Multiple Sclerosis News

Stony Brook Children's | LOURIE CENTER FOR PEDIATRIC MS

Kick Off the Season of Giving

Join us at the

Harvest Sunset Dinner

honoring

Chef Guy Reuge

of Mirabelle Restaurant at the Three Village Inn

Thursday, November 21

6:00pm-9:00pm

Villa Lombardi's • 877 Main Street

Holbrook, NY

Call 631.444.1454 for details

Stony Brook Medicine

National Multiple Sclerosis Society

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Stay updated on all our events and happenings: **"Like"** the Lourie Center for Pediatric MS.

New Approaches to the Measurement of MS Brain Pathophysiology

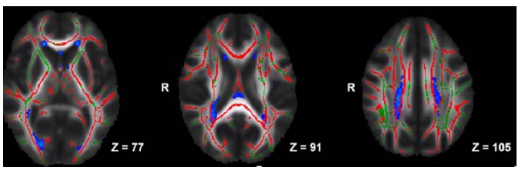
Finding a cure for MS requires better definition of the relationship between the pathophysiology of the central nervous system (CNS) and the clinical course. A routine MRI is very helpful for diagnosis but less so for prognosis. Presently there is no single imaging modality that can sufficiently link future neurologic function to CNS pathophysiology. Further, it is unlikely, that using only one MS neuroimaging modality can lead to a full picture of the structure/function relations of MS on the brain and spinal cord.

Fortunately, a multimodal simultaneous neuroimaging approach is now possible at Stony Brook. Thanks to a gift from Robert and Lisa Lourie, Stony Brook Medicine recently obtained a simultaneous Positron Emission Tomography (PET) /MRI scanner, the 3 Tesla Siemens Biograph mMR, one of very few in use worldwide. Research studies can now examine the brain using four imaging modalities simultaneously, without additional patient burden. These imaging modalities include (a) structural MRI (sMRI) of grey and white matter cerebral volume, (b) Diffusion Spectrum Imaging (DSI) of white matter (structural connectivity) disruptions, (c) functional MRI (fMRI) of variability in the functional connectivity of neural pathways, and (d) PET to measure brain metabolism. Application of these modalities provide an opportunity to link structure and function.

Now at Stony Brook, we are about to launch a study with the new MRI/PET scanner that will examine during one single scanning procedure all four of these methods in a single person. The goal of this research is to link intensive analysis of cognitive performance and its treatment with structure and neuronal function. Neuroimaging measures and cognitive performance will also be combined with measures of day to day functioning, fatigue, and other aspects of neurological function. We will monitor individuals longitudinally so that we can address the important question of how even subtle effects of MS on brain structure/function affect overall neurologic and cognitive wellbeing and we will ask the question whether how targeted interventions can partially reverse the effects of MS.

Recently we published a study comparing just one neuroimaging modality (Diffusion Tensor Imaging (DTI) with cognitive measures on individuals with MS and those without the disease. We were able to create maps of lesion probability (blue), changes in water diffusion along the whiter matter tracts (red), and link these to performance on cognitive tests.

Disruption of white matter tracts and presence of lesions in MS



Using multiple imaging modalities, we hope to learn the mechanisms of action of various interventions designed to improve MS symptoms. At the moment we are in the process of combining a treatment study of cognition with new neuroimaging approaches. Future studies will focus on other treatment strategies. We are optimistic that these technological advances will provide answers to how MS develops and, ultimately, how it can be stopped.

New Technology for MS Research and Clinical Care

Stony Brook Medicine, where MRI technology was first developed, is among the first sites in the United States to offer simultaneous PET/MRI technology for clinical use. Located in the Lisa and Robert Lourie Imaging Suite, the new technology will benefit patients by providing exceptional image quality and diagnostic capabilities, and greater efficiency by having two significant imaging procedures performed at the same time with low-dose radiation. Long Island's only simultaneous PET/MRI will be used for imaging and diagnosis of multiple sclerosis as well as cancer, neurodegenerative disease and psychiatric disorders.

Complementary and Alternative Medicine

Complementary and alternative medicine (CAM) is a group of diverse medical and health care systems, practices, and products that are not generally considered part of conventional medicine. Complementary medicine is used together with conventional medicine, and alternative medicine is used in place of conventional medicine. Conventional medicine is based on rigorous scientific principles with evidence-based guidelines. There is limited scientific research on CAM, therefore there is not well documented safety and effectiveness for some of these therapies.

Vitamin supplementation is one of the most commonly used areas of CAM. There has been well documented evidence that maintaining an adequate blood level of Vitamin D can be beneficial for many MS patients. Other types of CAM include acupuncture, massage, meditation, and yoga.

