Fast Forward℠

General Fund

This project is funded by Fast Forward, LLC, a nonprofit organization established by the National Multiple Sclerosis Society in order to accelerate the development of treatments for MS. Fast Forward connects university-based MS research with private-sector drug development and funds small biotechnology/pharmaceutical companies to develop innovative new MS therapies and repurpose FDA-approved drugs as new treatments for MS.

Primary Investigator	*Project Title*	*Amount to be Committed*
Solomon Langermann, PhD Amplimmune, Inc. Rockville, MD	Development of Recombinant B7-H4-Ig Fusion Protein (AMP-110) as a Therapeutic Treatment for MS	$500,000

About the Company

Amplimmune is focused on developing novel biologics targeting key molecules that rebalance the immune system and are intended for treating cancer, autoimmune disease, infectious disease, and transplantation. Amplimmune is a product driven company with strong development capabilities and is rapidly advancing two lead molecules towards clinical development: one in the area of cancer and the other in autoimmune disease. Working closely with its founders at Johns Hopkins University and other collaborators, Amplimmune has developed a strong foundation of reagents, models, know-how, and intellectual property and is expanding its technology base.

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Project Background & Goals

Multiple sclerosis involves an immune attack that is launched on the brain and spinal cord. T cells are major players in this attack. Co-stimulatory and co-inhibitory molecules help to activate or suppress T cells as needed.

Amplimmune's lead candidate therapeutic for autoimmune disease, AMP-110, includes a molecule that can inhibit certain T cells. AMP-110 has been shown to inhibit T cell responses in the laboratory and in models of autoimmune disease. Now they are testing this compound in mice with EAE, an MS-like disease, both alone and in combination with approved MS therapies. Also, they are examining blood samples from people with MS to evaluate potential biomarkers related to B7-H4, the protein upon which AMP-110 is based. This will provide an important readout for AMP-110 activity in MS patients.

This project presents a highly defined approach to developing a therapy that may stop the immune attack in MS in its tracks.