

## Expanding our reach



### **Society fellowships provide specialty MS training to researchers and doctors.**

by Lori De Milto

**Haley Titus, PhD.** Photo courtesy of Haley Titus, PhD. Haley Titus, PhD, is working on a treatment that could halt the dysfunctional immune response in multiple sclerosis; Matthew Plow, PhD, is helping people with MS manage fatigue so they can exercise; and Dr. Lilyana Amezcua is improving culturally competent MS care for Latinos. What do Drs. Titus, Plow and Amezcua have in common? They're all current or former National MS Society fellows.

Scientists and physicians who participate in any of the Society's nine types of research and clinical fellowships (see sidebar below) work alongside seasoned researchers or MS specialists in laboratories and MS clinics for one or more years. "These fellowships allow them to learn from experts in the field," says Jennifer L. Stark, PhD, director of research training programs at the Society. In addition to their work alongside their mentors, clinical fellows also have opportunities to attend Society-sponsored targeted educational programs, she says. "This training grows a workforce of doctors who can provide optimal care, and researchers who will focus on finding ways to stop MS for good."



**Haley Titus and her mother enjoying time together at home in the 1980s.** Photo courtesy of Haley Titus, PhD

### **Developing a new treatment to end MS**

By age 5, Dr. Titus was helping her mom, Terri, who has MS. “Despite her condition, she is always optimistic,” says Dr. Titus, who’s inspired by her mom to find a cure for MS. Now a Society Postdoctoral Fellow at Northwestern University Feinberg School of Medicine (2015-2018), Dr. Titus is working on a therapy she hopes will eliminate MS relapses and repair the nerve-insulating myelin damaged by the disease.

With her mentor Stephen Miller, PhD, and her colleagues, Dr. Titus is using nanoparticles, substances whose microscopic size can help deliver therapy throughout the body. The nanoparticles are coupled with myelin antigens (substances that trigger the immune system to produce antibodies). This is then being given in combination with FDA-approved oral drugs that are being repurposed.

Dr. Titus hopes one of the combinations will stop the immune system from attacking myelin without affecting other aspects of immune function—and improve myelin repair. So far, the approach has worked in animal models.

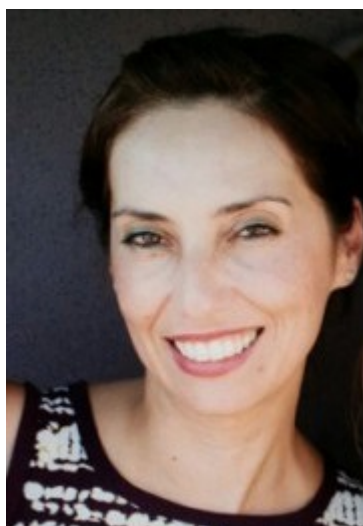


**Matthew Plow,**  
**PhD.** Photo courtesy of  
Matthew Plow, PhD

### **Using telehealth to help more people with MS**

Dr. Plow, who had a Mentor-Based Postdoctoral Fellowship in Rehabilitation Research from 2008–2010, is expanding on the work he did with his mentor, Marcia Finlayson, PhD, at the University of Illinois at Chicago. Now, with a Society grant, he is studying the use of teleconferencing to help people with MS manage fatigue so they can exercise. In Dr. Plow's study, groups of six to eight people participate in weekly conference calls led by an occupational therapist, who offers fatigue management strategies. Participants also learn from each other by sharing what works for them. He expects results later this year.

Dr. Plow, now an assistant professor in the School of Nursing at Case Western Reserve University, says his fellowship made his current study possible. "The fellowship gave me protected time to focus on research, guided by a mentor who had a lot of experience in MS. It helped me focus my career," he says.



**Dr. Lilyana**

**Amezcuca.** Photo  
courtesy of Dr. Lilyana  
Amezcuca

## **Helping Latinos understand MS**

Through a Multiple Sclerosis Clinical Care Physician Fellowship at the University of Southern California (2006-2008), Dr. Amezcuca transitioned from being a general neurologist to an MS specialist. During her training with Dr. Leslie P. Weiner, she found her niche: understanding how Latinos may experience MS differently.

During her fellowship, Dr. Amezcuca started the Hispanic MS Registry, which collects blood samples and survey information from Latinos with MS who volunteer to participate. Combined with a review of existing literature, and observations of her own Latino patients with MS, she discovered that Latinos are typically two or three years younger than whites when diagnosed, and are twice as likely to have inflamed spinal cords (transverse myelitis).

“I also observed that there are not only genetic differences, but also likely differences in the social and cultural aspects of the disease,” says Dr. Amezcuca. Now an assistant professor of neurology at the University of Southern California and MS Fellowship Program director of the MS Comprehensive Care Center there, Dr. Amezcuca is studying perceptions of MS among Latinos.

To improve Latinos’ understanding of MS and their access to culturally competent care, Dr. Amezcuca is working on several projects, including a film with USC’s School of Cinema. The film, which will be presented in early June at a Consortium of Multiple Sclerosis Centers meeting, features Latinos with MS, and explores cultural beliefs about MS. She is also studying whether certain MS disease-modifying therapies work the same in Latinos as in other people.

## **National MS Society Fellowships**

### **Research Fellowships**

Research fellowships train scientists and physicians in conducting research and clinical trials. Fellows have doctoral or medical degrees and typically work closely with mentors.

### **Postdoctoral Fellowships**

- Sylvia Lawry Physician Fellowships
- Career Transition Fellowships
- NMSS-AAN Clinician Scientist Development Awards
- Harry Weaver Neuroscience Scholar Awards
- Daniel Haughton Senior Faculty Awards

- Mentor-Based Postdoctoral Fellowships In Rehabilitation Research

## **Clinical Fellowships**

The Society offers two clinical fellowships, which train board-eligible or certified physicians in providing MS care.

- MS Clinical Care Physician Fellowships
- Institutional Clinician Training Awards

View more information on Society [Training Grants and Fellowships](#).

## **Developing a community of learning**

Nearly 100 current and previous fellows, along with senior scientists, learned about the latest research that their peers are conducting at the fifth Tykeson Fellows Conference in November 2015. An estimated 21 new fellows and early-career awardees will start in July 2016. “The new fellows are poised to accelerate the research breakthroughs that will improve the lives of people living with MS,” says Dr. Stark.

**Lori De Milto is a Sicklerville, New Jersey-based freelance writer.**