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CDMRP
DEPARTMENT OF DEFENSE
CONGRESSIONALLY DIRECTED MEDICAL RESEARCH PROGRAMS

Alcohol and Substance Use Disorders Research Program

Strategic Plan

INTRODUCTION

The Congressionally Directed Medical Research Programs represents a unique partnership among the U.S. Congress, the military, and the public to fund innovative and impactful medical research in targeted program areas. Programs managed by the CDMRP have formal strategic plans that identify program-specific research priorities, how to best address these urgencies, short- and long-term goals, investment strategies, and ways to identify and evaluate program successes with respect to the priorities.

The strategic plan presents the current strategy and program goals for the CDMRP's Alcohol and Substance Use Disorders Research Program. The ASUDRP strategic plan identifies the high-impact research goals most important to its stakeholders while providing a framework that is adaptable to changes in the medical research environment. Congress appropriates funds for the ASUDRP on an annual basis and there is no guarantee of future funding. The ASUDRP Programmatic Panel revises the strategic plan during the annual vision setting meeting.

BACKGROUND AND OVERVIEW

In 2020, the National Survey on Drug Use and Health revealed that more than 40 million Americans reported having a substance use disorder. Service Members and Veterans may be at increased risk of developing alcohol and other substance use disorders, or ASUD, due to their unique experiences and stressors.[1]

Congress initiated the ASUDRP in fiscal year 2010 to support innovative and impactful research on alcohol and other substance use disorders. The program strives to increase and improve medication options to treat alcohol, opioid and other substance use disorders, particularly when they co-occur with PTSD, TBI, and/or other mental health conditions. Additionally, the ASUDRP works to reduce the number of opioid and other substance use-related deaths.

The ASUDRP Vision and Mission statements are:

VISION: Improve the clinical outcomes of alcohol, opioid and other substance use disorders

MISSION: To identify, evaluate and advance pharmacotherapeutics for alcohol, opioid and other substance use disorders, with an emphasis on other co-occurring mental health conditions, to maximize the functioning and quality of life for Service Members, their Families, Veterans and the American public

[1] https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health

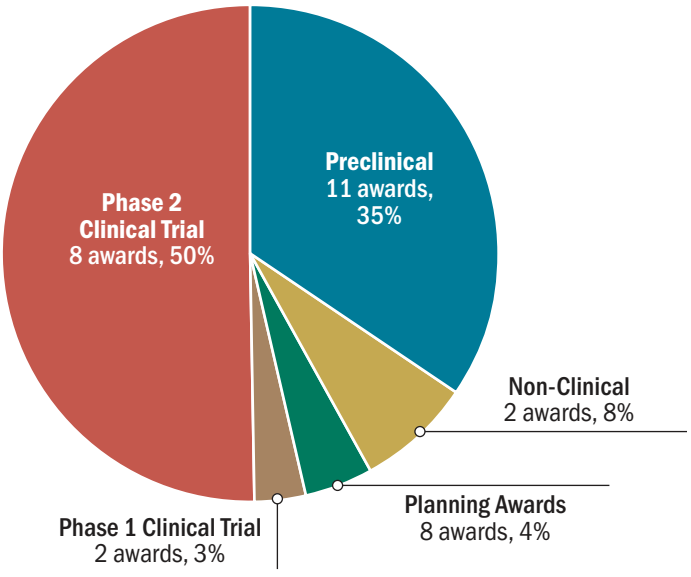
To ensure that each program's research portfolio reflects not only the most meritorious science, but also the most programmatically relevant research, the CDMRP employs a two-step review process that is composed of a scientific peer review and a programmatic review. An external panel of scientists, clinicians, military members, and patient advocates, who we call consumers, conduct the scientific peer review. The panel judges each application for scientific and technical merit according to criteria published in the program's funding opportunity. In the second tier of review, the programmatic review, a panel of experts in the field discuss and assess the applications based on the peer review ratings and summaries, portfolio balance and programmatic intent. The ASUDRP Programmatic Panel has representation from leading federal ASUD funding agencies such as the National Institute on Alcohol Abuse and Alcoholism, National Institute on Drug Abuse and U.S. Department of Veterans Affairs. The Programmatic Panel members provide ASUD expertise as well as knowledge of their organizations' research and funding efforts, enabling the ASUDRP to work synergistically within the ASUD community while avoiding duplication of effort.

