Accomplishments (Basic Science)

• Endogenous Stem cells are a source of remyelinating oligodendrocytes and the SHH signaling pathway is a therapeutic target (Salzer/Fishell)
• Small molecule inhibitors of ROR $\gamma$T cells ameliorate the course of EAE (Littman/Lafaille)
• Evidence that inflammatory demyelination affects synaptic remodeling (Gan)
• Creation of a mouse model to conditionally ablate microglia enabling analysis of their contribution to inflammatory demyelination (Gan/Littman)
• New method to live image inflammatory demyelination in spinal cord (LaFaille/Dustin) which will allow real time imaging of trafficking
Accomplishments (clinical/translational)

- **Investigations of Ethnic diversity in MS (*disease course in African Americans):**
  
  
  

- **New NYU Severity classification for MS**: Daumer et al: Prognosis of the individual course of disease: The elements of time, heterogeneity and precision. J Neurol Sci 2010; In press

- **Co-morbidities of MS**: migraine in MS; Neuro-Behcet’s disease; Tumefactive demyelinating lesions

- **Cognitive Dysfunction**: speed of processing and DTI studies
Accomplishments (clinical/translational)

- **Advances in NeuroImaging in MS**: microvascular abnormalities; Na loading in neuropathology, MR spectroscopic changes (~ 20 publications)
  


Accomplishments (administrative, etc.)

- NYU MS COE Website established

- **NYU & NMSS-cosponsored event** (hosting controversial Italian Vascular Surgeon; event covered by the news media)

- **NYU MS CME course**: scheduled for November

- **Progress in Philanthropic Efforts**:
  - proposal to support research on reparative therapy, MS research fellowships, and tissue banking efforts
  - ongoing contacts for targeted state and federal funding for the MS CCC

- **Comprehensive Clinical Center Hallmarks**
  - Hiring of a clinical trialist (Dr. Jai Perumal) and 2 clinical fellows
  - Opening of satellite practice at Faculty Practice at Langone campus
  - Ongoing efforts to relocate CCC to modern, more expansive space on 38th St.
Other Accomplishments

• **Funding obtained during the last year:**
  New York State Stem Cell & NIH ARAA supplements X2 (JLS), EMD Serono (JH), Biogen (JH; TK), Bayer Health (JB), NMSS (JL), R13 NIH/NINDS (MI/OG)

• **MS Meetings/Conferences**
  organized 1st Keystone Conference & Vice Chair Myelin Gordon Conference (JLS); Myelin European Conference (JLS); Neuroimaging of MS – State of the Art and future Directions (MI/OG); AAN 6 presentations; ECTRIMS 3 presentations; International Consensus Conference, NJ (JH)
Major Goals for the COE

1. Hire an MS immunologist to coordinate investigative and potentially novel clinical trials at NYU
2. Initiate an MS research fellowship
3. Begin Tissue Banking MS patient materials
4. Organize a PPG (“mechanisms of autoimmune demyelination”) this year
5. Further enhance the range and clinical services of the MS CCC
6. Increase Visibility of NYU’s MS COE via patient outreach, publications
7. Bring to completion our Philanthropic Efforts
Potential challenges

• Space
• What patient materials to bank
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Priorities for the next year

• Revisit hiring MS neuroimmunologist
• Begin Tissue banking
• Organize a Program Project (Mechanisms of Autoimmune Demyelination)