So what is a patient to do? The most important thing is to communicate with your health care provider. Let him or her know what you are taking, including any vitamins, supplements or herbs. There can be interactions. Be your own best advocate. Research whatever CAM you might be interested in. There are many studies underway examining the safety and usefulness of a variety of CAM practices.

A good website to research various CAM practices is: www.nlm.nih.gov/medlineplus/complementaryandalternativemedicine.html

Are you interested in participating in an MS study?

Name of Study:	Computer-based Cognitive Exercise – 12 weeks
Type of MS:	MS, Ages 18-70
About the Study:	Cognitive testing and 12 weeks of daily cognitive exercise at home using a study-provided laptop. Compensation up to $250.
Contact:	Maria Amella at 631-444-7993

Do your holiday shopping at participating Americana Manhasset® and select Wheatley Plaza® stores during the Champions of Charity® shopping event and support the Lourie Center for Pediatric MS!

Simply register for your free Champion Card, select the **Pediatric MS Center at Stony Brook** as your charity, and shop away! Champions for Charity® will donate 25% of your pre-tax purchase back to the Lourie Center.

Shopping days are **Sunday, November 24** and also **Thursday December 5 through Saturday December 7**. Visit www.championsforcharity.org or Call 516-627-2277 to register.

Give to the Lourie Center for Pediatric MS

Make your tax-deductible donation to the Lourie Center for Pediatric MS **online** by simply going to **Stonybrook.edu/pediatricmsgiving**

We offer memorial and honor donations. Please contact us at 631-444-1454 or email dominique.stanley@stonybrook.edu

The 8th Annual Summer Soirée was a Terrific Success

The 2013 Summer Soirée Committee

Amy Paston, Summer Soirée Committee Chair, and comedian Wendy Liebman

Summer Soirée committee member Rita Castagna and Merry Slone, Founder, Summer Soirée Committee

LOURIE CENTER'S PATIENT OPEN HOUSE

Back in August the Lourie Center held an open house gathering for all our patients and their families. We all enjoyed beautiful weather, an incredible setting, terrific food, games, spray tattoos and, for those adventurous enough, even horseback rides!

While the kids were enjoying the activities, the parents had an opportunity to spend time together at the water's edge, sharing their experiences. There were smiles, tears, and many nods of recognition as the stories told by each parent were familiar to the others around the circle.

The wonderful event was a unique opportunity for our patients and their families to connect with one another. Friendships and a support system are vital in bridging the isolation that can be part of living with pediatric multiple sclerosis. Bringing our patients together to share stories of struggles and joys (as well as to just be kids!) is truly impactful in their lives.

If you are a Lourie Center patient and would like to participate in this now annual event next summer please call us (631-444-7832) to make sure you are on our mailing list!

Now patients in the NY metro area have easier access to The Lourie Center for Pediatric MS!

With a new satellite office just off Columbus Circle, Dr. Lauren Krupp can now see patients in Manhattan or Stony Brook. The Lourie Center for Pediatric MS can provide support from experts in multiple sclerosis, pediatric neurology, nursing, psychiatry, and neuropsychology. Our goal is to address patients' unmet needs and enhance the quality of life of children and families affected by MS. Call 631-444-7832 for appointments.

UPCOMING EVENTS

November 14 – **Patient Education Seminar,** Setauket, NY
November 21 – **Harvest Sunset fundraiser,** Holbrook, NY
December 5 – **Patient Education Seminar,** Setauket, NY
March 14 – **NY Islander fundraiser,** Nassau Coliseum

Call 631-444-1454 for details on any of the above fundraisers, celebrations or programs

About the MS Centers

There are two MS centers located within Stony Brook Medicine, both designated Centers of Excellence by the National Multiple Sclerosis Society.

The MS Comprehensive Care Center is headed by two internationally recognized experts in MS, Drs. Patricia K. Coyle and Lauren B. Krupp, providing expertise and the latest cutting edge treatment and information to adults with MS.

The Lourie Center for Pediatric MS, founded and directed by Dr. Lauren Krupp, is committed to improving the lives of children with MS and advancing a research program that will benefit all people with MS.

MS Comprehensive Care Center 631-444-6722
Lourie Center for Pediatric MS 631-444-7802

Mail: Dept. of Neurology, HSC L12, Room 020, Stony Brook, NY 11794-8121

Would you like to raise money for children with MS? Hold a bake sale, organize a walk, hold a bowling party or get creative and come up with your own idea. We can help YOU make a difference – Call 631-444-1454 to learn how!

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