

National Multiple Sclerosis Society Request: Fund the MS Research Program at the Department of Defense at \$22 million for fiscal year (FY) 2023

MS in Veterans and Active-Duty Service Members

- Nearly 70,000 American veterans live with MS.ⁱ
- MS is considered a presumptive condition by the Department of Veterans Affairs (VA).
 - Over half of veterans with MS seen by the Veterans Health Administration have "service-connected" MS.
 - \circ $\;$ The VA MS Centers of Excellence serve approximately 49,000 Veterans with MS. $^{\text{ii}}$
- MS has a higher incidence in military service members than in the general population.ⁱⁱⁱ
 - Between 2009-2018, over 2,400 active-duty service members, reserve and National Guard Service members received a new diagnosis of MS within the Military Health Service.
 - O Including other Department of Defense beneficiaries (family members, former service members), the military health services had more than 21,000 new cases of MS.^{iv}

MS Research Program (MSRP) at the Department of Defense

- Congress established the MSRP in fiscal year 2009 and it is the only federal funding stream specifically for MS research.
- MSRP funds high-impact, high-risk research based on the input from people with MS.
- To date, the MSRP has funded \$93.1 million in MS research.
- A \$2 million increase for FY23 will allow greater funding of Clinical Trial Award mechanisms, which are more expensive grants, while also accounting for inflation and maintaining funding consistency for MS researchers.

Partnership in MS Research and Service to Veterans with MS

- The Society is a strategic partner with the federal government to:
 - Identify research gaps,
 - Reduce unnecessary research duplication, and
 - Leverage complementary research efforts.
- To date, the Society has funded over \$1.06 billion in MS research.
- In 2019 the Society signed a memorandum of agreement with the VA MS Centers of Excellence, to improve care and expand resources for veterans with MS and their families.

What is multiple sclerosis (MS)?

- MS is an unpredictable, often disabling disease of the central nervous system.
- The progress, severity and specific symptoms of MS in any one person cannot yet be predicted.
- Nearly 1 million people in the United States live with MS.

We work with all companies, organizations and individuals that share our mission. On average, financial support from pharmaceutical companies over the last three years has accounted for less than 4% of Society funds. The Society independently develops public policy positions on issues that are important to people affected by MS.

Bold Research Gives Hope to MS Community

MS does not fit into a box – every person has different symptoms. For Mike Olex, initial symptoms of facial paralysis and deafness led him to a diagnosis of progressive MS over 16 years ago.

He has tried 9 different medications through the years with no success in stopping his disease progression. With his background as a researcher, Mike knows that to find a cure for a disease as complex as MS, research

"Supporting the MSRP shows people with MS and the military community that multiple avenues need to be explored to find a cure and that our government is supporting people with MS and helping find an end to this disease." must be innovative. When he was given the chance to serve as a peer reviewer for the MSRP, he saw this as an opportunity to serve people with MS.

"MS impacts a lot of people – so many are hurting. The MSRP supports research that may not get funded through



Mike Olex, MS Activist and MSRP Consumer Reviewer

traditional channels. These studies find completely different paths for how we should treat patients and alleviate challenges faced by the MS community," Olex says. "It takes some of the best research in the country and funnels it towards the needs of the MS community."

MSRP Fills Critical Gaps in MS Research

The MSRP gives researchers like Vicky Leavitt, Ph.D., the funding they need to address urgent gaps in research that could make an immediate impact for the 1 million people living with MS in the U.S. Over 50% of people with MS experience cognitive changes, ranging from memory problems to language issues, which can lead to challenges like leaving the workforce. And yet, there are no effective treatments to address this.

Clinical scans often just inform patients of new lesions in their brain or spine; but these scans provide so much more information on what is happening in the brain.

Funding from the MSRP allows Leavitt and her team to tap into the understudied wealth of data these scans provide to potentially find a biomarker that can pinpoint the causes of cognitive changes – and in turn, develop treatments to stop, delay or reverse this symptom. This would be a groundbreaking discovery that could also help those with other neurological disorders, such as Alzheimer's.

"None of us wants our cognition to change or decline over time. This discovery would enable us to develop targeted treatments for cognitive change, something that the MS community desperately needs."



Leavitt, a clinical neuropsychologist, neuroscience researcher and assistant professor at Columbia University Irving Medical Center and cofounder and chief scientific officer at eSupport Health, PBC.

¹ Wallin, M. T., Culpepper, W. J., Campbell, J. D., Nelson, L. M., Langer-Gould, A., Marrie, R. A., Cutter, G. R., Kaye, W. E., Wagner, L., Tremlett, H., Buka, S. L., Dilokthornsakul, P., Topol, B., Chen, L. H., & LaRocca, N. G. (2019). The prevalence of MS in the United States. *Neurology*, *92*(10), e1029–e1040. https://doi.org/10.1212/wnl.0000000000007035

 ^{II} Gromisch ES, et al. Who is not coming to clinic? A predictive model of excessive missed appointments in persons with multiple sclerosis. Mult Scler Relat Disord. 2020 Feb;38:101513.
^{III} Eussing EC, et al. Estimated incidence of multiple sclerosis among United States Armed Forces personnel using the Defense Medical Surveillance System. Mil Med. 2012 May;177(5):594-600.
^{IV} Data includes both direct care (care received at Military Treatment Facilities) and purchased care (care received at Civilian facilities that is covered by TRICARE). Data does not include care received while deployed, or any care received ot the Military Health System that was not processed through TRICARE.