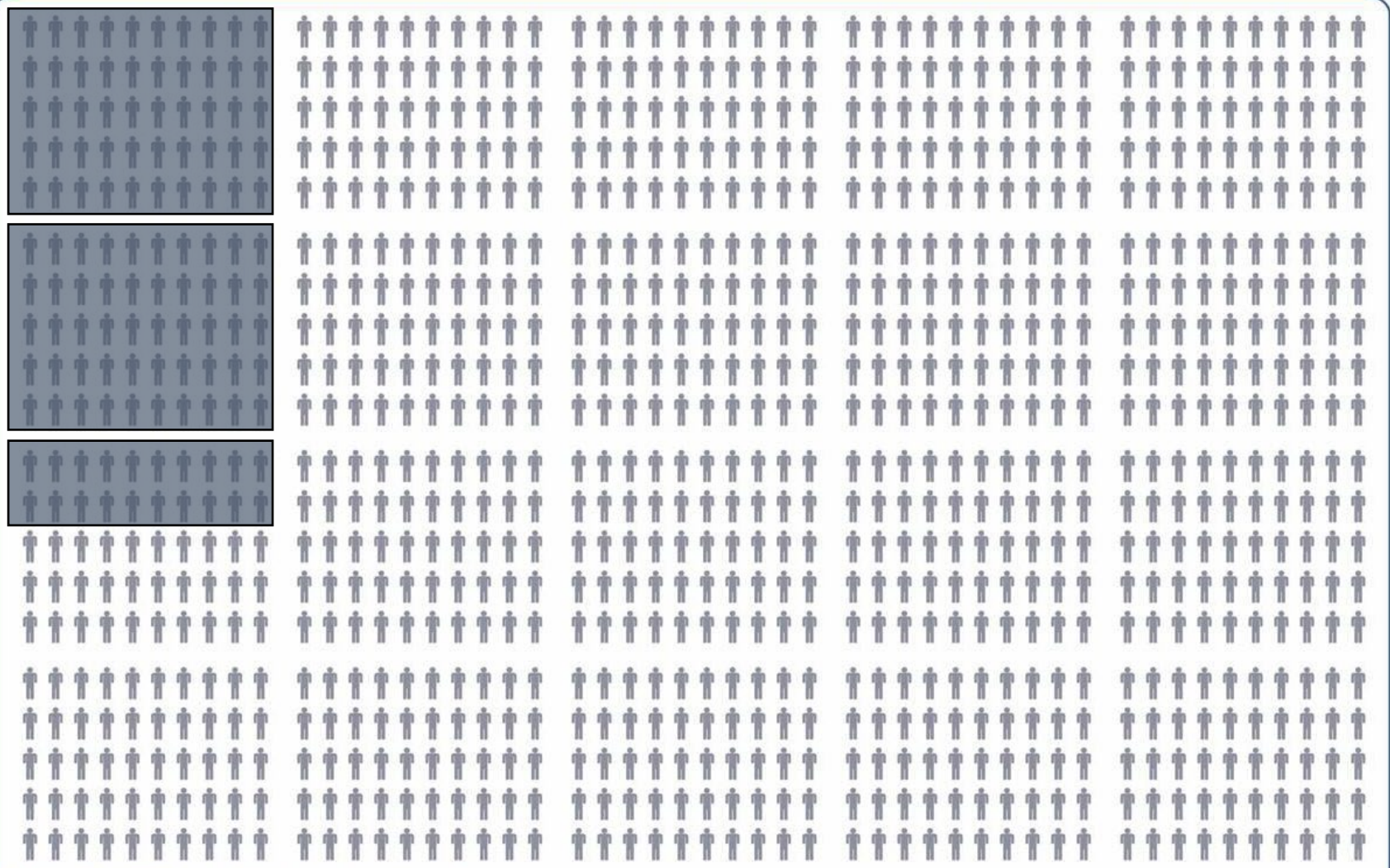
- Cause of 30 % of all health-related disability
 - **5 times more disability than diabetes or heart disease**
 - **15 times more disability than cancer**
- A major cause of early mortality
 - Individuals living with serious mental illness die 15-30 years younger than their peers.
 - A suicide every 13 minutes. A drug overdose every 8 minutes.
 - These trends worsened during the COVID pandemic, especially among adolescents.
 - More deaths from overdose each year than from car accidents or the Vietnam war.
- Cost the US more than \$ 1.5 trillion / year
 - Direct health care costs & indirect costs
 - Employers: absenteeism, presenteeism, reduced productivity, staff turnover
 - Governments: disability, homelessness, criminal justice involvement

Almost every family is affected, but **few get effective care**.

Of all people living with mental disorders



12% see a psychiatrist

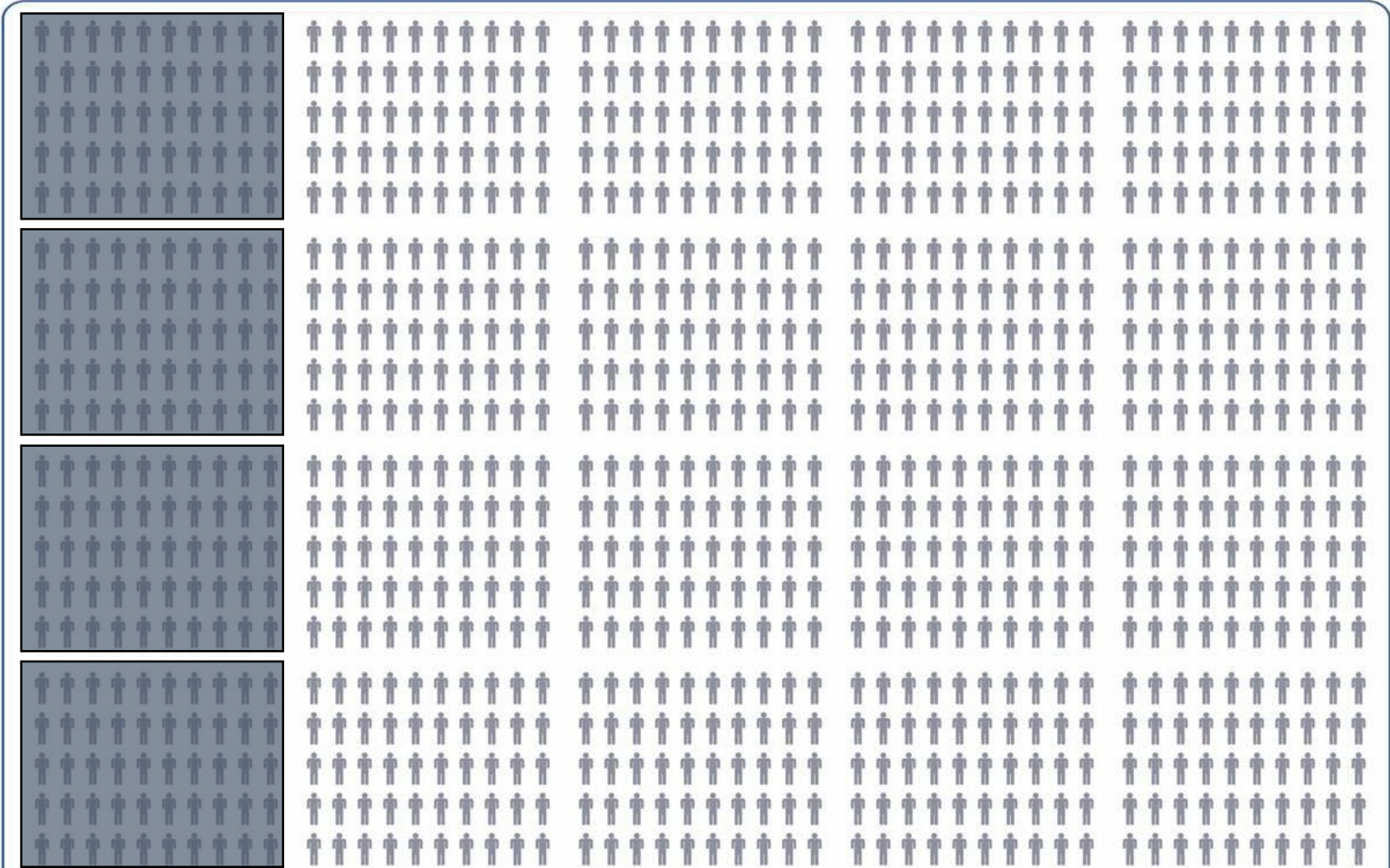


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20 % see any mental health professional



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40 % get mental health treatment in primary care



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Most get no mental health care



What if this was cancer? Would we be ok with this?

Mission & Vision



Garvey Institute for Brain Health Solutions

Treating and preventing disabling brain disorders from birth through old age

The mission of the GIBHS is to **improve the health for millions of people at risk for and affected by mental health, substance use, and other brain health disorders.**

We see a future where we can **prevent** disabling brain disorders through effective interventions from birth through old age and where those affected by mental health and substance use disorders receive effective **treatment**, enabling all of us to live healthy and productive lives.

Garvey Institute Strategies



- Innovation: Innovation Grants
- Training programs
- Recruitments

Innovation Grants



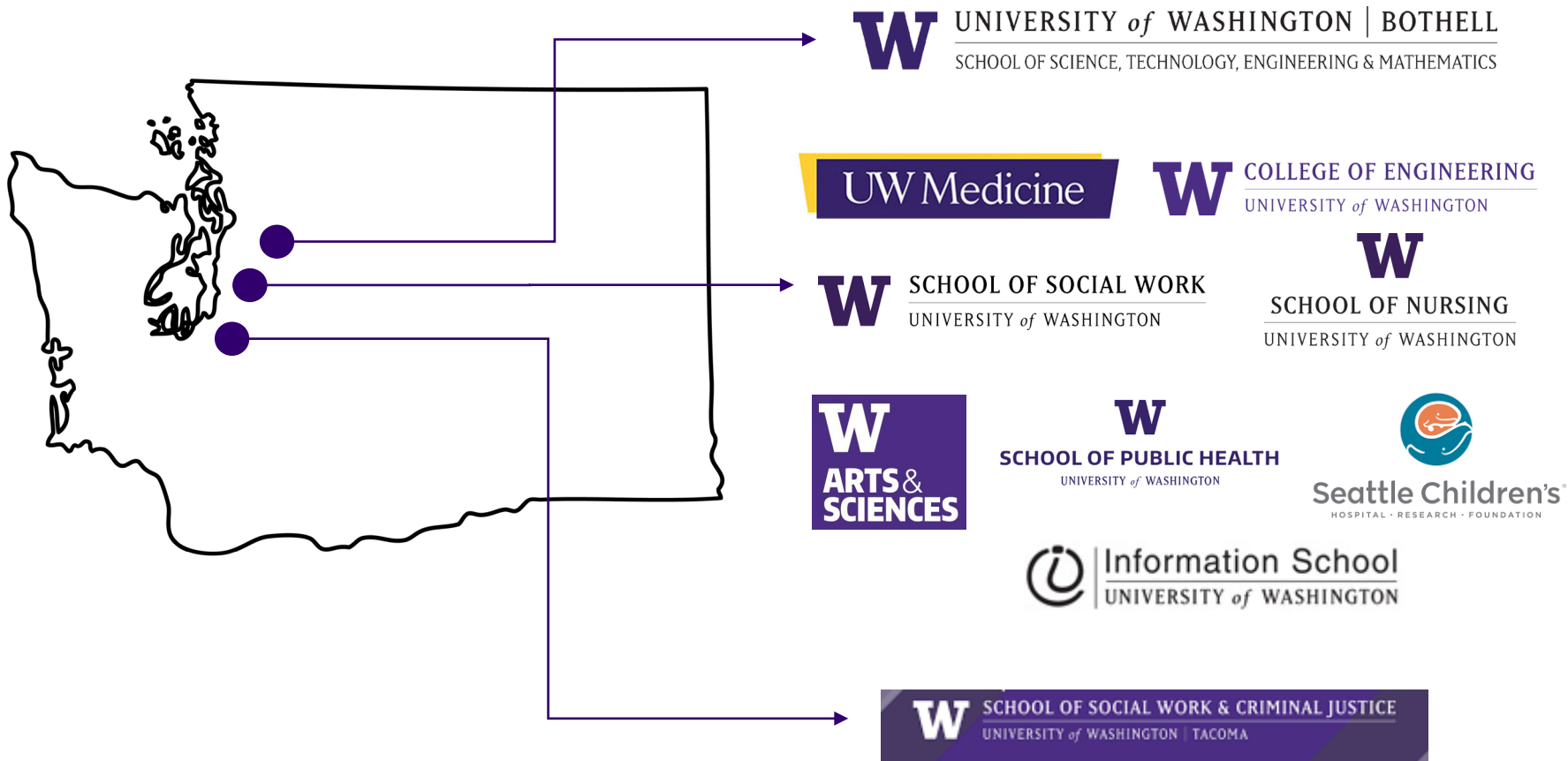
Provide funding for innovative, new ideas that can

- make a **substantial impact** on brain health
- help advance the Institute's goals to improve brain health at a **population level**
- can be **rapidly translated** into clinical care / services
- serve as a proof of concept that can lead to **additional funding**
- are funded up to **\$100,000**

36 grants awarded to 88 investigators to date

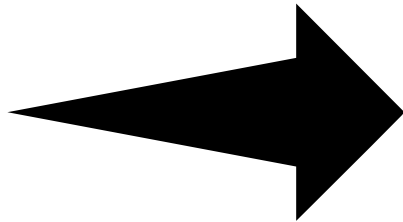
Innovation Grants

- 88 investigators from all 3 UW campuses, 9 Schools and Colleges, 23 departments, and numerous local and regional partners



Innovations: return on investments

\$ 5 M



\$ 25 M+

Federal, state, foundations, academic institutions: NIDA, Pravetoni; NIMH, Althoff; DoD, Iliff, Schindler; WA DSHS, Erickson; Brown University, Zaslavsky; Emory University, Zaslavsky; USAA Foundation, Comtois

PLUS

- publications in scientific journals
- presentations at conferences
- new collaborations (public & private organizations)
- additional philanthropy (Ballmer Group, Weill Neurohub)
- providers and caregivers receiving education/support
- brain health awareness via news stories
- **patients getting treatment via clinical trials & pilots**

Recent media



New Faculty Spotlight: Marco Pravetoni



Marco Pravetoni

Rick L. Seaver Endowed Professor for Brain Wellness, Department of Psychiatry and Behavioral Sciences
Lead Scientist, Garvey Institute for Brain Health Solutions

What is your Research Focus?

Current medications are not always sufficient to treat

NEWS RELEASE 23-JAN-2023

Q&A: How AI can help people be more empathetic about mental health

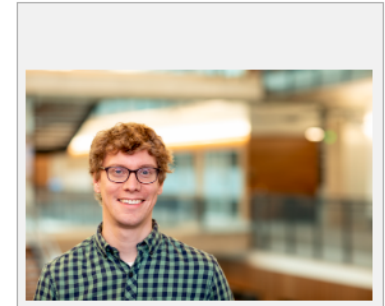
Peer-Reviewed Publication

UNIVERSITY OF WASHINGTON



Empathy is critical to having supportive conversations about mental health. But this skill can be tricky to learn, especially in the moment when a person is sharing something hard.

A team led by researchers at the University of Washington studied how artificial intelligence could help people on the platform [TalkLife](#), where people give each other mental health support. The researchers suggested c



Creating connections with the African American community to find the best ways to assess cognitive aging and mental health during a pandemic

March 17, 2022

Research (<https://depts.washington.edu/mbwc/news/category/research>), Social Determinants of Health (<https://depts.washington.edu/mbwc/news/category/social-determinants-of-health>), ADRC News (<https://depts.washington.edu/mbwc/news/category/adrc-site-news>)

ROOT CAUSE

August 4, 2022



Cami Rosso
The Future Brain

AI Detects Cog Distortions in 1 Messages

AI has potential for assisting providers in clinical settings.

Posted October 20, 2022

Reviewed by Kaja Perina



TheScientist

EXPLORING LIFE, INSPIRING INNOVATION



Opioid Vaccines as a Tool to Stem Ov

Researchers are turning to the immune system for help in treating overdose.



Tori Rodriguez
Jun 13, 2022

In October 2020, researchers at Columbia University began enrolling volunteers who were physically dependent on opioid drugs for a new [clinical trial](#)—the world's first to test a vaccine targeting these addictive substances. Volunteers who pass a battery



Training Programs



Behavioral Neurology and Neuropsychiatry Fellowship Program

- Joint program between Psychiatry & Neurology
- Directed by Michael Schrift, DO, MA
- Accepting applications!