ASUDRP FUNDING HISTORY AND INVESTMENTS

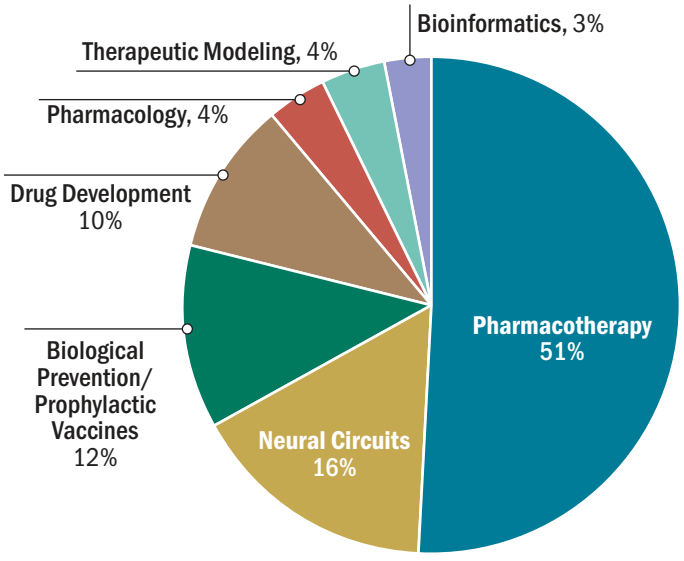
Since its inception in FY10, the program established a network of multidisciplinary, translational research teams with the explicit goal of accelerating the delivery of new or improved treatments for ASUD and awarded $60.075M to fund relevant research. Congressional appropriations supported two consortia through seven awards, as noted in the table below. Appropriations from fiscal years 2010 through 2013 supported the Institute for Translational Neuroscience consortium, and FY14-19 and FY21-23 support the Pharmacotherapies for Alcohol and Substance Use Disorders Alliance consortium. The ASUDRP Programmatic Panel serves as a Consortium Steering Committee to provide oversight and guidance to the PASA consortium. Note: The period of performance for ITN expired and all awards closed.

Consortium	Principle Investigator	Institution	ASUDRP Award Period of Performance and Award Amount
Pharmacotherapies for Alcohol and Substance use disorders Alliance	Tracy Nolen, DrPH	Research Triangle Institute	• 2018-2024; $11.14M • 2015-2024; $11.13M • 2022-2027; $10.57M
Institute for Translational Neuroscience	Jennifer Mitchell, Ph.D.	University of California, San Francisco	• 2014-2019; $3.71M • 2013-2018; $4.17M • 2012-2017; $4.82M • 2011-2016; $5.94M

PASA Consortium Investments by Award Type (FY14-23)



PASA Consortium Investments by Research Category



RESEARCH AND FUNDING ENVIRONMENT

STATE OF THE SCIENCE AND CLINICAL CARE

Among Service Members in the Military Health System between 2013-2022, ASUD accounted for nearly 3.5 million outpatient encounters and over 420,000 total hospital bed days.[2] The MHS faces a great challenge when considering the number of military beneficiaries who also received care for ASUD during this time.

The 2021 VA/DOD Clinical Practice Guidelines for the Management of Substance Use Disorders recommend naltrexone and topiramate for pharmacological treatment of alcohol use disorder, and buprenorphine/naloxone and methadone for opioid use disorder. Other medications, including benzodiazepines, are also recommended for managing symptoms of alcohol withdrawal. Two persistent challenges to address are patient adherence to treatment and relapse prevention.

When ASUD co-occurs with other mental health conditions, the treatment complexity increases for the healthcare provider. Service Members and Veterans with ASUD and PTSD typically require various medication combinations rather than a single pharmacotherapy to effectively manage their condition.[3] Developing pharmacotherapies that effectively address co-occurring conditions remains a challenge.

The program recognizes that, in most cases, the best practice for treatment of ASUD and many other mental health conditions involves a combination of non-pharmacological and pharmacological interventions. However, researching non-pharmacological interventions for ASUD is not the focus of this particular program.

RESEARCH FUNDING LANDSCAPE

Many sources provide funding for ASUD research through a variety of programs. The federal government provides funds to the National Institutes of Health, the CDMRP and VA. The VA, NIAAA, and NIDA represent members on the ASUDRP Programmatic Panel and coordinate the ASUDRP investment strategy. The ASUDRP considers the research focus and portfolio of other funding organizations as it refines its own.

In developing the current ASUDRP Strategic Plan, the Programmatic Panel members reviewed the ASUD research and funding environment and considered the existing research portfolios and emerging technologies that offer the potential to accelerate pharmacological treatments for ASUD. The ASUDRP and members of the programmatic panel regularly identify and leverage advances in the external environment, with the objective to reduce the number of opioid and other substance use-related overdose deaths.

