

# Fast Forward<sup>SM</sup>

## 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.

<i>Primary Investigator</i> David Wraith, PhD University of Bristol	<i>Project Title</i> Therapeutic Vaccines For Autoimmune and Allergic Diseases	<i>Amount to be Committed</i> \$1,000,000
---------------------------------------------------------------------------	-----------------------------------------------------------------------------------------	--------------------------------------------------

## About the Company

Apitope International NV is a biopharmaceutical company with headquarters in Hasselt, Belgium and a subsidiary in Bristol, England. Apitope was established at the University of Bristol in January 2002 by Professor David Wraith (a former research fellow of the National MS Society) and was initially funded by Mr. Richard Daniels. Apitope has developed peptides that can suppress immune responses such as that which occurs in MS. The idea behind Apitopes (Antigen Processing Independent epiTOPES) is to inhibit the immune system's harmful attack on the body while preserving normal immune responses to harmful antigens, such as infections. Apitope's portfolio includes novel peptide therapies for MS as well as other autoimmune diseases and common allergies.

## Project Background & Goals

Multiple sclerosis involves an immune attack that is launched on the brain and spinal cord. Apitope International NV has developed synthetic peptides that might be able to reinstate "tolerance" – in effect train immune cells to ignore target tissues -- to suppress such an attack. The Apitopes exert their therapeutic effect via a highly selective immune re-balancing process that, in pre-clinical studies, has been linked to the induction of immune regulatory T cells that secrete the messenger protein IL-10.



# **FastForward**<sup>SM</sup>

## *General Fund*

The lead product is ATX-MS-1467, an equal parts mixture of four peptides, which increases the activity of these regulatory T cells. The company recently announced results from the initial clinical trial in people with secondary-progressive MS, which indicated that in this small group of 6 patients, the drug was safe and well tolerated with promising early evidence of potential efficacy. Now they are conducting a larger study in 40 people with relapsing forms of MS (relapsing-remitting, and secondary-progressive with relapses). The primary outcome of this study is to determine the safety of this strategy, and secondary outcomes include the results of MRI scans that will measure effects on disease activity.

This study may yield findings that bring us closer to a novel targeted strategy that stops the MS immune attack in its tracks.