Clinician Scientist Training Program

- Encourage and develop clinician scientists
- Search committee for Director
- Vision is to expand to School of Medicine

Recruitment: Marco Pravetoni, PhD



Marco Pravetoni, PhD

Rick L. Seaver Endowed Professorship for Brain Wellness

- Psychiatry & Pharmacology
- Center for Medication Development for Substance Use Disorders and Overdose
- Vaccine development for heroin, oxycodone, fentanyl
- Phase 1 clinical trials

Recruitment: Thomas Grabowski, MD



Thomas J Grabowski, MD

Tim B. Engle Endowed Professorship for Brain Health Innovations

- Director of the UW Memory & Brain Wellness Clinic
- Focus on strategies to promote brain wellness and resilience across the lifespan

Recruitment: Active searches



Garvey Family Endowed Professorship for Technology and Brain Health

- Focus on Neuromodulation Treatment and Research

Mark N. Tabbutt Endowed Professorship for Education in Brain Health

- Director, Clinician Scientist Training Program

Nicole K. Engle Endowed Professorship for Addiction Medicine

- Focus on Clinical Trials in Addiction Medicine

Thank You!



- Mike & Lynn Garvey, President Cauce, CAB members, Faculty Advisors, Investigators, and Staff, Advancement Team.
- We deeply appreciate this truly remarkable opportunity to advance brain health and mental health at this critical time.
- We are off to a fast start and growing
 - Building a great team
 - Inviting the best ideas to improve brain health & mental health
 - Recruiting additional collaborators to join the team
 - Developing new partnerships
 - Inviting new supporters and sponsors
- Join us and help us get the word out. gibhs@uw.edu

INNOVATIONS





Innovation Grants

36 grants awarded 2020-2023



Approaches to improve brain health?

Protect brain from harm / injury

- trauma, drugs, chronic stress
- best to start before birth, but a lifelong challenge

'Exercise' brain to 'keep it in shape'

- Parent training, early childhood intervention, education, keeping our brains active as we age

Repair 'broken' brain

- Modulate brain circuitry

Help people live with challenging brain health problems: medications, psychotherapy, technology (AI), neuromodulation, family support

Innovation Grant updates



The microbiome and trauma-related symptoms in Veterans

Kathleen Pagulayan, PhD

Leveraging technology to support families who are navigating serious mental illness

Sunny Cheng, PhD

Addressing suicide risk in primary care to reduce youth suicide

Denise Chang, MD

Suicide prevention in addiction treatment settings

Richard Ries, MD, FAPA, FASM

Increasing access to evidence-based and culturally-responsive trauma-focused treatments

Michele Bedard-Gilligan, PhD

Texting to support maternal wellbeing in the perinatal period

Amritha Bhat, MBBS, MD, MPH

Center for Medication Development for Substance Use Disorders and Overdose

Marco Pravetoni, PhD

THE MICROBIOME & TRAUMA-RELATED SYMPTOMS IN VETERANS

KATI PAGULAYAN, PHD & ABIGAL SCHINDLER, PHD

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Traumatic Brain Injury

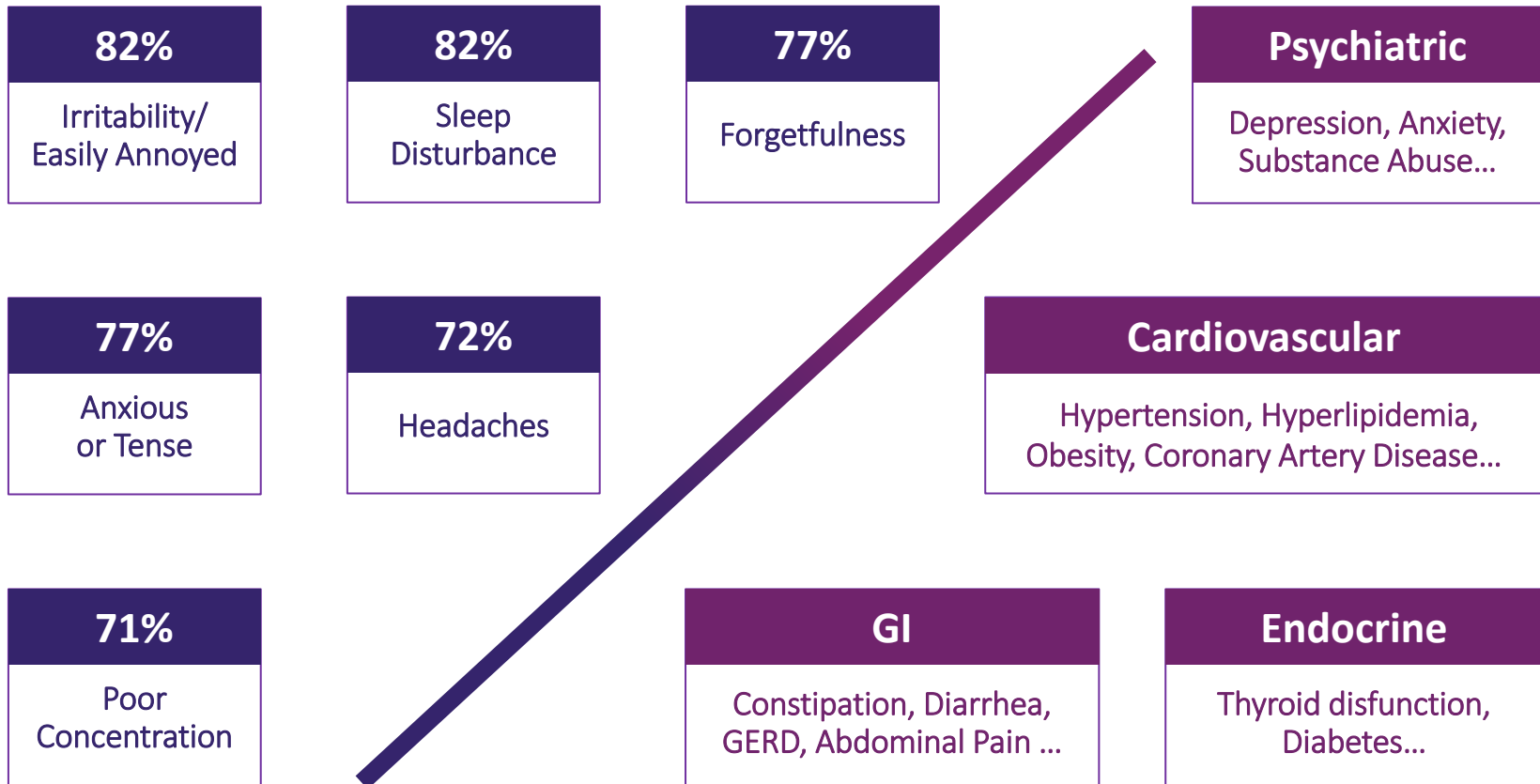
“Signature
Injury”

...Veterans of conflicts in
Iraq and Afghanistan

33% - 39%

...sustained a TBI also
have PTSD (Inoue et al., 2022)

Symptom endorsement after mTBI



Link between
the gut
& the brain



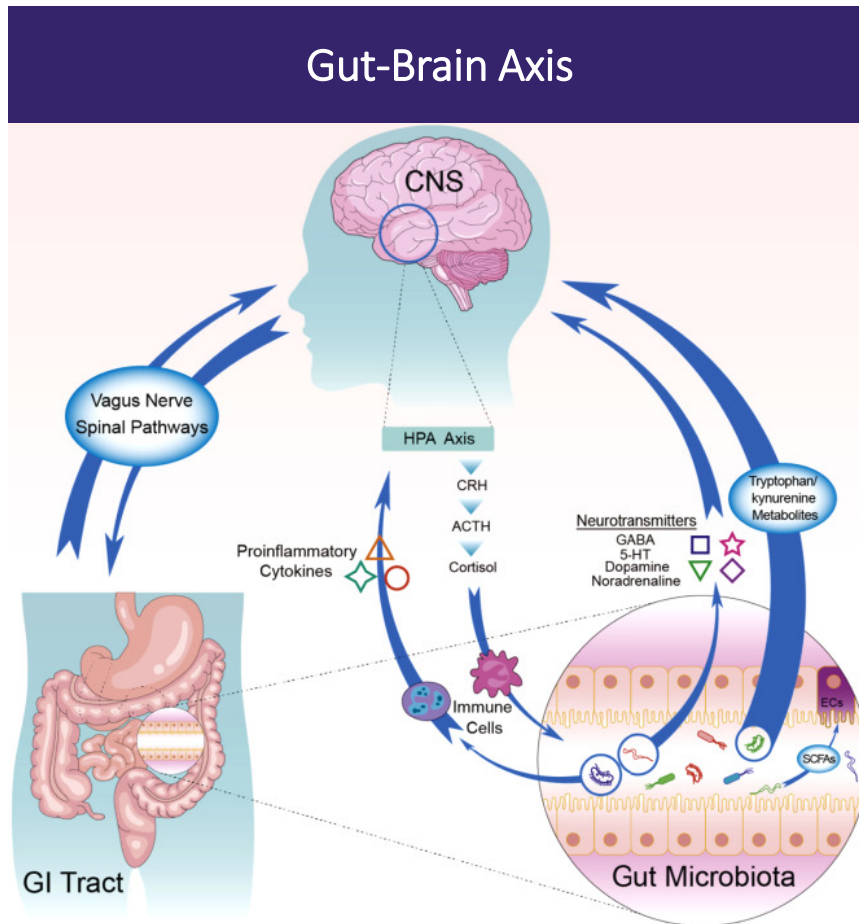
**TRUST
YOUR GUT...**

Link between
the gut
& the brain

BUTTERFLIES IN MY STOMACH

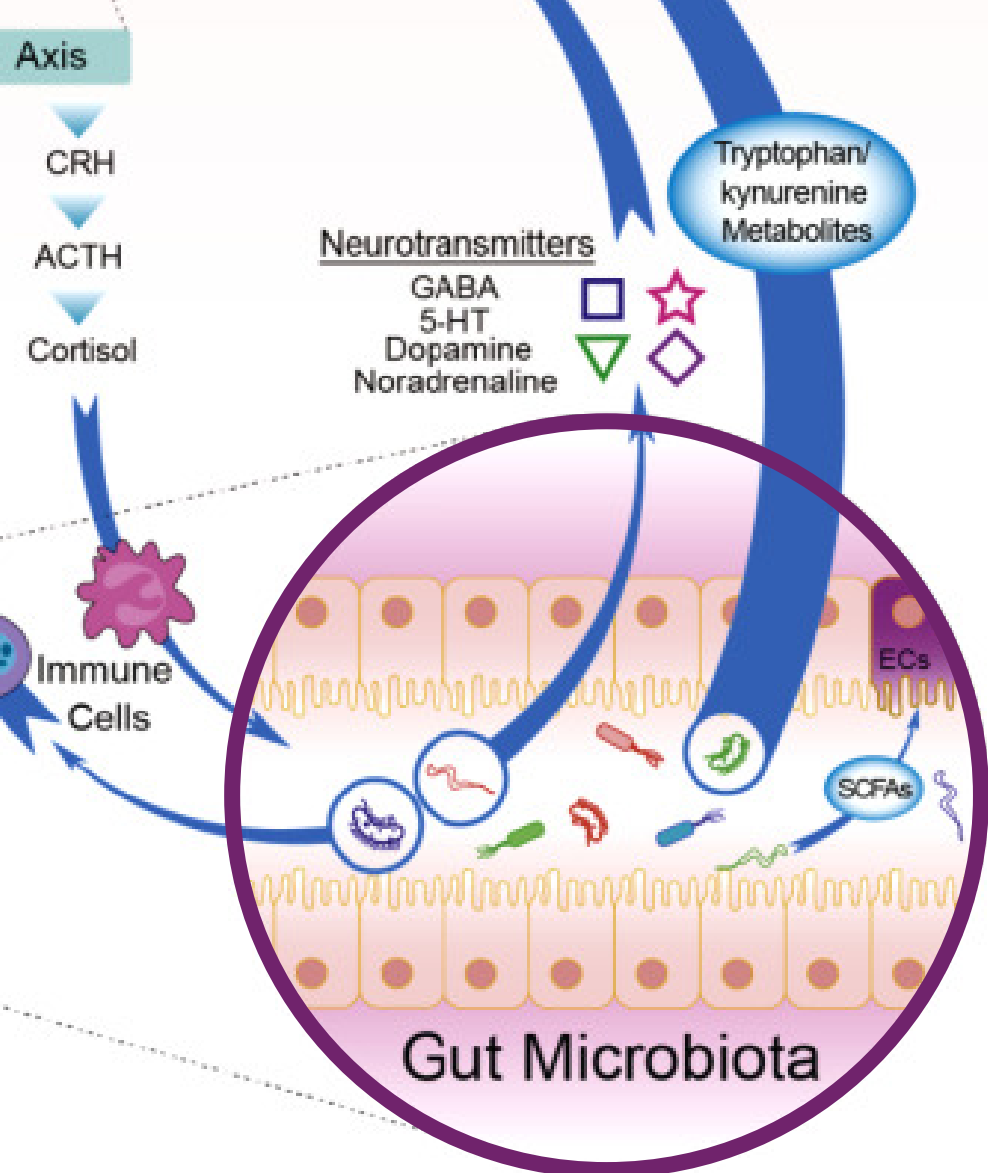


The microbiome: A gut-brain axis?



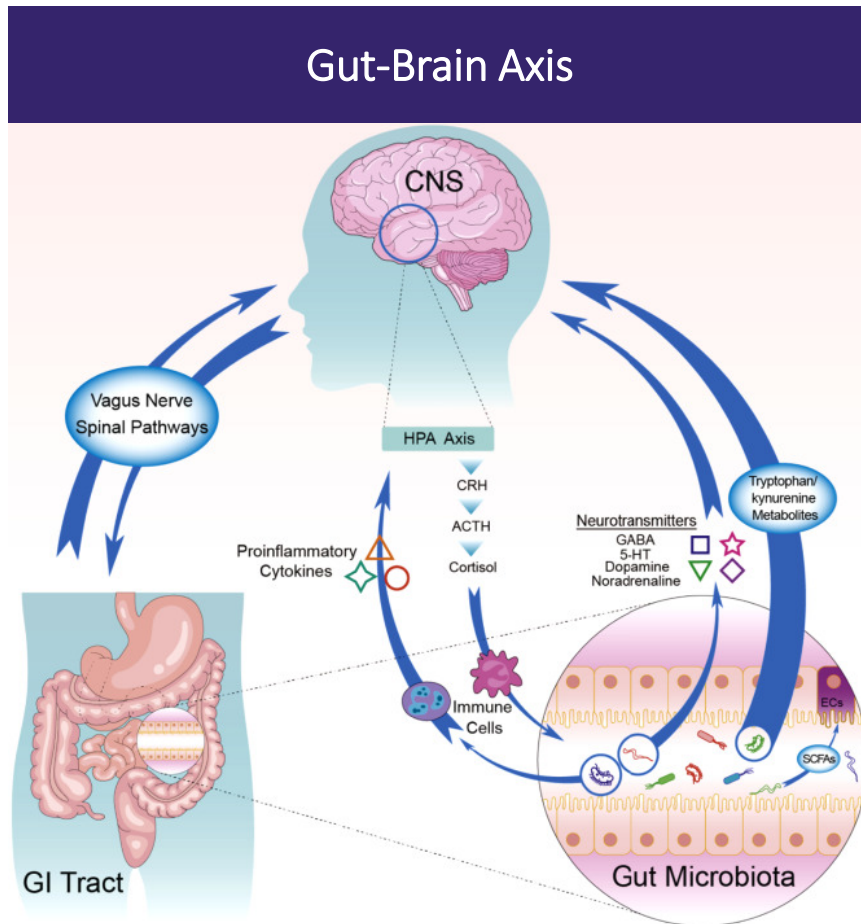
Two-way communication between the brain and gut microbiota: gut-brain axis.

This connects the emotional and cognitive centers of the gut and brain.



The collection of microorganisms that live in the digestive tract

The microbiome: A gut-brain axis?



Alterations in microbiota associated with depression, anxiety, reduced sleep, and poor cognition....

Could changes in the gut microbiome contribute to persistent symptoms after mTBI?

