CDMRP
Department of Defense

Alcohol and Substance Abuse Disorders Research Program

Strategic Plan

INTRODUCTION

The Congressionally Directed Medical Research Programs (CDMRP) 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 formalized 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.

This document presents the current strategy for the CDMRP's Alcohol and Substance Abuse Disorders Research Program (ASADRP). The ASADRP 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 to address those goals. This plan has been formulated to provide greater clarity of the program's goals over time to the public and other stakeholders. Funding for the ASADRP is congressionally appropriated on an annual basis; therefore, there is no guarantee of future funding. The ASADRP Strategic Plan will be reviewed during the program's Vision Setting meeting and updated as necessary.

BACKGROUND AND OVERVIEW

The problem of alcohol and substance abuse is a growing concern among the general public, as well as military personnel and Veterans alike. In 2013 the Institute of Medicine (now called the National Academy of Medicine) report *Substance Use Disorders in the U.S. Armed Forces*[1] described the increasing medical burden imposed on the Military Health System by excessive alcohol use. The report recommended that the Department of Defense assume leadership to ensure the consistency and quality of treatment services available to those with alcohol substance use disorders (ASUD) given the burden of ASUD in the military. The Fiscal Year 2021 (FY21) House Appropriation Committee – Defense recognized the ongoing threat posed to Warfighters and the general public by the opioid epidemic. Those who may develop an opioid dependency following an injury generally struggle with addiction, or those Service Members who have family members that struggle with addiction are often not positioned to dedicate themselves entirely to the required military mission. The Committee encouraged the Assistant Secretary of Defense (Health Affairs) to prioritize congressionally directed medical research on substance use disorders aimed at reducing the overall number of opioid-related overdose deaths.

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

MISSION: To explore integrated approaches to address alcohol and substance use disorders, and reduce the number of opioid and other substance use-related deaths, through multidisciplinary, team-based research efforts that translate basic knowledge into enhanced clinical pharmacological treatment protocols and enhanced quality of life for Service Members, Veterans, and the American public

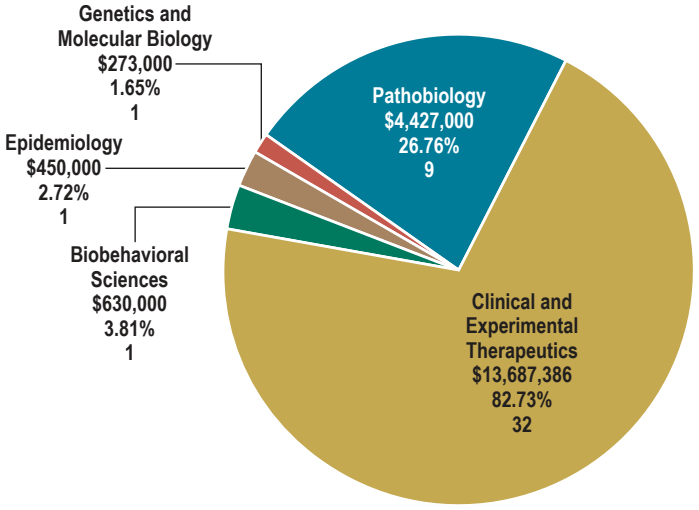
To ensure that each program's research portfolio reflects not only the most meritorious science, but also the most programmatically relevant research, the CDMRP employs a two-step review procedure for research applications that is composed of a scientific peer review and a programmatic review. The scientific peer review is conducted by an external panel that is recruited specifically for each peer review session. Peer review involves the expertise of scientists, clinicians, military members, and consumers (patient advocates). Each application is judged on its own scientific and technical merit with respect to the described criteria in the funding opportunity solicitation. The second tier of review, programmatic review, includes discussions by experts in the field, such as the Programmatic Panel for the ASADRP. These experts, which include scientists, clinicians, consumers, and members of the military, assess the applications based on the scientific peer review ratings and summaries, portfolio balance, and programmatic intent. The ASADRP Programmatic Panel (https://cdmrp.army.mil/srp/panels/panels21) has representation from leading federal ASUD funding agencies such as the National Institute on Alcohol Abuse and Alcoholism (NIAAA), National Institute of Drug Abuse (NIDA), and Department of Veterans Affairs (VA). The Programmatic Panel members provide ASUD expertise as well as knowledge of their organizations' research and funding efforts, enabling the ASADRP to work synergistically within the ASUD community while avoiding duplication of effort.

