# AUTISM RESEARCH PROGRAM



**MISSION:** Promote innovative research that advances the understanding of autism spectrum disorder and leads to improved outcomes

Congressional Appropriations
FY07-FY24:
\$164.4M total



"As a parent, I find the ARP valuable because it not only involves parents and their input, but the fusion of the scientific community

and ASD families."

Juan Dipini, Autism Speaks, FY22 Consumer Peer Reviewer

#### **SCOPE OF THE PROBLEM**

**1** in **36** children are diagnosed with ASD<sup>1</sup>

Over 2% of adults are estimated to have ASD<sup>2</sup>



## RELEVANCE TO MILITARY HEALTH

From 2013-2022, about **28,000** autistic individuals sought care within the Military Health System per year. Beneficiaries of active duty and reserve military members accounted for over **70%** of these encounters.<sup>3</sup>



- Outpatient encounters: 8M<sup>+</sup>
- Hospital bed days: 317,913

#### PROGRAM PRIORITIES

Improve the lives of individuals with ASD now and in their future

- · Advance effective treatments and interventions for autism
- · Support those caring for the autism community
- · Address needs of persons with autism into adulthood
- Understanding causes, mechanisms and signs of ASD





<sup>&</sup>lt;sup>1</sup> Maenner MJ, et al. MMWR Surveillance Summaries 72, no. SS-2, 2023: 1-14.

<sup>&</sup>lt;sup>2</sup> Dietz PM, et al. J Autism Dev Disord 50, no. 12, 2020: 4258-4266.

<sup>&</sup>lt;sup>3</sup> MHS data from the Defense Medical Surveillance System, The Armed Forces Health Surveillance Branch, Defense Health Agency, Silver Spring, Maryland, 2013-2022.

#### **PROGRAM IMPACT AND OUTCOMES**



**Initial Concepts** 

## **Discovery Award**

Innovative. Non-Incremental Research



Early Ideas

## ldea **Development Award**

Research Leading to Critical Discoveries





#### **Clinical Trials**

#### **Clinical Trial Award**

## Single **Investigator Option**

Rapid Implementation of Trials for the Treatment or Management of ASD

## **Early Career Investigator Option**

**Partnering** Experienced and Early-Career **Investigators** 



**Early Career** 

## Career **Development Award**

Early-Career Investigators Established Investigators Transitioning to ASD

Research

**Enhancing Research Capacity** 

Innovative and Impactful Research Discoveries

## **Supporting Engagement with the Autism Community**

Fostering collaboration between the ARP, researchers, and autistic individuals and caregivers to maximize the impact potential of supported research



- Autistic individuals and caregivers share unique perspectives as part of their role on the **ARP Programmatic Panel.**
- The ARP encourages community-based and participatory research interventions that include autistic individuals in the development and implementation of these studies.

#### RESEARCH BREAKTHROUGHS — MAKING A DIFFERENCE

Improving outcomes for those with ASD throughout their life span





















**CHILDHOOD** 

- Use of a beta-blocker, propranolol, to improve core symptoms of autism in children
- Multidisciplinary intervention for encopresis to alleviate incontinence in children
- · Augmented and virtual reality software technology to **improve** the symptoms of social interaction disorders seen in autism

ADOLESCENCE TO YOUNG ADULT

- Job internship and support program for military dependents in high school
- Use of microbiota transfer therapy to alleviate gastrointestinal **problems** in adults
- Cognitive Enhancement Therapy to improve employability in adults