The Pilot Study

Investigate relationship between gut microbiome and chronic symptoms in Veterans deployed to Iraq and Afghanistan and who screened positive for a possible TBI

Goals



Feasibility of participant recruitment & remote data collection



Collect preliminary data

The Pilot Study

At home fecal tests



Self report questionnaires of PTSD, depression, sleep, pain, cognitive functioning, substance use, and post-concussive symptoms



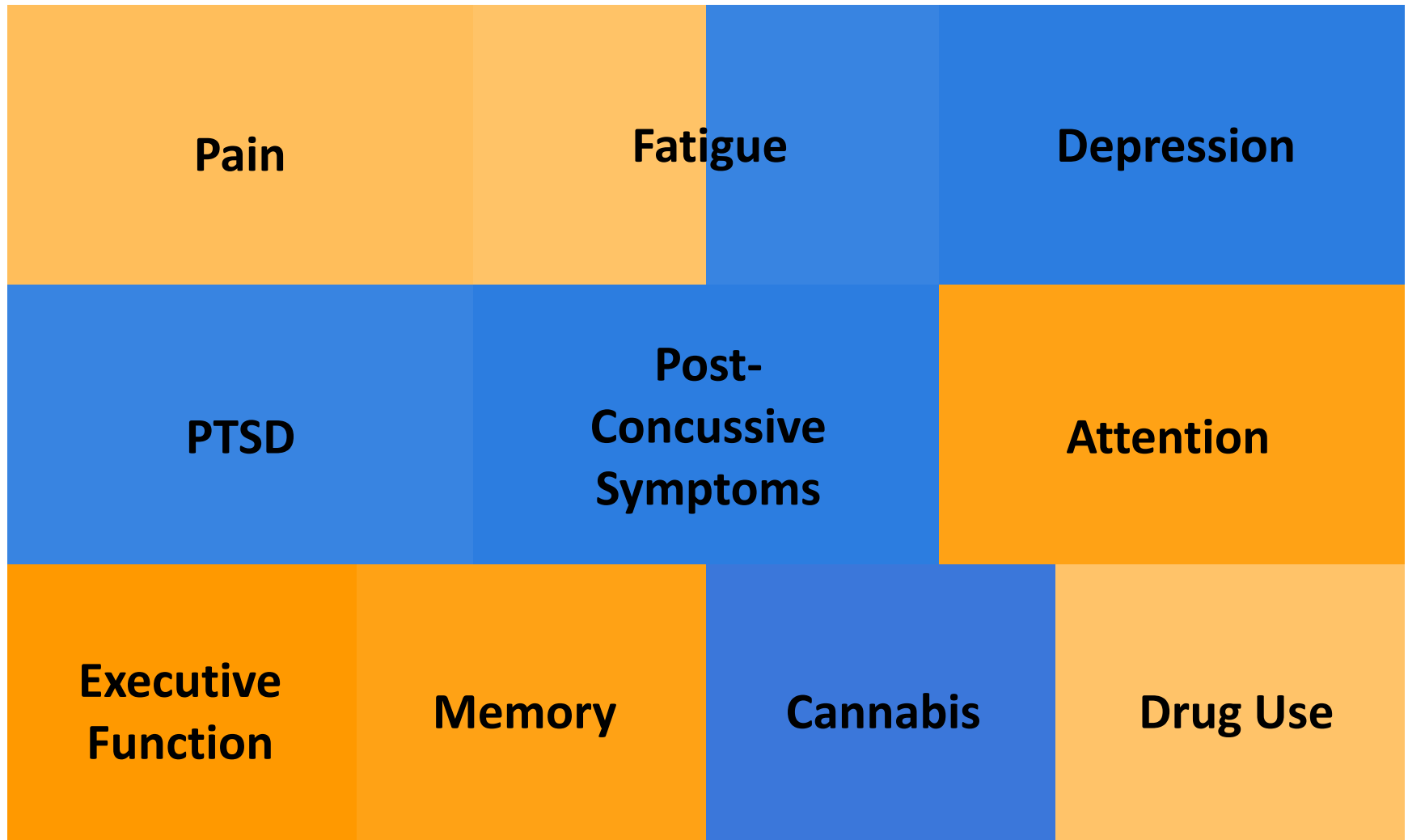
The Pilot Study Results: Correlations

Type of Bacteria in Phylum

	Actinobacteria	Bacteroidetes (B)	Cyanobacteria	Firmicutes (F)	Fusobacteria	Lentisphaerae	Other	Proteobacteria	Spirochaetes	Synergistetes	Verrucomicrobia	F:B Ratio
Pain										0.433*		
Fatigue		0.401*									-0.521**	
Sleep												
Depression											-0.554**	
PTSD											-0.522**	
Post-Concussive Symptoms											-0.555**	
Attention											0.617**	
Executive Function											0.671**	
Memory											0.614**	
Alcohol												
Cannabis											-0.529**	
Drug Use			0.396*									

** $p < 0.01$, * $p < 0.05$

The Pilot Study Results: Correlations



Summary

&

Next Steps

Summary: Study provides *first* evidence of connection between chronic symptoms and gut microbiome in Veterans who screened positive for possible mTBI.

Next Step: Clinical intervention study
Does changing the gut microbiome with probiotics affect these symptoms?

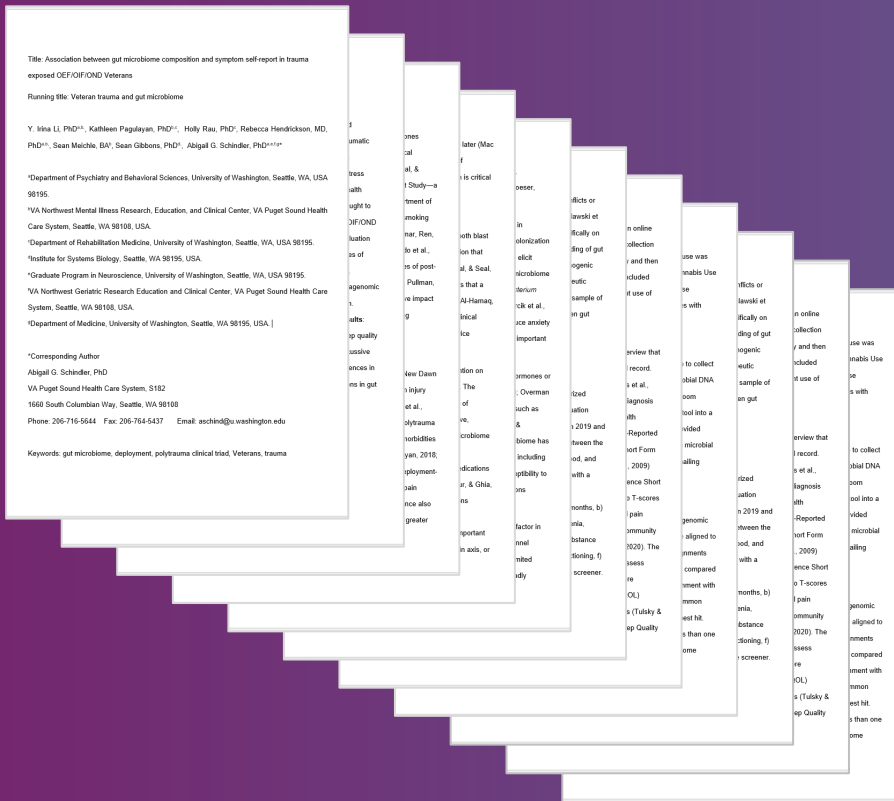
Probiotic supplementation can:

- reduce depression & anxiety
- improve cognition
- improve sleep quality

Acknowledgements & Research Team

Association between gut microbiome composition and symptom self-report in trauma exposed OEF/OIF/OND Veterans

Y. Irina Li, PhD, Kathleen Pagulayan, PhD, Holly Rau, PhD, Rebecca Hendrickson, MD, PhD, Sean Meichle, BA, Sean Gibbons, PhD, Abigail G. Schindler, PhD



- Garvey Institute for Brain Health Solutions
- UW Department of Psychiatry
- VA Northwest MIRECC

Please contact Kati Pagulayan, PhD at farkat@uw.edu or Abbie Schindler, PhD at aschind@uw.edu for questions about this work



Questions?

PSYCHOSIS REACH: LEVERAGING TECHNOLOGY TO SUPPORT FAMILIES WHO ARE NAVIGATING SERIOUS MENTAL ILLNESS

CHIEH (SUNNY) CHENG, RN, PHD and SARAH L. KOPELOVICH, PHD
GARVEY INSTITUTE FOR BRAIN HEALTH SOLUTIONS 2ND ANNUAL MEETING
JANUARY 27, 2023

PUBLIC CRISIS, PRIVATE TOLL

- Families are often left to figure out what to do to help their loved one on their own...
- Of the **60 million family members** supporting a loved one with a serious mental illness, only **1.9%** received a Family Intervention (ISMICC, 2017).



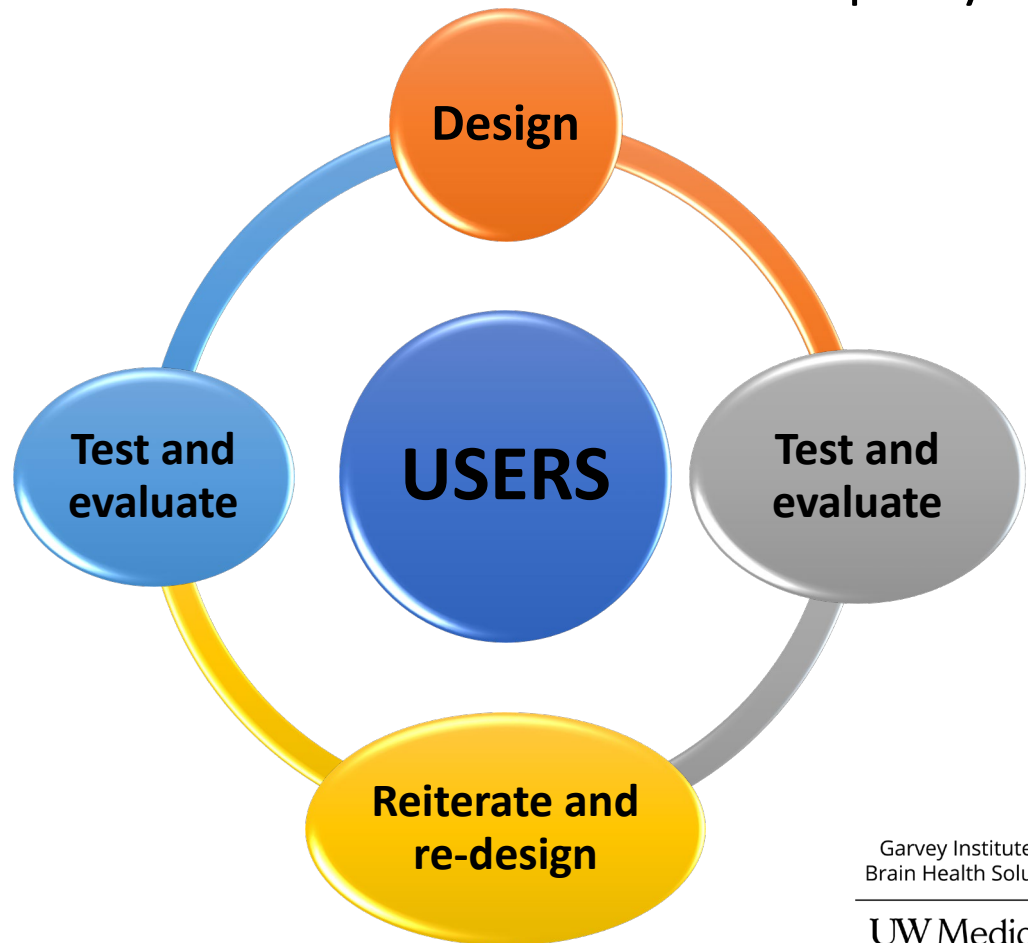
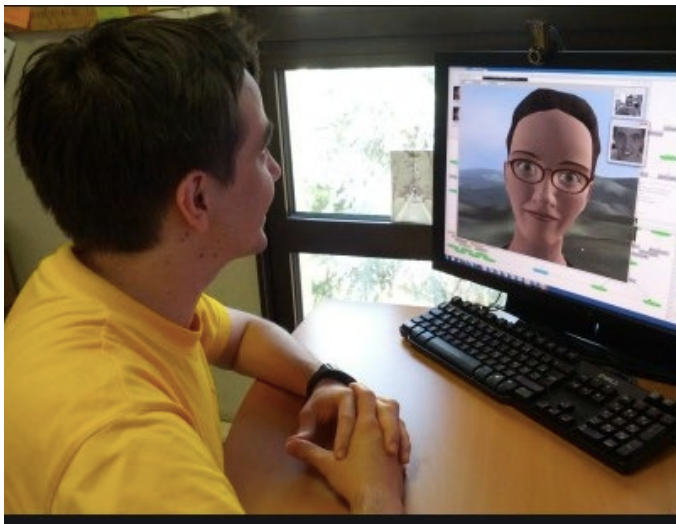
Bring Support Directly to Families

Psychosis REACH: Recovery by Enabling Adult Carers at Home



Approach to Address Problem/Challenge

A Digital Tool that Addresses Mental Health Inequity



Core Design Principles



Website is simple and easy to navigate



Hi, Username

Not you? [Sign out](#) here

Modules > Module Overview

Search

A Brief Review of Psychosis REACH



Practice FIRST Skills
with Virtual Coach

Article

Video and Transcript



Home

About

Modules

> Overview

> F: Falling back on the Relationship

> I: Inquire curiously

> R: Review the information and put it together

> S: Skill Development

> T: Try it out

Resources

Favorites

Surveys

Support

Psychosis REACH emphasizes three key areas that are each needed to help improve your relationship with your loved one:

Psychoeducation

To understand how psychosis can present and the kinds of factors that contribute to psychosis risk and resilience

Caregiver self-care

- Caring for our own needs enables us to be more effective in caring for others
- Cognitive behavioral therapy has been proven to be an effective intervention for addressing caregiver burnout, stress, and fatigue.

Cognitive-behavioral techniques

FIRST skills enhance your relationship and communication with your loved one!

A special note to parents

Bill MacFarlane, an American psychiatrist who specializes in family psychoeducation for schizophrenia, once stated "schizophrenia isn't caused by bad parenting, but schizophrenia can cause bad parenting" (1).



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Chatbot provides tailored feedback

Fall Back On Your Relationship

6%

Oh Alfie, I had no idea you felt that way about me. It sounds like you're feeling like everybody's ganging up on you and trying to control you. Do I have that right?



Excellent job! Your response demonstrates empathy and an earnest desire to understand Alfie's perspective, rather than to defend your own. This can be hard to do in the moment, particularly when the stakes are so high. By using a reflection ("it sounds like...") you can both help Alfie feel heard and make sure you got it right.

How would that work, exactly? I'm curious how it is that medications or vaccines could control your mind? Could you tell me more?



You're jumping ahead prematurely to the "I" skill. Instead, slow down. Notice that the relationship needs to be attended to, as Alfie is communicating a lack of trust. Your number one priority right now is to rebuild that trust and [rapport]!

The Psychosis iREACH Team

Meet the Team



Sarah Kopelovich, PhD
Intervention Team
Team Lead



Rachel Brian, MPH
Intervention Team
Research Program Manager



Jennifer Blank, BA
Intervention Team
Research Coordinator



Rene Gomez
IT Support
STEM/CSS IT Liaison



Sunny Cheng, RN, PhD
Design Team
Team Lead



Myra Divina, MSci, BA
Design Team
Research Coordinator



Serene Gao
Design Team
Student, UX Designer



Ilia Savin
Design Team
Student, UX Designer



Mia Wang
Design & Dev Team
Student



Jamie Kim
Design Team
Student



Ziyi Li
Design Team
Student



Dong, Si, PhD
Dev Team
Team Lead



Victor Chee
Dev Team
Student, Software Engineer



Jonathan Lee
Dev Team
Student



Skye Tran
Dev Team
Student



Yinzhou Wang
Dev Team
Student



Jakob Hoveland
Dev Team
Student



Vicky Xiang
Dev Team
Student

Next Steps and Collaborations

- We are currently building out the data we need to support converting Psychosis iREACH into an **Artificial Intelligence (AI)** tool.
- We are in the process of vetting AI companies and interested funders.
- Please reach out if you are interested!
 - Dr. Kopelovich: skopelov@uw.edu
 - Director for Philanthropy David Chow chowd@uw.edu



With Gratitude to the Garvey Institute
for Brain Health Solutions
for this pilot innovation grant!



Questions?

ADDRESSING SUICIDE RISK IN PRIMARY CARE TO REDUCE YOUTH SUICIDE

DENISE CHANG, MD AND SARAH DANZO, PHD

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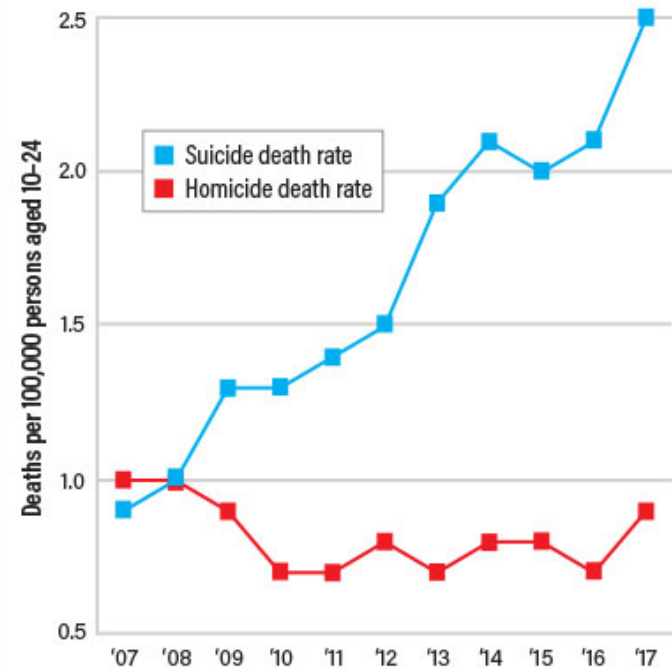
UW Medicine

Suicide Risk and Prevention

- Suicide is a leading cause of death among 10–24-year-olds in the United States
- Nearly half of youth who die by suicide contact a primary care provider within one month prior to suicide
- National guidelines recommend all medical settings screen for suicide risk
- Several barriers exist to implementing suicide screening and prevention in primary care (i.e., lack of infrastructure and training)

Suicide Rates of Youth Surpass Homicide Rates in Past Decade

After a stable period from 2000 to 2007, suicide rates for youth aged 10 to 24 increased from 2007 to 2017, while homicide rates increased from 2014 to 2017 but were still lower than suicide rates.