STRATEGIC DIRECTION

The ASUDRP has three strategic goals:

Goal 1 – Identify new chemical entities and repurpose existing medications in preclinical and non-clinical research models, including IND-enabling studies, for the treatment of ASUD with co-occurring PTSD and other mental health conditions.

Goal 2 – Evaluate candidate medications, including assessment of safety, pharmacokinetics and pharmacodynamics, to determine optimal dosing in individuals with ASUD, or ASUD with co-occurring PTSD and other mental health conditions, or healthy volunteers, as needed.

Goal 3 – Advance potential treatments by testing the preliminary efficacy and safety of medications or medication combinations in individuals with ASUD, or ASUD with co-occurring PTSD and other mental health conditions; as well as explore precision medicine tools for improved treatment outcomes for individual patients.

[2] Data provided by the Armed Forces Health Surveillance Branch, based on electronic records within DMSS. Does not include care received outside of the MHS. Includes all MHS inpatient and outpatient encounters where the first, or primary, diagnosis was for any of the following alcohol related disorders: Alcohol Abuse Disorders; Alcohol Dependence Disorders. Active Component Service Members does not include Activated Reserve and Activated National Guard. This does not include care received while deployed, or any care received outside of the MHS that was not processed through TRICARE (i.e., care covered by other insurance sources or care paid for entirely out of pocket). Other DOD beneficiaries include: National Guard/Reserve members; former Service Members; and family members of ACSM.

[3] Shorter, Daryl, John Hsieh, and Thomas R. Kosten. 2015. "Pharmacologic Management of Comorbid Post-Traumatic Stress Disorder and Addictions." *The American Journal on Addictions* 24, no. 8 (November): 705–12. https://doi.org/10.1111/ajad.12306.

The ASUDRP funds consortia that serve as translating centers to move projects from discovery to proof-of-concept and phase 2 safety and efficacy trials that seek to inform the planning of larger multi-site clinical trials, with the goal of industry handoffs for further development and commercialization. The ASUDRP expects the funded consortia to support studies that address the program's near-term, mid-term and long-term strategy as follows:

Near-Term Strategy, 1-2 years

Discovery studies

Proof-of-concept studies

Mid-Term Strategy, 3-5 years

Discovery studies

Proof-of-concept studies

Multisite activity/dosing studies

Industry handoff/efficacy studies

Long-Term Strategy, 5+ years

Discovery studies

Proof-of-concept studies

Multisite activity/dosing studies

Industry handoff/efficacy studies

Industry handoff/pivotal studies leading to licensing and product development

Through these strategies, researchers can translate basic science knowledge and early-stage clinical products into evidence-based treatments at an accelerated pace. This approach includes a regulatory strategy for FDA compliance.

FY24 ASUDRP RESEARCH FOCUS AREAS

The ASUDRP focus areas aim to treat ASUD and improve treatment adherence, prevent relapse, and reduce risk of misuse. The population of interest encompasses individuals with alcohol and other substance use disorders, including opioid use disorder, particularly when PTSD, TBI, and/or other mental health conditions co-occur. The program's focus areas are:

- New medication targets
- Novel medications
- Re-purposed medications
- Vaccines and other immunotherapies
- Drug-drug combinations
- More potent, longer-acting formulations to counteract opioid overdose, including fentanyl and its analogs

INVESTMENT STRATEGY

The ASUDRP invests in consortia that are rigorous, collaborative research efforts that identify, evaluate and further develop pharmacotherapies and translate basic knowledge into evidence-based treatments for ASUD, particularly with co-occurring PTSD, TBI, and other mental health conditions. The goal ASUDRP-funded research is to maximize functioning and quality of life for Service Members and their Families, Veterans and the American public.

MEASURING PROGRESS

The ASUDRP measures near-term success by investing in consortia that solicit and fund research projects that address the ASUDRP focus areas. Longer-term success is evaluated by the program's contributions to the scientific community, follow-on research that is attributed to ASUDRP-funded projects, the impact of ASUDRP-funded research on clinical treatments and interventions, and handoffs to industry partners.

FY10-23 RESEARCH OUTCOMES

METRIC	Number
Awards	7
Consortium-Funded Studies	55*
Clinical Trials	15
Publications	62
Patents / Patent Applications	2
Presentations	68

**Includes studies under negotiation*