ASADRP FUNDING HISTORY AND INVESTMENTS

Congress launched the ASADRP in FY10. Since then the program has established a network of multidisciplinary, translational research teams with the explicit goal of accelerating the delivery of new or improved treatments for ASUD; as a result, the ASADRP has distributed a total of $40.83M to fund relevant research. Appropriations supported four awards to the University of California, San Francisco, for the Institute for Translational Neuroscience (ITN) Consortium, as well as two consortium awards to the Research Triangle Institute for the Pharmacotherapies for Alcohol and Substance Abuse (PASA) Consortium. These are product-driven consortia that conduct multidisciplinary, team-based translational research efforts to identify promising compounds; proof-of-principle basic research; and human proof-of-concept trials with promising compounds to address effective treatments for ASUD, including a regulatory strategy for U.S. Food and Drug Administration (FDA) compliance. A Consortium Steering Committee provides oversight and guidance to the PASA Consortium. The ITN period of performance has expired and all awards have closed.

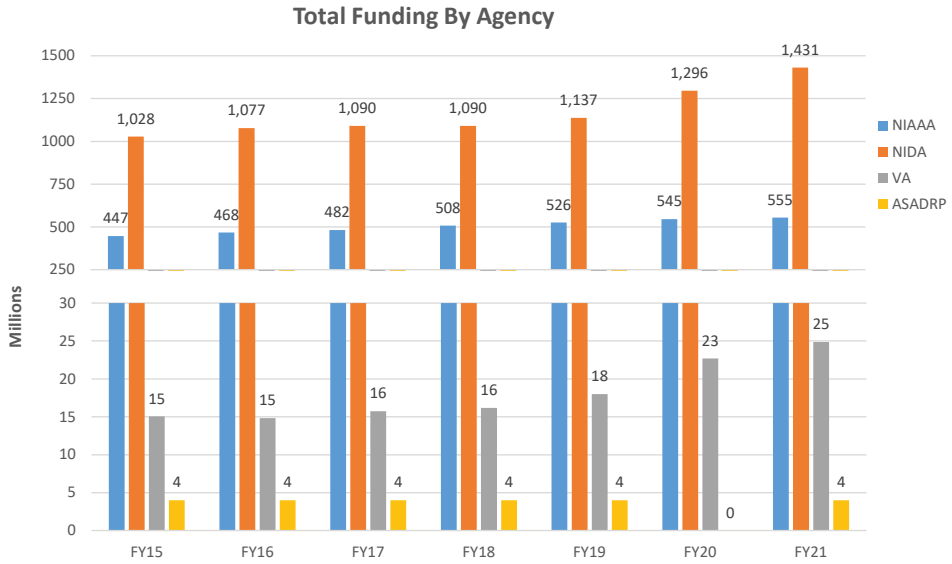
Consortium	Principle Investigator	Institution	ASADRP Award Period of Performance (Award Amount)
Pharmacotherapies for Alcohol and Substance Abuse (PASA)	Dr. Tracy Nolen	Research Triangle Institute	(1) 2018-2023 ($11.15M) (2) 2015-2021 ($11.04M)
Institute for Translational Neuroscience (ITN)	Dr. Jennifer Mitchell	University of California, San Francisco	(1) 2014-2019 ($3.71M) (2) 2013-2018 ($4.17M) (3) 2012-2017 ($4.82M) (4) 2011-2016 ($5.94M)

FY10–FY19 ASADRP Portfolio Investment by Research Category (% of Total Investment/# of Awards)