Source: National Center for Health Statistics, National Vital Statistics System, Mortality

Project Aim

- Develop a suicide prevention program for youth with suicidal thoughts and/or behaviors that can be efficiently and effectively delivered in primary care
- The Garvey grant will support the development of a **comprehensive suicide prevention program** that will encompass:

1

SCREENING

Implement effective screening protocols for evaluating suicide risk

2

ASSESSMENT and INTERVENTION

Provide brief suicide risk assessment and intervention strategies

3

TRIAGE

Improve triage and referral pathways for youth with low-moderate suicide risk

Assessment and Intervention



- GOAL: Adapt a brief, evidence-based suicide intervention, initially developed for the emergency department, for use in primary care
 - Involve master's and bachelor's level behavioral health clinicians
 - Emphasize patient's strengths and parent/caregiver support

PROCESS:

- Engage **key stakeholders (providers, teens and parents/caregivers)** in the development of the intervention to create a patient centered model of care
- Provide **training and evaluation** of the clinicians delivering the intervention
- Solicit **feedback** from youth and parents/caregivers

Innovation and Next Steps

Developing a comprehensive model of suicide care for adolescents in primary care

- Expand access to critical suicide prevention services by expanding the behavioral health workforce
- Reduce risk for adolescent suicide and enhance patient safety
- Reduce burden on primary care providers
- Reduce unnecessary referrals to the emergency department
- Create a sustainable and scalable intervention for primary care

Important data gathered from this project will be used to:

- Further expand efforts to improve patient safety and outcomes
- Apply for subsequent funding to increase scalability and effectiveness of a suicide prevention program in primary care
- Advocate for expansion of reimbursement opportunities for these types of clinical services

Project Leads

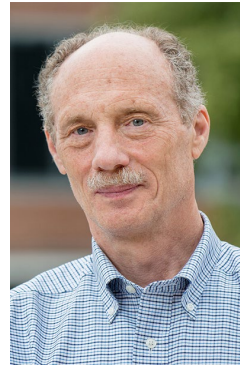


Sarah Danzo, PhD



Denise Chang, MD

Collaborators



Lawrence Wissow, MD, MPH



Laura Richardson, MD, MPH



Molly Adrian, PhD

Co-Investigators



Elizabeth McCauley, PhD



Katherine Scott Davis, LICSW



Doreen Kiss, MD



Kalina Babeva, PhD
UW Medicine
Institute for Health Solutions

THANK YOU GARVEY
INSTITUTE!



Questions?

INNOVATIVE TRAINING AND IMPLEMENTATION FOR SUICIDE PREVENTION IN ADDICTION TREATMENT SETTINGS: THE PARS-WEB PROJECT


RICHARD RIES, MD

GARVEY INSTITUTE FOR BRAIN HEALTH SOLUTIONS 2ND ANNUAL MEETING

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Why?

- Addiction increases Suicide Risk by 10 x, ... yet no Suicide Prevention Intervention has ever been developed with, for, and tested in community addiction treatment settings
- The PARS (Preventing Addiction Related Suicide) module was developed (NIDA grants) by the author's team to fit this need, with positive Randomized Controlled results published in JAMA April 2022
- **Thanks to the GARVEY Innovation Grant we have** developed a training and certification Web site (PARS-Web) *which will encourage wide dissemination of training for the PARS intervention.*

Approach to Address Problem/Challenges

Progress

1. Developed a training, certification, and billing website with essential help from Alan Gojdics in the department AIMS Center
2. Developed integrated visual, printed (PowerPoint), and video (of an actual group) training materials on administration of each of the 56 PPT slides to ensure fidelity and training efficacy—A short sample is below:
<https://aims.uw.edu/parsweb/sample>
3. Copyrighted materials through UW CoMotion
4. Developed AIMS and CSPAR personnel infrastructure to manage the website

Next Steps and Potential Collaborations


- PARS-Web and PARS have been presented at the national meeting of the American Academy of Addiction Psychiatry and the WA State Co-Occurring Disorders conferences. Other WA state counselor training conferences have scheduled presentations to engage PARS trainees.
- Meetings with WA State congressional members (Tina Orwell and Lauren Davis) have already occurred to help move PARS into status as a 3 hr certified training to meet WA state requirements for Suicide training for addiction counselors.
- Once certified by WA state, the other 36 states in USA which require such suicide trainings will be approached.
- Approximately 2,500,000 persons a year are enrolled in community addiction treatment and would hopefully receive PARS from PARS-Web trained counselors.



Questions?

Thanks again to the Garvey Institute

INCREASING ACCESS TO EVIDENCE-BASED AND CULTURALLY-RESPONSIVE TRAUMA-FOCUSED TREATMENTS: A COLLABORATION WITH WA STATE COMMUNITY MENTAL HEALTH PROVIDERS



MICHELE BEDARD-GILLIGAN, PHD & KRISTEN LINDGREN, PHD, ABPP
GARVEY INSTITUTE FOR BRAIN HEALTH SOLUTIONS 2ND ANNUAL MEETING
JANUARY 27, 2023

Mission

We seek to **promote trauma recovery by making treatments easier to use and sustain** in real world settings locally and across the globe.



**TRAUMA
RECOVERY & RESILIENCE
INNOVATIONS**

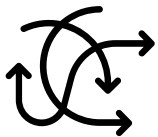
Effective trauma-focused mental health treatments exist but.....

accessing these treatments is challenging, especially for those in underserved communities in WA

Patients experience:



Large numbers of people seeking help



Long waits & confusing referral systems



Difficulty accessing effective treatments locally

Providers experience:



Lack of specialized training



Low confidence & efficacy in own ability



Difficulty accessing support and consultation

We developed a virtual learning collaborative to support WA State community providers

The Trauma Recovery ECHO Clinic

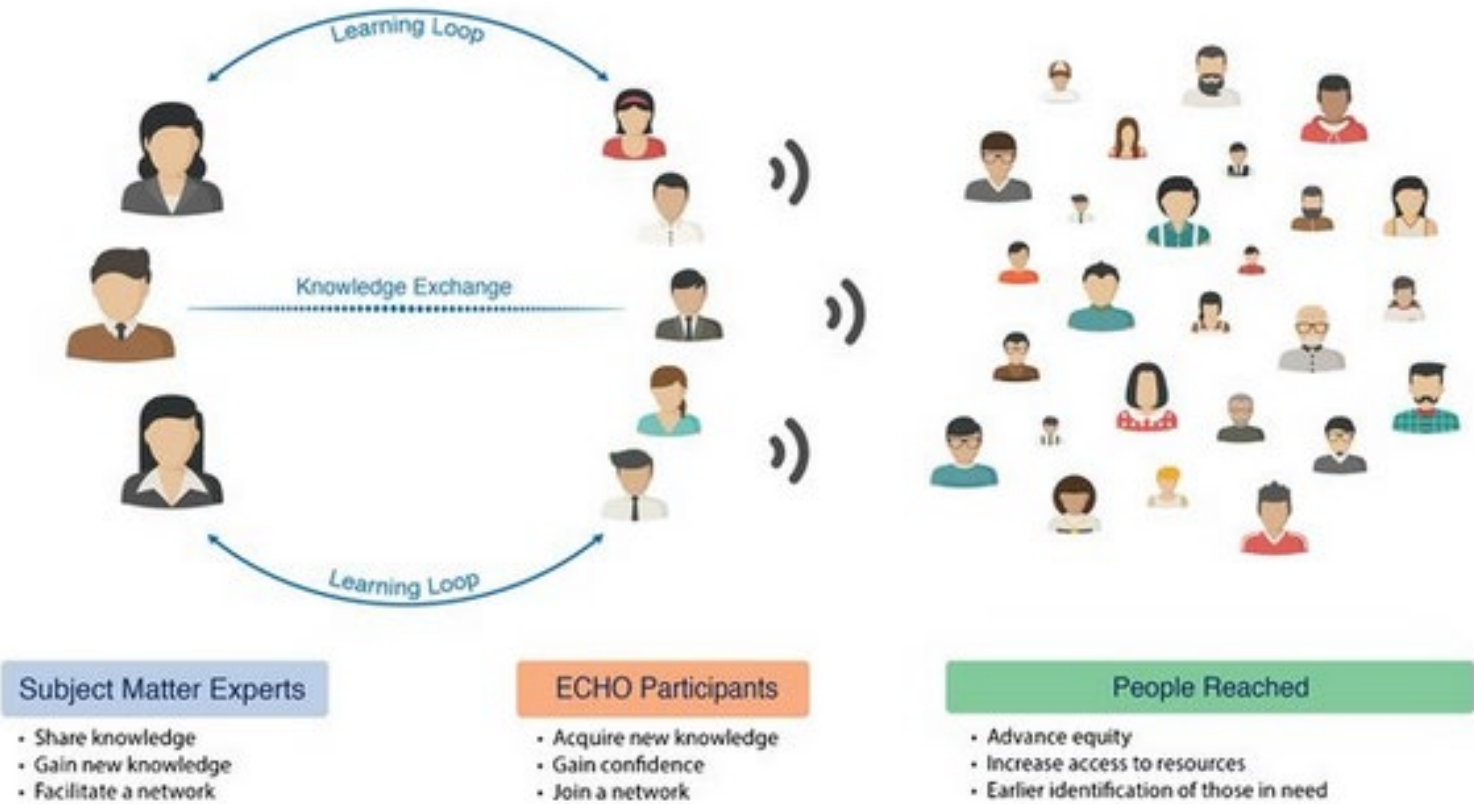
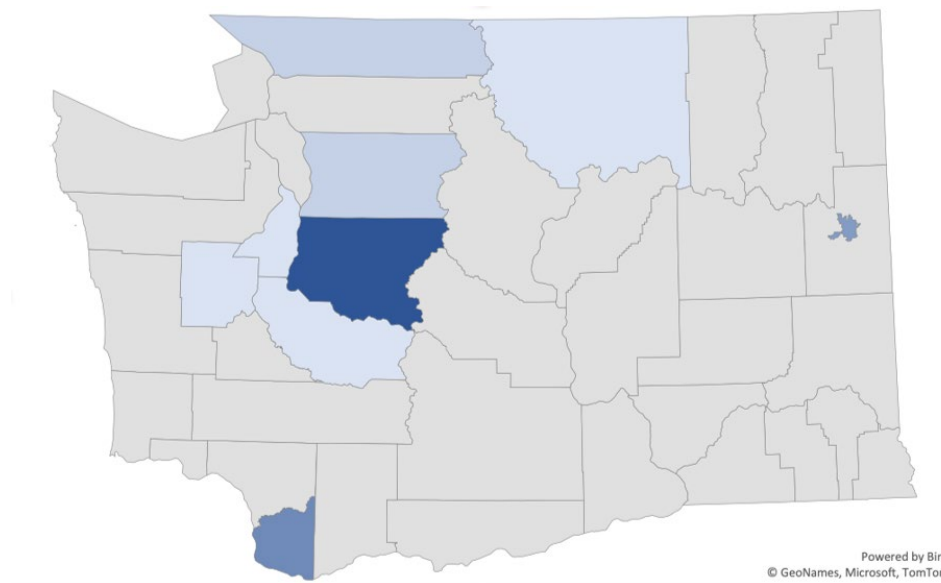


Image source: Tosi et al. (2020)

Trauma Recovery ECHO Clinic

Clinicians across WA State



32 clinicians from **13** zip codes and **9** counties

-12 sessions of education and case consultation

-Excellent attendance, engagement, & retention

Trauma Recovery ECHO Clinic meaningfully supported providers and patients

Clinician perspectives on ECHO clinic:

*“It was helpful to know I **wasn’t alone** with some of the difficult cases I have...”*

*“I really appreciated the **community** and **connection**, and having a space to talk about the **nuances and difficulties of trauma treatment**”*

Patient benefits from the ECHO clinic:

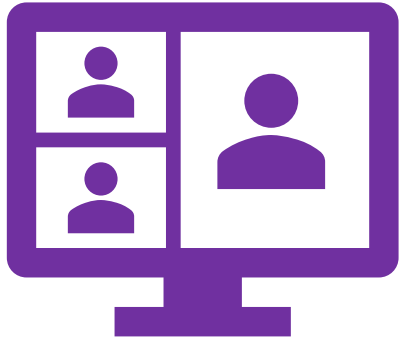


Use of therapy
skills/tools



Progress toward
therapy goals

Trauma Recovery ECHO: Summary and next steps based on lessons learned



- Strong interest and follow through from community providers across the state
- Next steps:
 - Use provider feedback to develop and test future iterations of the trauma recovery ECHO
 - Partners with interest in supporting the mental health workforce could increase reach

With gratitude to.....



GARVEY INSTITUTE FOR
BRAIN HEALTH SOLUTIONS

UW Medicine

- Community clinicians
- Patients receiving services

Trauma Recovery ECHO Project Team

Directors: Michele Bedard-Gilligan, PhD, & Kristen Lindgren, PhD, ABPP

HUB Team Members: Emily Dworkin, PhD, Sophia Robinson, BA, Rebecca Hendrickson, MD, Laura Merchant, MSW, Minu Rana-Stewart, MSW, & Jon Reeves, PhD



U.S. Department of Veterans Affairs

Veterans Health Administration
VA Puget Sound Health Care System



Questions?

TEXTING TO SUPPORT MATERNAL WELLBEING IN THE PERINATAL PERIOD



AMRITHA BHAT, MD, MPH

GARVEY INSTITUTE FOR BRAIN HEALTH SOLUTIONS 2ND ANNUAL MEETING

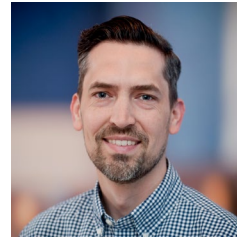
JANUARY 27, 2023

Garvey Institute for
Brain Health Solutions

UW Medicine

Team

University of Washington



Nurture Northwest



Recruitment partners

Northwest Hospital

Parenting listservs

Birthing professional listservs

Perinatal depression and anxiety are common....



- Perinatal depression 10 – 20%
- Perinatal anxiety 15 – 20%
- Perinatal PTSD 6 – 20%
- Postpartum psychosis 0.1%

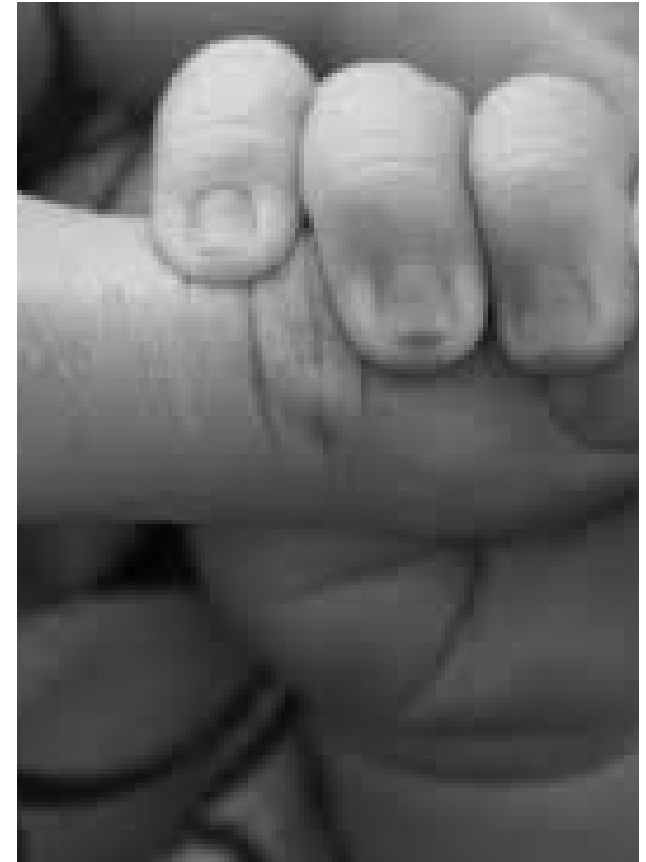
Any hypertension in pregnancy 8.6%
Gestational diabetes 7%

...and impact parents, children and society

- Poor prenatal care
- Increased substance use and smoking
- Pregnancy complications
- Maternal mortality
- Effects on partner's mood
- Increased marital discord
- Impaired family functioning
- Cost - \$14 billion per year
- Preterm birth, low birth weight.
- Increased irritability, sleep difficulties
- Higher rates of hospitalization and mortality in the first year
- Cognitive, emotional and developmental delays
- Anxiety and depression

Many receive no treatment or inadequate treatment

- Limitations in workforce
- Patient level barriers to care
 - So they would say 'Be strong' or you know, 'It's your hormones.' "You're about to have a baby. Aren't you nesting, having fun? It's like, no, I hate life."
 - "It's that whole 'oh crap it's out of me. What do I do with it now?'" "Where is that manual for the baby?"
 - "She's had a couple of bouts where she just cries and cries and cries and cries, and I don't know why. And I think it – it irritates me and then I feel super bad And then it would just make me feel even worse about myself. .. what am I doing wrong? Am I just failing at this?"
 - "I didn't want people to say – 'Oh she is crazy. She is going to harm her baby'. Or 'why is she thinking these things if she has everything'?"



Addressing the treatment gap

- Improve access to emotional support during pregnancy and postpartum through text messaging; compare the feasibility of peer mentor texting and automated texting
- Peer mentor texting delivered by Nurture Northwest
- Example “conversation starters”
 - Have you ever experienced two conflicting feelings at once? This is common and a big part of the transition to parenthood, however it can feel distressing. There's even a term for it: ambivalence. When I became a parent, I remember feeling [INSERT A MOMENT WHEN YOU FELT TWO CONFLICTING EMOTIONS].
 - ...A huge part of adjusting to parenthood is embracing small moments of joy or pleasant activities. One pleasant activity that got me through the early days as a parent was [INSERT A PLEASANT ACTIVITY YOU ENJOY]. What's a pleasant activity that's feeling good to you right now?
 - Social media can really impact what we think our parenting journey should be like. Who/what are you following and has that changed as your parenting journey has progressed? Which accounts feel like they feed your self-confidence and which ones make you feel less confident?
- 127 participants enrolled. Completed data collection for the baseline, 6 weeks postpartum, 3 months postpartum, and 6 months postpartum time points

NurtureNW

You've got this. We've got you.

Just had a baby or expecting soon? Sign up and get matched with a mentor—a real parent who will check in by text every week from your third trimester through your baby's first birthday. They'll cheer for the little victories, troubleshoot your sleep schedule, and help you get ready for the transition to parenthood.



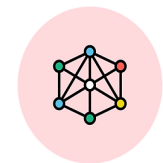
On Your Side

From feeding stress to dealing with the blues, mentors support, never judge.



Prepared to Help


Your mentor is an experienced parent who is trained to support you.



Here to Connect

Your mentor has access to WA's top resources for new parents.

Accessible, acceptable perinatal support



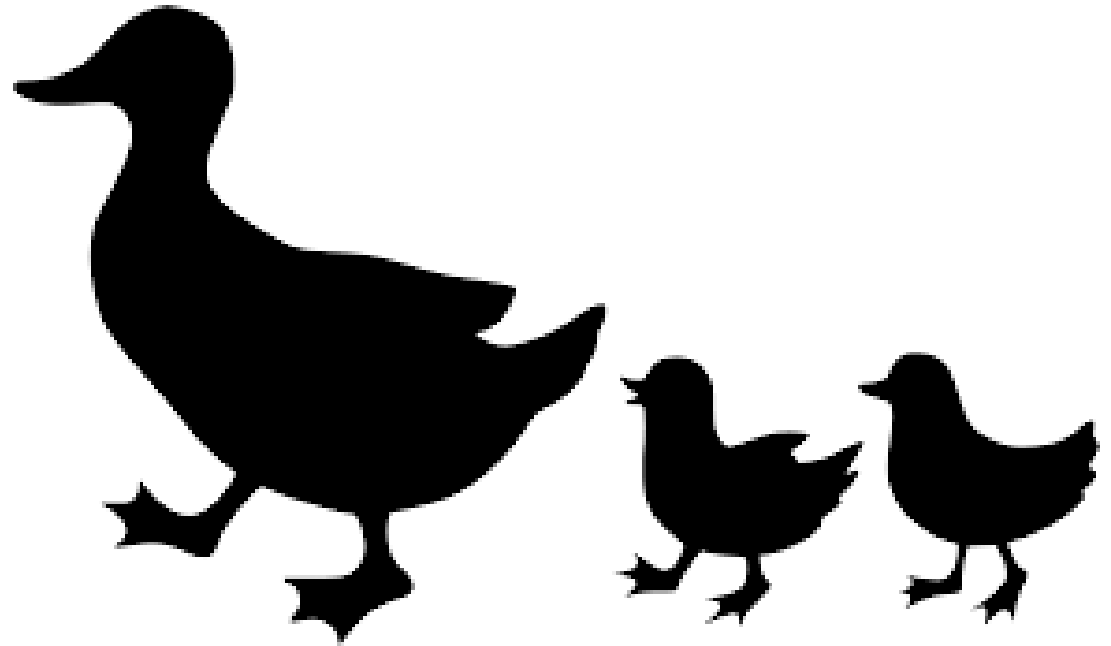
Member quotes

- “I have a great network of friends that are moms that I can always reach out to, but what I enjoy the most about your program is the anonymous piece. Sometimes I am embarrassed to ask a friend something personal or admit something to a friend that might make me look bad. I know there will be no judgement here.”
- “My mentor asked about my hopes and fears for my child, something I hadn’t articulated out loud or thought a whole lot about. This was helpful in helping me realize the simple yet important things I hope for my child.”

Member turned Mentor Experience

- “I was a member who really struggled in the newborn phase. As I remind them all to celebrate the wins and know that they did nothing "wrong" when things are hard, and that they are still a great parent - I'm reinforcing that message for myself.”

Next Steps



- Compare effectiveness of peer mentor texting and automated texting
- Integrate this approach into other perinatal mental health treatments
- Build on momentum of expanded awareness and support for perinatal mental health



Questions?

CENTER FOR MEDICATION DEVELOPMENT FOR SUBSTANCE USE DISORDERS (SUD) AND OVERDOSE



MARCO PRAVETONI, PHD, RICK L. SEAVER ENDOWED PROFESSORSHIP IN BRAIN WELLNESS

GARVEY INSTITUTE FOR BRAIN HEALTH SOLUTIONS 2ND ANNUAL MEETING

JANUARY 27, 2023

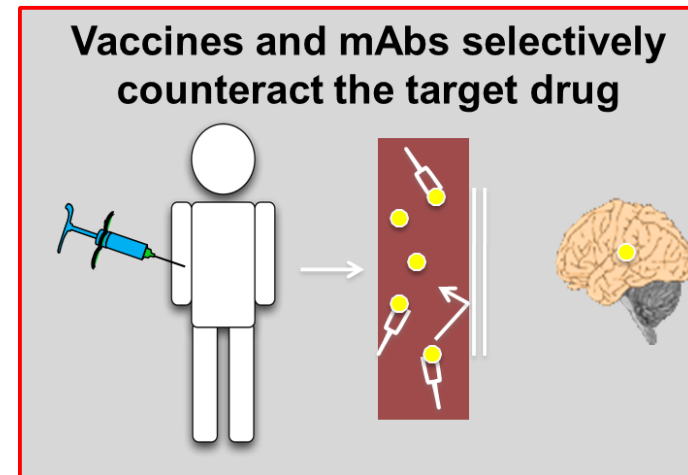
Garvey Institute for
Brain Health Solutions

UW Medicine

Our mission: To advance solutions for SUD and Overdose from discovery to clinical stage

Pipeline: Biologics, Small Molecules, Devices and Biomarkers

- **Vaccines against heroin, oxycodone, fentanyl and fentanyl analogs**
 - 3 Phase I Clinical Trials (1 ongoing, and 2 pending FDA approval to initiate)
- **Monoclonal antibodies (mAb) against overdose**
- **Pre-clinical and clinical biomarkers of addiction**
- **Technologies to enhance vaccine or mAb efficacy**
 - Adjuvants, polymers, immunomodulators, nanoparticles...
- **Opioid antagonist formulations against overdose**
 - Nanoparticle-based extended-release delivery platforms
- **Point-of-care antibody-based biosensors**
 - Detect opioids and other drugs of interest



End-to-end platform and infrastructure from discovery to clinical trial

- Multi-institution academic team: chemistry, pharmaceuticals, immunology, pharmacology...
- Industry partners + contractors (CDMO/CRO)
- Regulatory expertise (DEA, FDA) + clinical sites
- Commercialization

2022 New NIH awards: Vaccines and mAbs against fentanyl and its analogs

Development of a monoclonal antibody to reverse overdose from fentanyl and its analogs: from manufacturing to clinical trials

National Institute of Drug Abuse (NIDA) awarded ~\$20 million

- Aim 1: Monoclonal antibody (mAb) manufacturing
- Aim 2: Pre-clinical pharmacology and pharmacokinetic (PK/PD) profile of mAb
- Aim 3: Safety and toxicology of lead mAb formulation
- Aim 4: 2 x sequential Phase 1a/1b Clinical Trials

Vaccines for fentanyl and its derivatives: a strategy to reduce illicit use and overdose

National Institute of Drug Abuse (NIDA) awarded ~\$15 million

- Aim 1: Lead vaccine discovery and development
- Aim 2: Multivalent vaccine formulations
- Aim 3: Manufacturing, safety and toxicology of lead vaccine formulations

Completed transfer of NIH awards from former affiliation to UW

2022 Outreach

Advocacy with legislators and policy makers

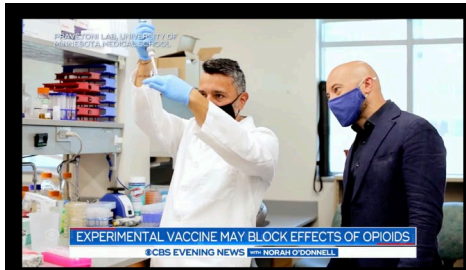
➤ Capitol Hill: Senate bills related to SUD, fentanyl analogs legislation

Conferences & meetings

Peer reviewed publications

Media, press releases

NIH study sections



A vaccine for addiction? UW researchers say it's possible

RADIO-CANADA MENU

ICI Colombie-Britannique

À la une En continu Arts Atelier culturel

ACCUEIL SANTÉ SOINS ET TRAITEMENTS

Un vaccin à l'essai aux États-Unis pour contrer la crise des opioïdes



New Faculty Spotlight: Marco Pravetoni

UW Research > New Faculty Spotlight: Marco Pravetoni

What is your Research Focus?

Current medications are not always sufficient to treat substance use disorders and prevent or reverse drug overdoses. This has resulted in a dramatic increase in fatal and non-fatal overdoses, accelerated by the COVID-19 pandemic. More than 72,000 opioid-related fatal overdoses occurred in 2020, the highest number of overdose deaths ever recorded in a year. A growing body of research suggests that immunotherapeutics such as vaccines and monoclonal antibodies (mAbs) can treat and prevent addiction and overdose. Marco Pravetoni, PhD, uses these novel strategies to develop new medical interventions for substance use disorders and overdose and is among the first to test these new interventions in humans.



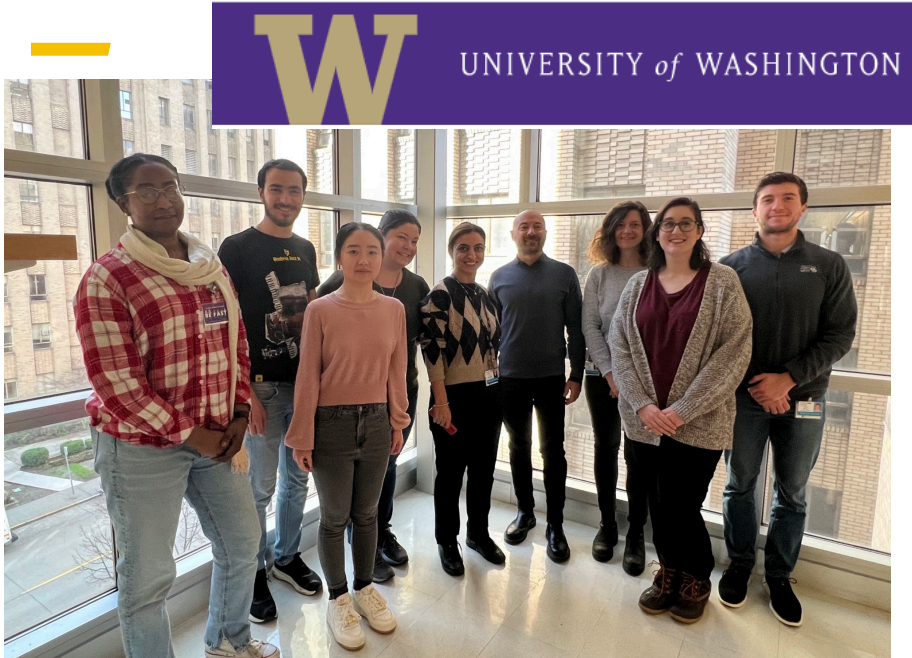
Marco Pravetoni

Rick L. Seaver Endowed Professor for Brain Wellness, Department of Psychiatry and Behavioral Sciences
Lead Scientist, Garvey Institute for Brain Health Solutions
Director, Center for Medication Use Disorders and Overdose
mprave@uw.edu
[Marco Pravetoni faculty page](#)

Dr. Pravetoni's team has identified promising vaccines against heroin, oxycodone, fentanyl, and their derivatives or combinations. His team is currently testing a lead oxycodone vaccine in the first-in-human Phase I clinical trial. Vaccination generates antibodies against oxycodone so whenever the drug is ingested again, the antibodies are sequestered. This prevents the oxycodone from entering the brain, and thus preventing reward, pharmacological and side effects. Heroin and fentanyl vaccines are close to clinical trial testing as well. Due to their selectivity, these vaccines do not interfere with methadone, buprenorphine, naltrexone and naloxone, or other important medications such as anesthetics used in critical care.



Pravetoni Research Team



Margaret Calhoun, PhD; Sara Rostamizadeh, PhD; Courtney Marecki, MS; Jamie Valeich; Bryan Hannon; Tyler Phan; Yue Zhang, MS; Fatima Hamid, MS; Davide Tronconi



Carly Baehr, PhD; Michael Raleigh, PhD; Jenny Vigliaturo; Dustin Hicks; Aaron Khaimraj, MS; Daihyun Song; Allison Blaskowski; Brandon Steiger

Medication Development Consortium



IMPROVING CARE



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Garvey Institute for
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UW Medicine

Catalyst for growth



Garvey
Institute for
Brain Health
Solutions
(2019)

Outpatient
Clinic
Expansion
UWMC-
Roosevelt
(2022/23)

Behavioral
Health
Teaching
Facility
UWMC-NW
(2023/24)

Behavioral
Health
Institute,
HMC
(2026?)

New Child
Psychiatry
Programs in
Renton
(2027?)



Local News | Local Politics

Inslee unveils \$675 million plan to reverse crisis in Washington's mental-health system

Originally published December 11, 2018 at 1:13 pm | Updated December 12, 2018 at 1:17 pm



In Partnership with UW Medicine

Workforce Development

- Psychiatry Residency Expansion
- Child Psychiatry Fellowship Expansion
- NP/PA Fellowships
- BHHS program

24/7 Telepsychiatry Consultation Service

Behavioral Health Teaching Facility

(\$250 M)

Garvey Institute for Brain Health Solutions

UW Medicine

UW Medicine: How do we close the gaps?