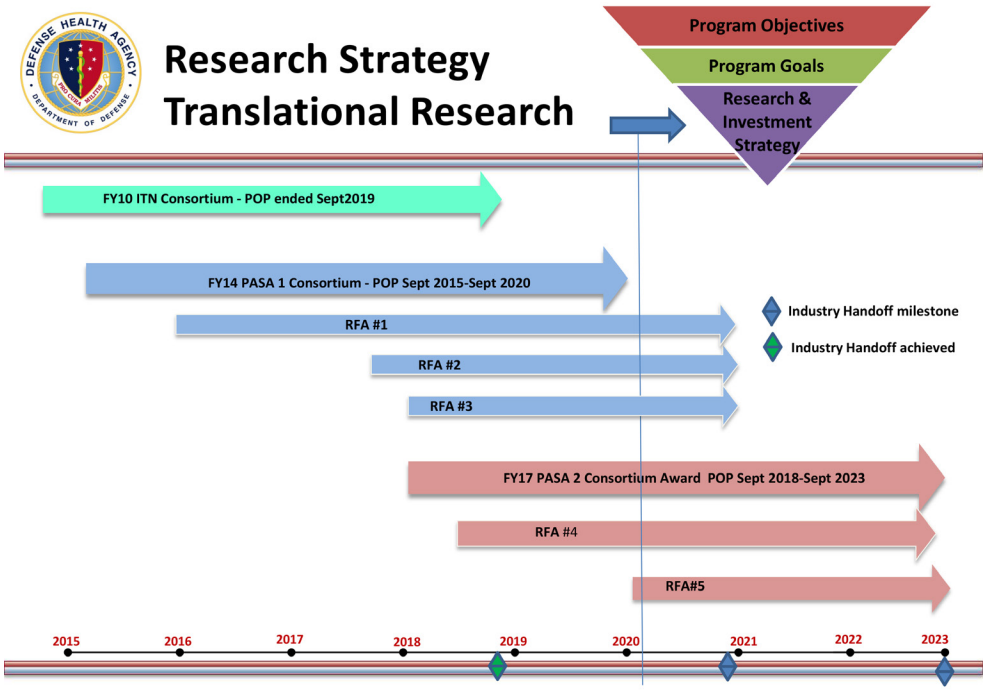
ASUD RESEARCH AND FUNDING LANDSCAPE

Funding for ASUD research comes from many sources through a variety of programs. Many are funded by the federal government through the National Institutes of Health (NIH), CDMRP, and VA. The ASADRP Programmatic Panel includes representation from federal ASUD funding agencies such as the VA, NIAAA, and NIDA, all of whom help coordinate the ASADRP investment strategy. As the ASADRP develops its own research program focus and portfolio, it remains mindful of the research efforts of other funding organizations.



STRATEGIC DIRECTION

The overall research strategy of the ASADRP that integrates both the ITN and PASA consortia and future efforts of subsequent awards is discussed below. The Consortium will serve as translating centers to move projects from discovery to proof-of-concept phase 2 trials that seek to inform the planning of future multisite phase 2 efficacy/dosing studies with the goal of industry handoffs.



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

The overall strategy of the ASADRP supports the following Research Aims:

Aim 1 – Discovery: Test new chemical entities and repurpose existing medications in preclinical and non-clinical models of ASUD with comorbid PTSD and other psychological disorders.

Aim 2 – Phase 1 First In-Human Safety: Conduct clinical trials of potential medications that include assessment of medical safety and doses for potential efficacy in subjects with ASUD and comorbid PTSD and other psychological disorders.

Aim 3 – Phase 2 Efficacy: Conduct multiple site clinical trials to test preliminary efficacy and safety of potential medications or medication combinations in humans with ASUD and comorbid PTSD and other psychological disorders, and to also explore precision medicine tools for matching patients to these medications.

This approach should accelerate the translation of contemporary basic science knowledge into enhanced clinical pharmacological treatment protocols for ASUD, including a regulatory strategy for FDA compliance.

FY21 ASADRP Research Focus Areas

- Improved formulations to treat opioid use disorder with comorbid substance use
- Improved formulations to treat opioid use disorders with comorbid PTSD and other psychological disorders
- New formulations and/or combinations of existing medications to improve treatment compliance, prevent relapse, and reduce risk of misuse
- Stronger, longer-duration formulations to counteract opioid (including fentanyl analogs) overdose
- Novel medications and immunotherapies to treat ASUD
- New medication targets for the treatment of ASUD

FY21 INVESTMENT STRATEGY

To achieve its Research Aims and Focus Areas the ASADRP is seeking applications for an FY21 Consortium Award to conduct multidisciplinary, team-based translational research efforts to identify promising compounds and conduct preclinical and clinical research to test potential medications or medication combinations in humans with ASUD and comorbid PTSD and other psychological disorders, and to explore precision medicine tools for matching patients to these medications. The goal of this research is to reduce the burden of ASUD in society, to include reducing the overall number of opioid-related overdose deaths.

MEASURING PROGESS

The ASADRP will measure its success in the near term by investing in consortium-managed research to develop best practices that in turn support and manage productive research projects to address the ASADRP Focus Areas. Longer-term success will be evaluated based on the program's contributions to the scientific community, follow-on research that is attributed to ASADRP-funded projects, the impact of ASADRP-funded research on clinical treatments and interventions, and handoffs to industry partners.

REFERENCES

1. Committee on Prevention, Diagnosis, Treatment, and Management of Substance Use Disorders in the U.S. Armed Forces; Board on the Health of Select Populations; Institute of Medicine. 2013. *Substance Use Disorders in the U.S. Armed Forces: 2, Understanding Substance Use Disorders in the Military* (O'Brien CP, Oster M, and Morden E, Eds.). National Academies Press, Washington, DC. Available from: https://www.ncbi.nlm.nih.gov/books/NBK207276/