Partnering to Improve Mental Health for our Region Care – Innovation - Training

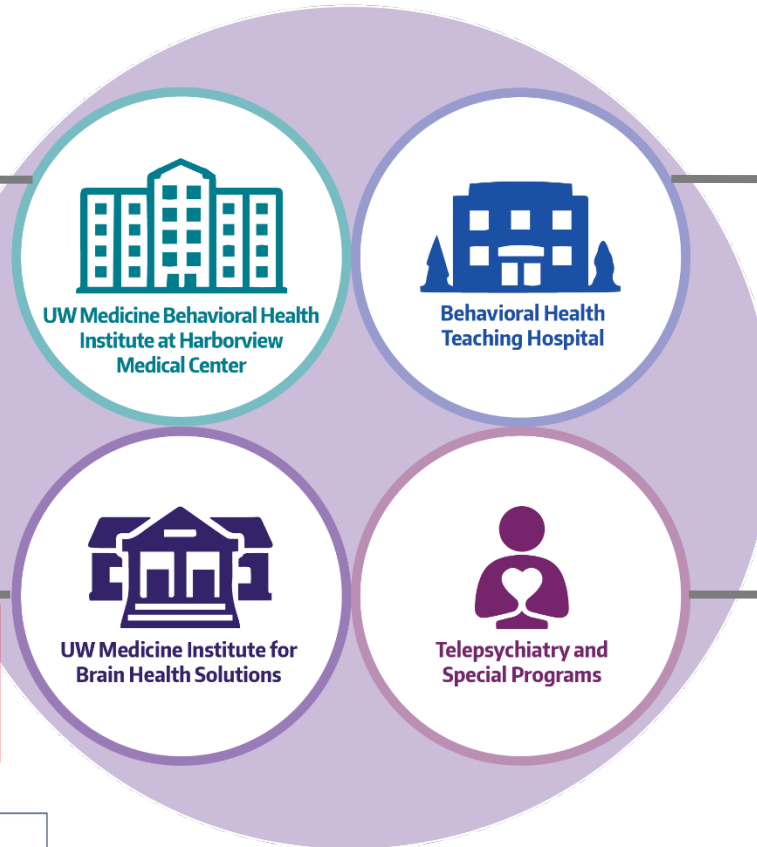
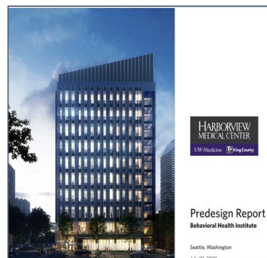


When you need help right away

Harborview Medical Center 24/7 Emergency and crisis care for patients experiencing mental health or substance-use crises.
Comprehensive inpatient and outpatient psychiatric care.

When you need new solutions

- **UW Medicine Garvey Institute For Brain Health Solutions.** Launched in 2019 with \$ 50 million gift from Mike & Lynn Garvey.
- **Behavioral Health Institute at Harborview**



When you need a place to get well

150-bed Behavioral Health Teaching Facility at UWMC Northwest (opening 2024)
Longer-term inpatient care
Adults & Geriatrics
Medical / Surgical care
Neuromodulation treatments.
24/7 Telepsychiatry consultation.
Training and Workforce Development.

When you need advice

24/7 state-wide telepsychiatry consultation.
Psychiatry Consultation Line (PCL)
Partnership Access Line (PAL)
PAL for Moms.
UW PACC & other ECHO programs
All Patient Safe training

When you need more helpers

Psychiatry & psychology training programs.
Inclusive approach to mental health workforce.

Garvey Institute for
Brain Health Solutions

UW Medicine

UWMC BEHAVIORAL HEALTH TEACHING FACILITY



RYAN KIMMEL, MD

GARVEY INSTITUTE FOR BRAIN HEALTH SOLUTIONS 2ND ANNUAL MEETING

JANUARY 27, 2023

Garvey Institute for
Brain Health Solutions

UW Medicine

Western State Hospital c. 1892



UWMC Behavioral Health Teaching Facility c. 2024



Garvey Institute for
Brain Health Solutions

UW Medicine

UWMC Behavioral Health Teaching Facility c. January 2023



Garvey Institute for
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UW Medicine

Advantages & Opportunities for Innovation

Movement away from an asylum model

Hospitalizing patients in their own communities

- Family involvement
- Better transitions with outpatient behavioral health team
- Better engagement with housing

Co-locating long-term psychiatry and an academic medical center

- Integration of psychiatry and medical care
 - Access to specialty medical and psychiatric care
 - Ease of transitions (location and staff)
- Innovations in facility design and treatment programs
- Workforce development
 - Space to teach and learn together
- Legislative commitment (\$230 million) and state-wide reach

Patient and Trainee Experience



Outdoor Patient Areas



Psychiatry Unit Patient Rooms



Neuromodulation Center



NEW TREATMENTS

JÜRGEN UNÜTZER, MD, MPH, MA

GARVEY INSTITUTE FOR BRAIN HEALTH SOLUTIONS 2ND ANNUAL MEETING

JANUARY 27 2023

Garvey Institute for
Brain Health Solutions

UW Medicine

Mental health research: underfunded and failing to attract young academics

While donors pour money into researching cures for cancer and heart disease, mental health is left out in the cold

- 'Stories are not cries of the privileged'
- More from our mental health series



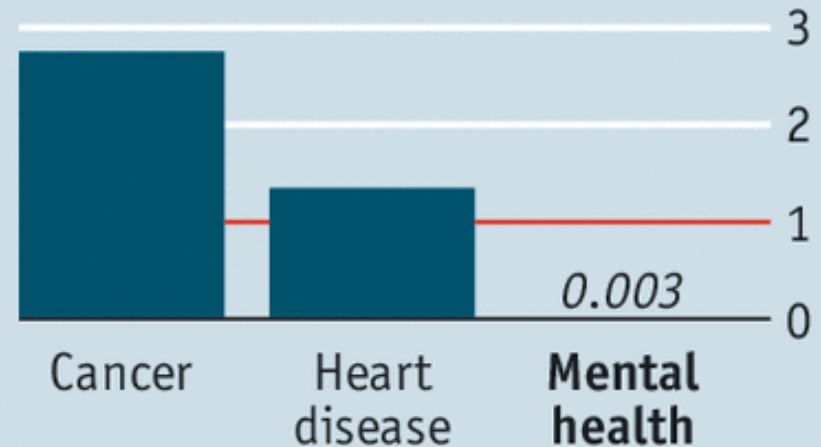
▲ 'It's a battle to keep talented young scientists interested in mental health, as the funding path is not as clear.'
Photograph: Images.com/Corbis

Mental health research needs a boost. It is an area that receives nowhere near as much in public donations as research into cancer or heart disease does. The pharmaceutical industry shies away from it and some say it is a less attractive field for young bright scientists to move in to.

The Guardian. Feb 18, 2015

Charitable giving for research

Per pound of UK gov't spending, £, 2010



Economist.com

**UW Medicine Creates
Garvey Institute for Brain
Health Solutions**

[Click to learn more](#)

Garvey Institute Neuromodulation Clinic

- Located in the new UW Medicine Behavioral Health Teaching Facility
- Opening in Spring 2024
- Blending of top-notch clinical care and innovative research
- Cutting edge training for residents
- Active recruitments for
 - Medical Director
 - Research Director
- **Tremendous new asset for our community**



Neuromodulation Treatments

- Brain stimulation to help normalize or modulate brain function.
- Using direct electrical stimulation, strong magnetic fields, or other approaches.
- Shown to help people with depression, psychosis (catatonia), and other serious brain health disorders
- Alternative to medication treatment
- Examples
 - Electroconvulsive Therapy (ECT)
 - Transcranial Magnetic Stimulation (TMS)
 - Transcranial Direct Current Stimulation (tDCS)
 - Cranial Nerve Stimulation (e.g., Vagus Nerve)
 - Deep Brain Stimulation (DBS)



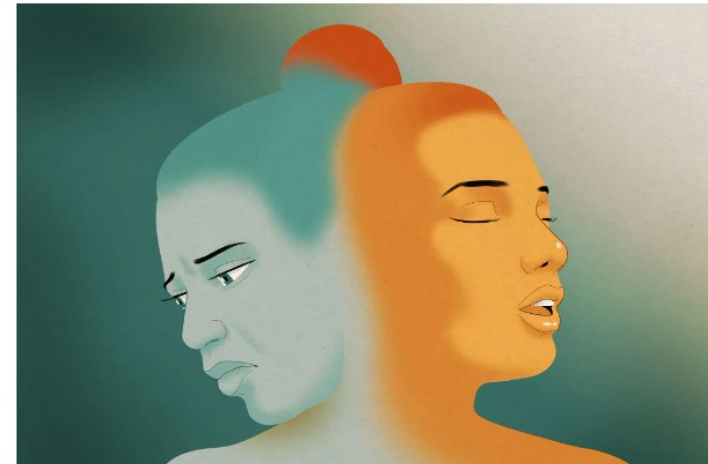
Novel Therapeutics

- Psychedelic Substances (naturally occurring and / or synthetic)
 - Psilocybin
 - Ketamine
 - MDMA
- Used to treat depression, PTSD, anxiety, substance use disorders
- Research is promising but more data is needed
 - Great potential but also serious risks
 - Real world use is way ahead of science
 - 'More heat than light' => add more light

The Promises and Perils of Psychedelic Health Care

Many recreational drugs known for mind-altering trips are being studied to treat depression, substance use and other disorders. Here's what you need to know.

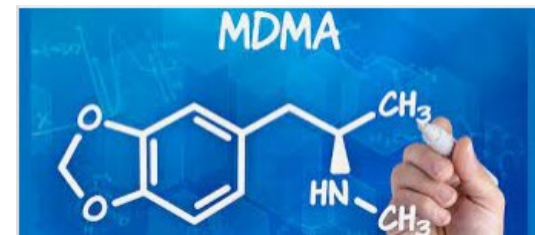
Give this article    426



Reference:
<https://www.nytimes.com/2022/01/05/well/psychedelic-drugs-mental-health-therapy.html>

Center for Novel Therapeutics in Addiction Psychiatry (NTAP)

- Develop powerful new ways of treating people struggling with alcohol, opioid, tobacco and other addictions
- Explore ways to combine psychedelic compounds with evidence-based behavioral interventions / psychotherapies
- Approach
 - Improve understanding of safety and efficacy
 - Conduct pre-clinical and clinical trials
 - Translate effective (proven) new treatments into safe practice in our communities
 - Develop standardized training program
- Directed by Nathan Sackett, MD, MS



OUTPATIENT PSYCHIATRY CLINIC AT ROOSEVELT

AMANDA FOCHT, MD

GARVEY INSTITUTE FOR BRAIN HEALTH SOLUTIONS 2ND ANNUAL MEETING

JANUARY 27 2023

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UW Medicine

OPC clinic services: Care for complex patients within the UW system

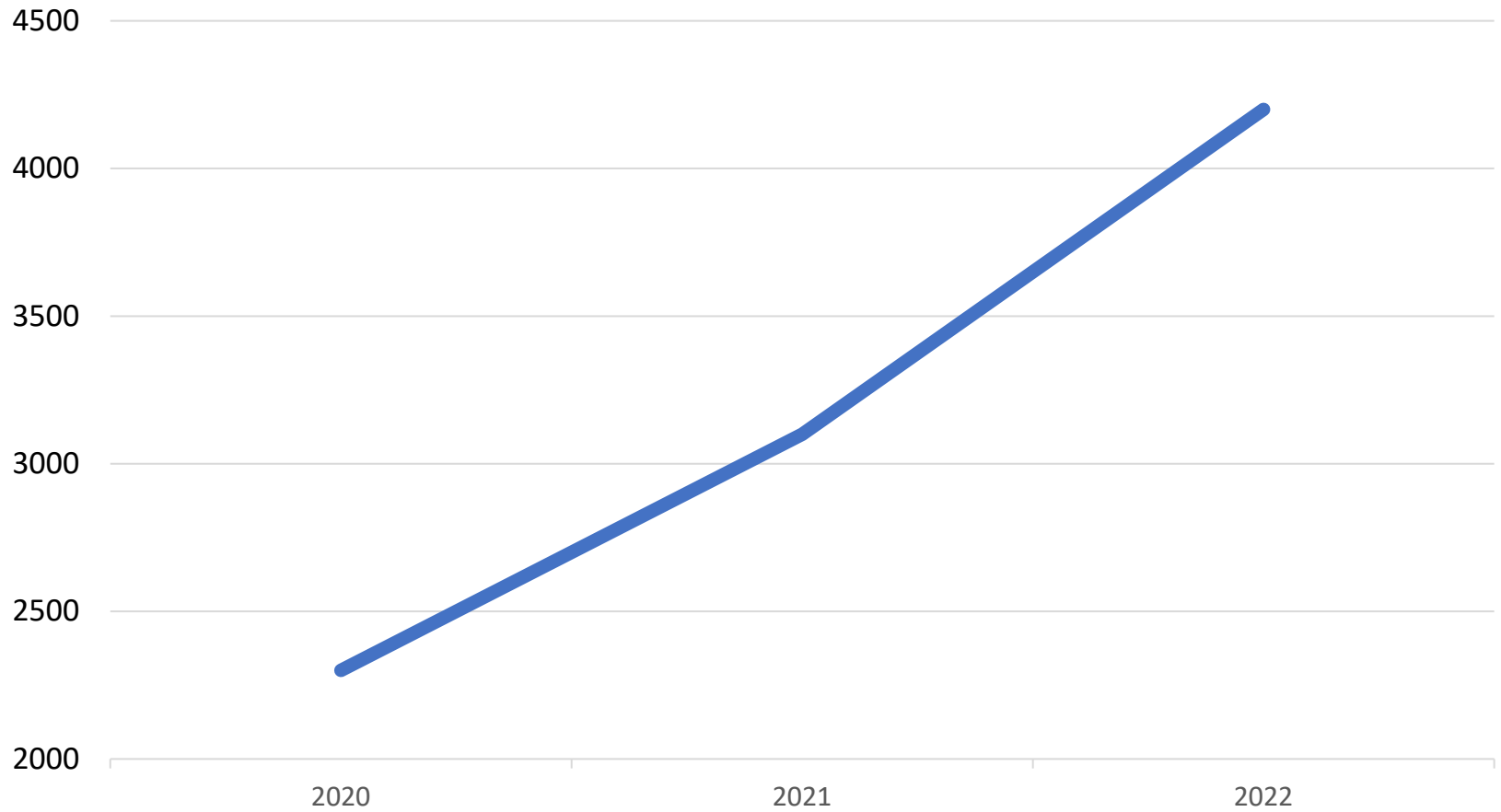
- **Specialized services areas:**
 - Perinatal psychiatry and psychology
 - Addictions psychiatry and psychology
 - Geriatric psychiatry and psychology
 - OCD psychiatry and psychology
- **Social work services**
 - Crisis management
 - Case management and connection with resources
 - Navigation
 - Psychotherapy
- **Nursing services**
 - Crisis management
 - Medical review of referrals
 - Communication with patients over the phone and Mychart
 - Metabolic monitoring, ECGs, injections

OPC providers

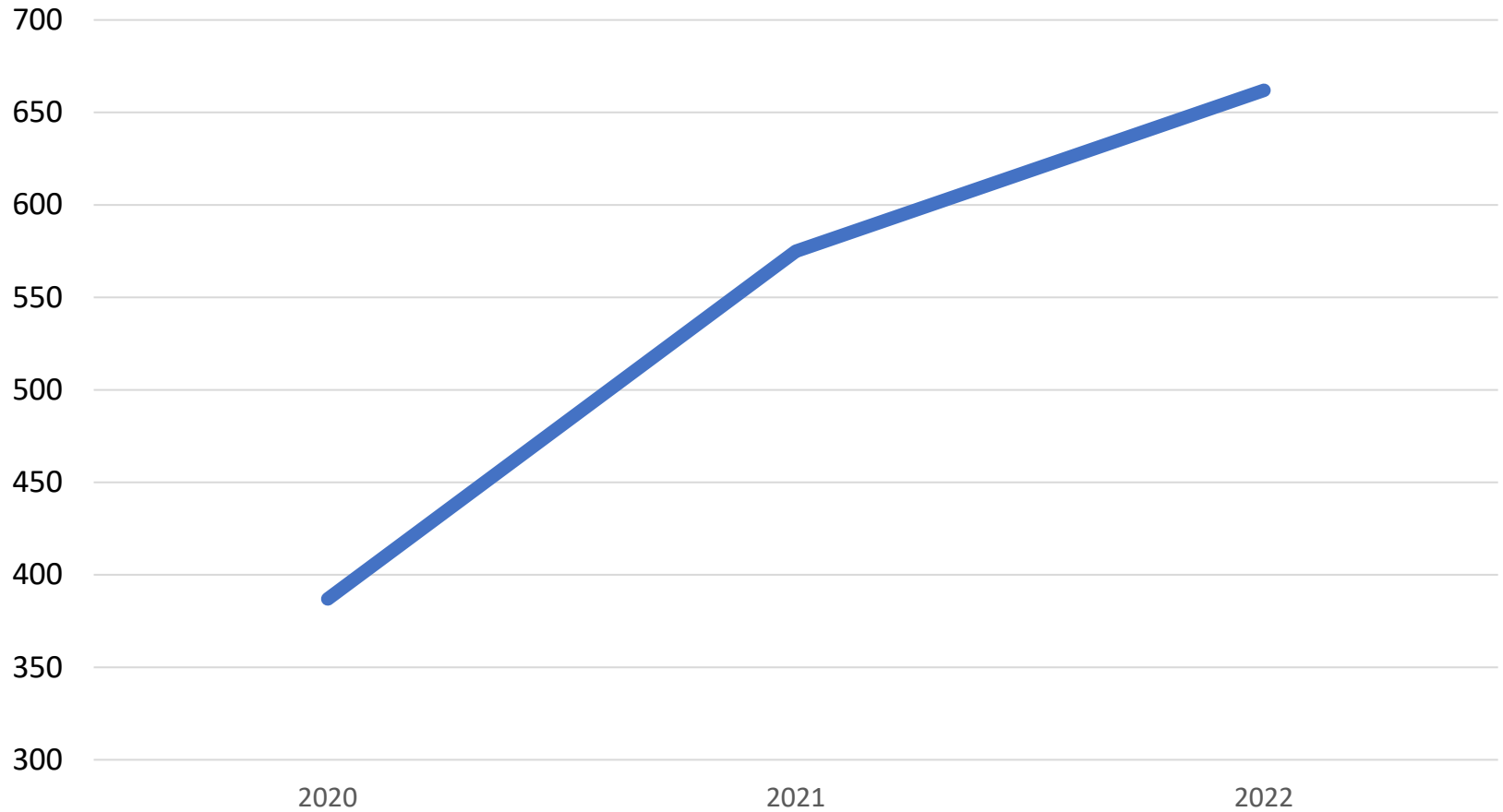


- 12 attending psychiatrists
- 9 attending psychologists
- 2 social workers and a social work assistant
- 30 rotating psychiatry residents
- 4 rotating psychology residents and post-docs

Visit trend 2020-2022



Referrals to clinic trend 2020-2022



Covid-19 pandemic: conversion to telehealth

- One of the first clinics to roll out telehealth visits
- Maintained visit volumes throughout conversion
- Patients choose in-person or telehealth
- 75% of visits are telehealth
- Expands geographic reach
- Reduces number of no-shows
- Increases provider efficiency

OPC resident education



- **R2 outpatient psychotherapy**
 - First psychotherapy cases
 - Attending psychiatrist provide didactics and clinical supervision
- **R3 outpatient continuity clinic**
 - See new patients with attending psychiatrist
 - Provide medication management and psychotherapy
 - Work with attending psychologists to psychotherapy interventions including CBT, CPT and DBT
 - Attending weekly supervision group led by a psychiatrist and psychologist
- **R4 outpatient continuity clinic**
 - Continue to follow patients from R3 year
 - Deepen knowledge in interest areas
- **Psychology residents**
 - Primary rotation site for internship program
 - Post-doc option for those wishing to expand clinical skills

OPC recent areas of growth to improve access

- **Expansion of psychotherapy resources**
 - Psychologist and social work hiring
 - Groups for ADHD, perinatal, general supportive
- **Expansion of imbedded specialty services**
 - Addictions—created elective,
 - Perinatal—expansion of services
 - Geriatric—creation of elective
 - OCD—hiring of specialty psychiatrist from community

Outpatient Psychiatry Clinic Future Directions

- **Clinical trials**
 - Addictions
 - Integrated care
 - Novel therapeutics
 - Suicide prevention
- **Expand treatment access and treatment options**
 - Continue to recruit psychiatrists and psychologists to expand access to most needed services
 - Partner with Anesthesia Department to offer ketamine treatment
 - Development of Mentalization-Based treatment options
 - Expand treatment for patients in suicidal crisis
 - Continue to expand number of groups offered

PATIENT AND FAMILY SUPPORT PROGRAMS

MOLLIE FORRESTER, MSW, LICSW

GARVEY INSTITUTE FOR BRAIN HEALTH SOLUTIONS 2ND ANNUAL MEETING

JANUARY 27, 2023

Garvey Institute for
Brain Health Solutions

UW Medicine

Patient and Family Support Programs

- Provide tailored behavioral health systems navigation assistance, within UW Medicine and across the region
- Improve timely access to effective behavioral health treatment
- Working towards goal of ‘no patient falls through the cracks’
- Making our behavioral health system work better for all of us

Direct Patient and Family Support

Individualized navigation and support



- Clarify treatment goals and understand barriers
- Provide tailored behavioral health systems information and psychoeducation
- Develop and implement a customized plan for accessing care
- Assistance provided to ~ 300 patients and families thus far

Direct Patient and Family Support

- Expanded team of Mental Health Navigators who support all our consultation programs
- Continuously refining our referral network of internal and external care providers
- Regularly review patient care needs and barriers, seeking opportunities to improve services and ways to innovate

Patient and Provider Consultation Programs

- **Mental Health CareConnect** - employer funded
 - ~ 800 adult and child patients received a psychiatric consultation and/or curated mental health care access assistance
- **Psychiatry Consultation Line (PCL)** – legislatively funded
 - ~ 2,500 providers received a psychiatric consultation; assisted providers and/or patients in 38 of Washington’s 39 counties
- **Perinatal Telepsychiatry Clinic** - donor funded
 - ~ 300 patients across WA received perinatal psychiatric assessment via telehealth

Healthcare Workforce Support Programs

COVID response programs for UW Medicine employees

- **Supportive Conversations** –80 faculty and staff volunteers
- **Employee Mental Health Support** - UW Medicine COVID Support Fund – donor supported
 - Combined navigation with direct access to care in Outpatient Psychiatry Clinic (OPC) at Roosevelt
 - 400 workforce members assisted to date
 - New social work positions in OPC

Future Opportunities

Patient, family and caregiver informed:

- **Interdisciplinary workforce education and training**
 - Local, regional & beyond
- **Patient and caregiver resources and support**
 - In person and virtual information on topics such as understanding behavioral health conditions and related modes of care, systems navigation, treatment and recovery planning, legal and financial considerations, etc.
- **Leverage internal expertise and community partnerships**
 - Psychosis REACH and Family Bridger programs, MBWC's "Memory Hub," NAMI, etc.



BREAK (10:50-11:00 AM)



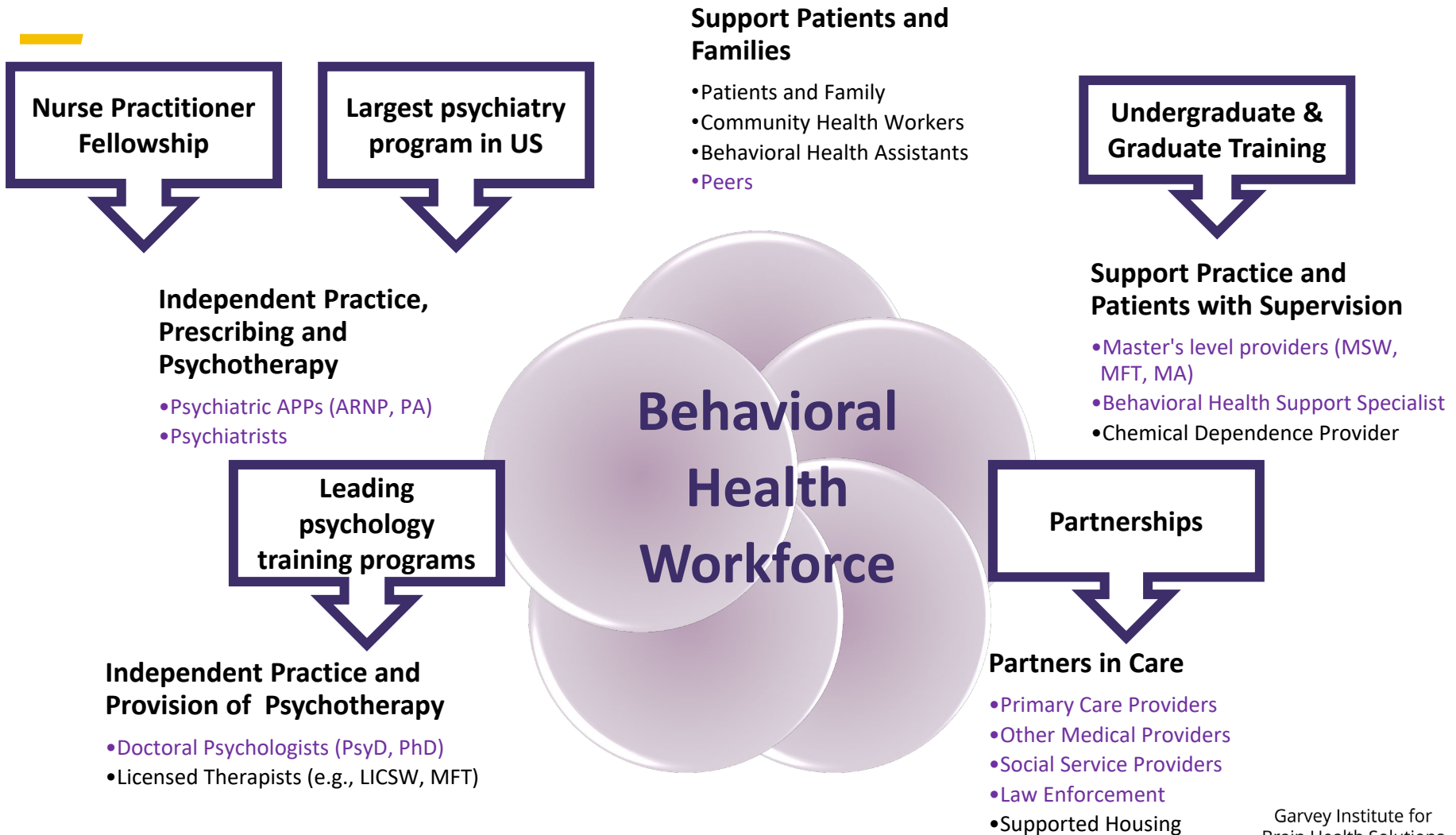
THE NEXT GENERATION

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Garvey Institute for
Brain Health Solutions

UW Medicine

Behavioral Health Workforce Training



CLINICIAN SCIENTIST TRAINING PROGRAM

JÜRGEN UNÜTZER, MD, MPH, MA

GARVEY INSTITUTE FOR BRAIN HEALTH SOLUTIONS 2ND ANNUAL MEETING

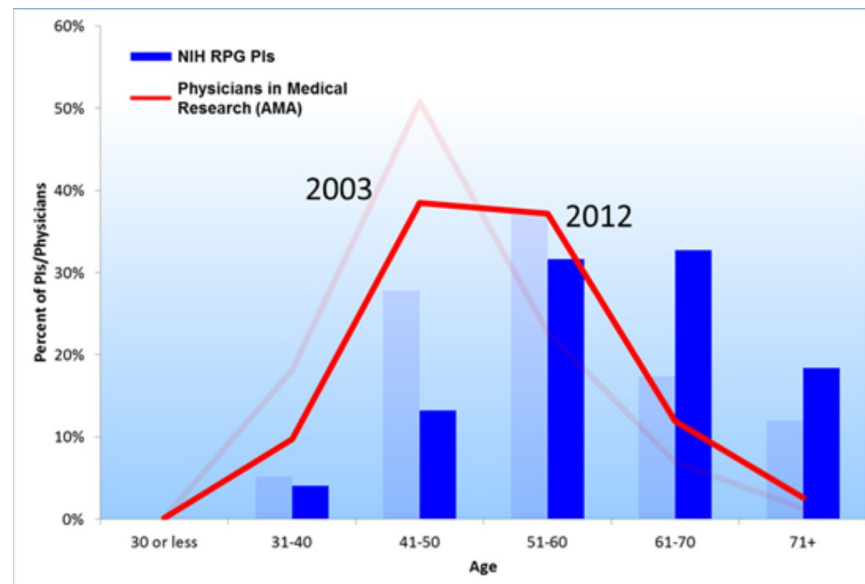
JANUARY 27, 2023

Garvey Institute for
Brain Health Solutions

UW Medicine

Clinician Scientists

- Practicing clinicians who are also engaged in research and discovery
- Central to translational medicine; fill the gap between bench and bedside, making sure discoveries are quickly ‘translated’ into care for patients and families.
- UW has large brain health / behavioral health research programs, but few medical students and physicians in training (residents / fellows) participate
- Endangered species
As researchers with medical degrees retire, there are few to replace them.
- Competing priorities
- Lack of opportunities



Reference: <https://www.science.org/content/article/nih-report-warns-looming-shortage-physician-scientists>

Program Leadership



- Faculty Champion
 - Mark N. Tabbutt Endowed Professorship for Education in Brain Health
- Co-Director
- Program Support Staff

- Program oversight
- Faculty development
- Mentorship

Pilot Grant Funding

- 1-year grants
 - Brief proposals – two funding cycles / year.
- Awarded to trainee with a faculty mentor
- Funding for
 - Trainee research support
 - Small amount of FTE (1-5%) for faculty mentorship
 - Clinical Trial Consultation Service

Early career start-up support

- Start-up packages for promising junior faculty
- Competitive applications
- Specific aims and clearly articulated goals / deliverables
- 2 years of funding, renewable for a 3rd year if satisfactory progress
- 20-40 % FTE support.

Clinical Trial Consultation Service



- Assist with
 - Study planning and design
 - Specific aims
 - Research protocols
 - IRB application
 - Study implementation
 - Partnership development
 - Recruitment, retention, quality assurance
 - Data safety / monitoring
 - Analysis
 - Research dissemination
 - Reporting
 - Presenting and publishing
 - Grant writing

UNIVERSITY OF WASHINGTON - BEHAVIORAL NEUROLOGY & NEUROPSYCHIATRY (BNNP) FELLOWSHIP TRAINING PROGRAM



MICHAEL J SCHRIFT, DO, MA, FANPA

GARVEY INSTITUTE FOR BRAIN HEALTH SOLUTIONS 2ND ANNUAL MEETING

JANUARY 27, 2023

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BNNP

- Behavioral Neurology & Neuropsychiatry is defined as:
 - Medical subspecialty committed to the better understanding the links between neuroscience and behavior, and to the care of individuals with cognitive and behavioral disturbances who suffer from illnesses that fall in the borderland between neurology and psychiatry.

-
- Training in Behavioral Neurology & Neuropsychiatry entails the acquisition of knowledge regarding the clinical and pathological aspects of neural processes associated with cognition, emotion, behavior, and elementary neurological functioning.



BNNP

- Expertise and clinical competence in Behavioral Neurology & Neuropsychiatry requires a combination of knowledge and skills that are beyond the scope of those required for the practice of general neurology or general psychiatry, either alone or in combination.

BNNP

- While the knowledge base and clinical skills of behavioral neurologists and neuropsychiatrists are built upon on the foundation established by their primary training in one or both specialties, expertise and clinical competence in Behavioral Neurology & Neuropsychiatry requires an integrative knowledge of the brain-behavior relationships specific to:
 - Evaluation
 - Differential diagnosis
 - Prognosis
 - Pharmacological and Neuromodulation treatments
 - Psychosocial management
 - Neurorehabilitation of persons with **complex neuropsychiatric and neurobehavioral conditions.**

BNNP

- The body of knowledge and clinical skills involved in Behavioral Neurology & Neuropsychiatry are additive to those of general psychiatry and general neurology and are distinct from other subdisciplines of these medical specialties.

BNNP

- Specialized training and focused clinical experiences in Behavioral Neurology & Neuropsychiatry are needed to achieve competence to practice in this area of medicine.
- Clinicians qualified to practice in this subspecialty area of medicine may refer to themselves as behavioral neurologists (especially those whose primary training is in neurology), neuropsychiatrists (especially those whose primary training is in psychiatry), or subspecialists in Behavioral Neurology & Neuropsychiatry.

Due to the collaboration and support from the Departments of Neurology and Psychiatry, fellows will have training in:

Aging and Dementia

- Alzheimer's disease, frontotemporal dementia, Lewy Body spectrum disorders, vascular cognitive impairment, Huntington's disease

Epilepsy

Traumatic Brain Injury

Movement disorders

Neuroinflammatory disorders

Toxic, metabolic, and genetic brain disorders

Neuroimaging

Questions?

Thank You!

I specifically want to thank the Garvey Family and the Garvey Institute for their most generous gift to make this fellowship training possible.

TRAINING OPPORTUNITIES IN COGNITIVE AGING



THOMAS J GRABOWSKI, MD, TIM B. ENGLE PROFESSOR FOR BRAIN HEALTH INNOVATIONS
GARVEY INSTITUTE FOR BRAIN HEALTH SOLUTIONS 2ND ANNUAL MEETING
JANUARY 27, 2023

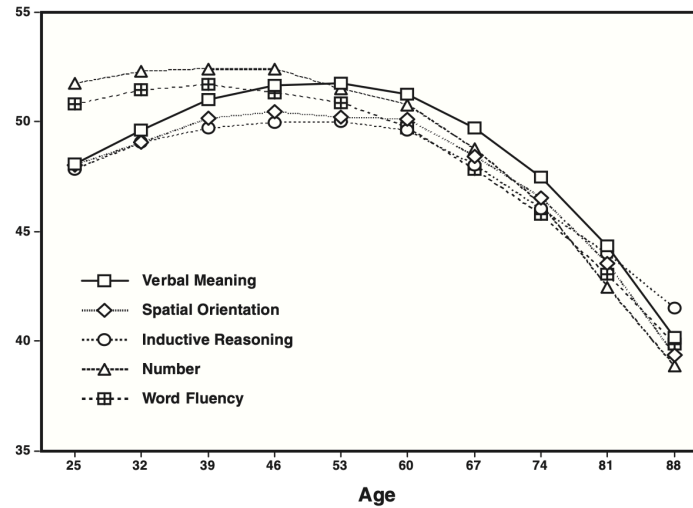
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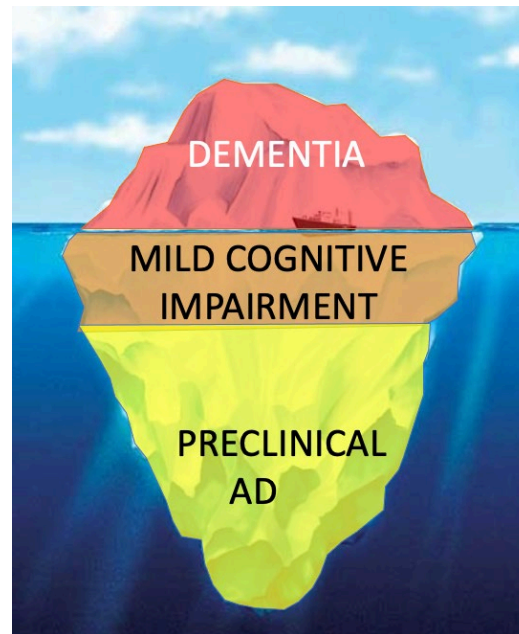
Adult Cognitive Development is a thing

Preclinical Alzheimer's Disease is common


Some brains are more resilient to disease than others



Schaie, K. W. (2010).




Delaying the “tipping point”



- The tipping point is influenced by:
 - **Lifestyle factors** : education, occupational challenge, and cognitive habits
 - **Health factors** : sleep, hypertension, depression, and exercise.
- These factors can make a decade of difference in the tipping point
- For reference, the strongest genetic risk factor for AD makes ~12 yrs difference
- What is the biology behind these factors?
- How can we and our trainees improve the brain health of the public?

Postdoctoral Clinical Training (Fellows and Residents)



- Geriatric Psychiatry Fellowship, Lucy Wang MD, Director
- Geriatric Medicine Fellowship, Katherine Bennett MD, Director
- MIRECC Fellowship, VA Puget Sound, Elaine Peskind MD, Director
- Memory and Brain Wellness Center Clinic
 - Neurology, Psychiatry, Social work
- The NEW Behavioral Neurology and Neuropsychiatry Fellowship Program
 - A collaboration of Psychiatry and Neurology Departments, and Garvey Institute
 - UCNS-Accredited
 - Starting summer 2023

Postdoctoral Research Training (MD Fellows/ PhD Postdocs)

- [NIH T32 Alzheimers Disease Training Program](#) (Predoctoral and Postdoctoral trainees)
 - Major federal support for pre- and postdoctoral trainees
 - Affording research component to the BNNP Fellowship
 - BNNP expected to help attract MD Fellows to this program
- [NINDS R25 training program](#) NIH-funded support for research in neurology, neurosurgery, neuroradiology residency and fellowship
- [MIRECC fellowship](#), VA Puget Sound, Elaine Peskind MD, Director
- [Medical Scientist Training Program](#), Marshall Horwitz Md PhD, Director

Junior Faculty:

Research Education Component, ADRC



- Enhancing the T32 with curriculum around UW research resources
- Interactions with Native Alzheimer's Disease Center for Minority Aging Research, e.g. participation in NAD RCMAR grant writing course
- Scholarships for Big Data Summer Institute
- Closely connected to UW ADRC "Pilot" projects
- Broadening mentorship for UW ADRC Pilot project awardees

Resilience Working Group

- New!
- Catalyzed by the UW Alzheimer's Disease Research Center and the Garvey Institute
- Led by Drs. Eric Larson, and Tom Grabowski
- Monthly hands-on work-in-progress and accountability for junior investigators actively working in the area of cognitive aging and resilience
- Modeled on successful ADRC-affiliated working groups in Neurogenetics and Tau biology
- Inaugurated because of increasing focus on resilience in the ADRC



Dr. Eric Larson



Dr. Tom Bird

Primary Care Providers: Project ECHO Dementia

- ECHO-Dementia
 - On-line collaborative training model for primary care physicians, statewide
 - Interdepartmental and interinstitutional collaboration
 - State-funded, located at [The Memory Hub](#) on First Hill
- Primary Care Continuing Medical Education Workshop,
 - Identifying and Managing Dementia
 - Directed by Dr. Barak Gaster
 - Interactions with
 - ECHO-Dementia,
 - indigenous aging projects
 - ADRC Outreach, Recruitment, and Engagement Core of the ADRC`



The Garvey Institute contributes to Interdisciplinary training opportunities



- By creating new training programs
- By potentiating existing training programs
- By funding innovation by UW trainees and faculty
- By promoting a thematic focus on mechanisms of pathological cognitive aging and brain resilience

Thank you!

RECRUITMENT

BECKY SLADEK, MS

GARVEY INSTITUTE FOR BRAIN HEALTH SOLUTIONS 2ND ANNUAL MEETING

JANUARY 27, 2023

Investing in people



We're a bit understaffed today, could you be 6 people?

Behavioral Health Teaching Facility

- creating a new recruiter position on HR team
- active at national and regional conferences throughout the year
- innovative workforce expansion projects



“Do you have any references besides Batman?”

Behavioral Health Teaching Facility

Psychiatry Fellowship for Advanced Nurse Practitioners

“Our future fellows will transform the access to effective mental health care across Washington state through collaboration, community support, and sustainable access to evidence-based care for patient and families”

NEWS RELEASE



December 8, 2022 For immediate release

Grant will augment nurse-practitioner training in psychiatry

Premera Blue Cross invests \$6.6 million in UW fellowship to help address state's mental-health workforce crisis.

MEDIA CONTACT:

- **UW School of Medicine:** Susan Gregg, 206-390-3226, sghanson@uw.edu
- **UW School of Nursing:** Alex Abplanalp, 206-351-6058, ann08@uw.edu
- **Premera Blue Cross:** Amanda Lansford, 425-918-3975, Amanda.Lansford@premera.com



LATEST NEWS

- 01/17/2023
Genetic diagnosis helps guide childhood hearing loss
- 01/11/2023
Enrollees sought for study on the brain
- 01/09/2023
Memory Hub now welcoming during public hours
- 01/05/2023
Study illuminates sugar's role in kidney disease

Garvey Institute Recruitments: Endowed Professorships

Mark N. Tabbutt Endowed Professorship for Education in Brain Health

- Director, Clinician Scientist Training Program
- Internal search

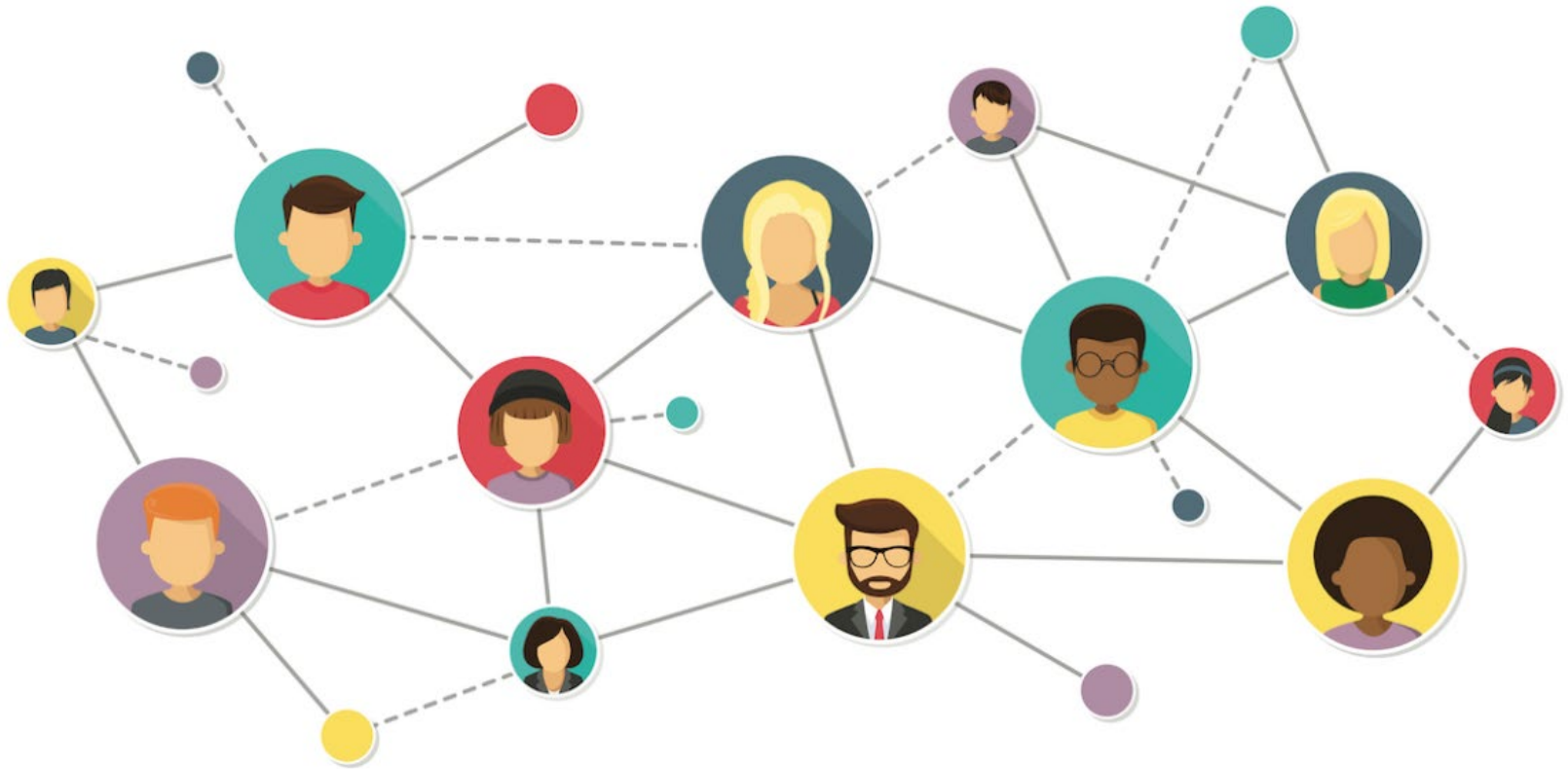
Garvey Family Endowed Professorship for Technology and Brain Health

- Director, Neuromodulation Research Program
- Behavioral Health Teaching Facility

Nicole K. Engle Endowed Professorship for Addiction Medicine

- Focus on clinical trials
- UWMC-Roosevelt outpatient expansion

Networking is more important than ever



Stay in touch!

Garvey Institute opportunities

- Sign up for our newsletter (gibhs@uw.edu)
- Reach out to me (rsladek@uw.edu)

Behavioral Health Teaching Facility

- Psychiatrist/psychologist/psychiatric nurse practitioners – connect with Ryan Kimmel, MD
- Everything else – [uwhires](#)

Garvey Institute for Brain Health Solutions at UW Medicine

Sign up for news and updates from the Garvey Institute for Brain Health Solutions at UW Medicine and learn about opportunities to become involved. Questions? Email GIBHS@uw.edu

Email Address *

First Name *

Last Name *

Affiliation

Position

Subscribe

WRAP UP & CLOSING



Garvey Institute website: gibhs.psychiatry.uw.edu

UW Medicine

DEPARTMENT OF PSYCHIATRY
AND BEHAVIORAL SCIENCES

Garvey Institute for Brain Health Solutions

[About Us](#) ▾ / [Initial Areas of Focus](#) / [Current Projects](#) / [Training Programs](#) / [Funding Opportunities](#) / [Recruitments](#) / [Partners & Collaborators](#)

Here you can find the latest news, upcoming events, who we are and our approach to tackling one of the biggest challenges of our generation — the personal, medical and societal burden of brain disorders.

Our initial work has been focused in five areas: brain health and cognitive aging, trauma, addictions, technology and adolescent and young adult mental health.

Search our project database by patient population, targeted condition or geographic area.

Learn about our new Behavioral Neurology and Neuropsychiatry Fellowship Program and our new Clinician Scientist Training Program, both launching in 2023.

Our Innovation Grants have funded 36 projects and 88 investigators to date.

Learn about our current openings and how to apply.

We are committed to leveraging existing efforts to further brain health across the University of Washington as well as locally, regionally and nationally. Here you can see a sample of our current partners and collaborators.

Grand Rounds

<https://gibhs.psychiatry.uw.edu/events/>

2022 talks

- The gut microbiome immune connection
- The geriatric mental health workforce
- Electroconvulsive Therapy
- Tracking preclinical Alzheimer's disease with biomarkers
- Translational research in early psychosis
- Catching up on cannabis science
- Emerging insights into the links between cranial fluid dynamics, sleep, and cognitive decline

2023

- Neuropsychiatric effects of COVID-19
- Neuroscience research and training opportunities

Events

The Garvey Institute is working on building a centralized calendar where you can learn about brain health-related events taking place throughout the University of Washington. If you have events to share, please contact Becky Sladek at rsladek@uw.edu.

List Summary Tile



[+ Subscribe](#) [☰ My Events](#)

Friday, Jan 27, 2023

Time	Event	Location
8:30 am	2nd Annual Meeting of the Garvey Institute for Brain Health Solutions	South Lake Union Administration (SLU Building C) (SLC)

Friday, Feb 17, 2023

Time	Event	Location
12 pm	Psychiatry and Behavioral Sciences Grand Rounds: Rebecca Hendrickson, MD, PhD and John Oakley, MD	washington.zoom.us... Passcode: 461403

Friday, Mar 17, 2023

Time	Event	Location
12 pm	Psychiatry and Behavioral Sciences Grand Rounds: Tom Daniel, PhD, Susan Ferguson, PhD and John Neumaier, PhD	washington.zoom.us... Passcode: 461403



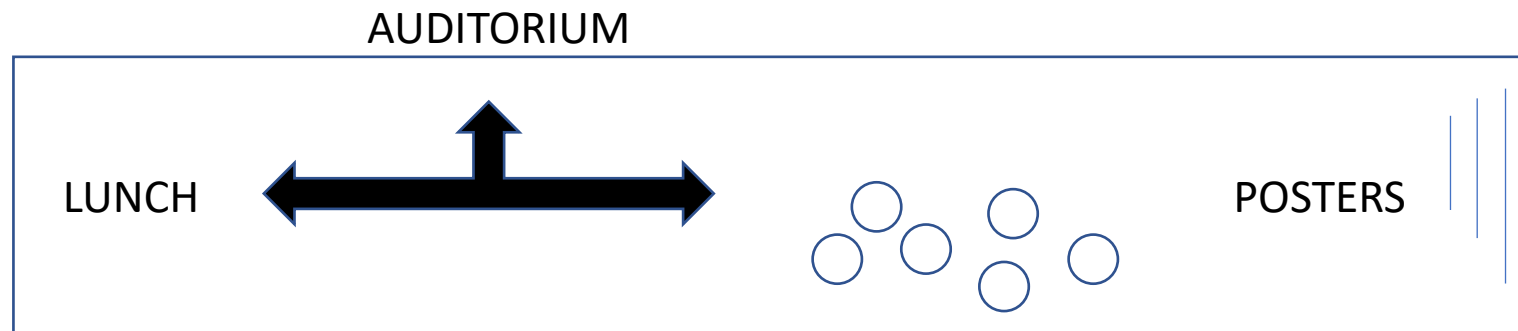
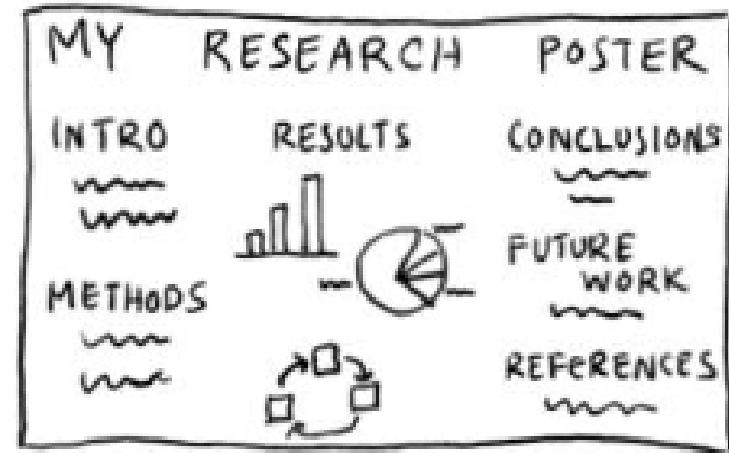
Events calendar powered by Trumba

Networking Lunch & Poster Session

Lunch to your right

Researchers & Posters to your left

Remember to get your parking voucher!



A detailed microscopic image of brain cells, showing various neurons and their intricate network of dendrites and axons. The cells are rendered in vibrant colors like blue, purple, and orange against a dark background.

Garvey Institute for Brain Health Solutions

Treating and preventing disabling brain disorders from birth through old age

THANK YOU!

gibhs@uw.edu