

Teri L. Schreiner, M.D., MPH

CURRICULUM VITAE

1. Personal history

Assistant Professor, Neurology
 University of Colorado School of Medicine
 Children's Hospital Colorado
 12631 East 17th Avenue, Mail Stop B185
 Aurora, Colorado 80045
 Academic Office: 303/724/2187
 Scheduling Phone: 720/848/2080

2. Education and Training

- University of Pennsylvania, Philadelphia, PA 1991--1995
BA Anthropology
- Yale University, New Haven, CT 1995--1997
M.P.H. Health Policy and Administration
- University of Rochester School of Medicine and Dentistry, Rochester, NY, M.D. 2002--2006
- University of Colorado/Children's Hospital Colorado 2006--2008
Resident, Pediatrics
- University of Colorado 2008--2009
Resident, Neurology
- University of Colorado/Children's Hospital Colorado 2009--2011
Resident, Child Neurology
- University of Colorado 2011--2012
Instructor/Fellow, Neuroimmunology
- University of Colorado/Children's Hospital Colorado 2011--2012
Instructor, Pediatric Neurology

3. Academic Appointments

- Jagiellonian University, Krakow, Poland Spring, 2005
Student Instructor
- Instructor/Neuro/immunology Fellow, University of Colorado 2011--2012
National Multiple Sclerosis Society Clinical Care Fellowship
- Assistant Professor of Neurology, University of Colorado School of Medicine 2012--Present

4. Previous professional positions

- Oxford Health Plans, Norwalk, CT 7/97--7/98
Alternative Delivery System Analyst
- Kaiser Permanente, Oakland, Ca 7/98--7/02
Project Manager, Financial Services, The Permanente Medical Group
- Women's Health Partnership, Rochester, NY Summer, 2003
Summer Fellow

- 5. Honors**
- Mortar Board Honor Society, University of Pennsylvania 1994--1995
 - Two Year Recipient of the Schlesinger Scholarship, Yale University 1995--1997
 - Arnold P. Gold Foundation Humanism and Excellence in Teaching Award 2011
 - TEVA Pharmaceuticals Travel Grant, ECTRIMS Annual Meeting, Amsterdam, The Netherlands 2011
- 6. Professional Memberships**
- American Academy of Neurology
 - Child Neurology Society
 - American Neurologic Association
 - Colorado Society of Clinical Neurologists, Vice President
- 7. Licensure/Certifications**
- Medical licensure, Colorado 2011
 - Diplomat Board Certification American Board of Psychiatry and Neurology with Special Qualifications in Child Neurology 2011
- 8. Invited Lectures/Presentations**
- A 14-year-old male with chorea. Abby Stoddard Rounds 9/25/09
 - Pediatric Demyelinating Conditions. Neuro/radiology Conf. Children's Hospital Colorado 4/26/10
 - Mistaken Identity: A case of transverse myelitis mistaken for Guillian/Barre Syndrome Child Neurology Mortality and Morbidity Conference, Children's Hospital Colorado 6/11/10
 - Pediatric Demyelinating Disorders presentation to Children's Hospital hospitalists 1/5/11
 - De/MS/tifying White Matter Disorders in Children Neurology Grand Rounds, University of Colorado 4/27/11
 - Origins, Triggers and Disease Development National Multiple Sclerosis Society luncheon 9/27/11
 - Unlocking the Mysteries, Key Thoughts on Risk Factors for MS Presentation to Rocky Mountain MS Center Fall Research Seminar 11/19/11
 - Pediatric Demyelinating Disorders, Children's Hospital Colorado Rehabilitation Dept. Retreat 2/4/12
 - What's the Big Deal? Vitamin D as a Modifiable Risk Factor for Multiple Sclerosis Neurology Grand Rounds, University of Colorado 6/6/12
 - Beyond ADEM and MS: Diagnoses Not to Miss in the Evaluation of a Child with Demyelination. Child Neurology Society Meeting, October 2012.
 - Roadmap to Pediatric Demyelination: Clinical Features. Consortium of Multiple Sclerosis Centers Annual Meeting. 5/14
 - Filmed appearance CBS *Evening News*. Enterovirus and paralysis in children in Colorado. 9/30/14

- Filmed appearance on NBC *Today Show*. Enterovirus and paralysis in children.
1/28/15

9. Mentoring

- Amanda Moen, MD. Child Neurology Resident. Neuroimmunology Mini/Fellowship, 2014.
- Weekly mentoring of MSIII students in adult and pediatric neuroimmunology clinic. 2013/2014.
- Faculty mentor to Elizabeth Tolar, MD. Child Neurology Resident. Current.

10. Current Grant Support as Primary Investigator

CFTY720D2311, Novartis Schreiner (PI) 02/13/2014--Present
A two/year, double/blind, randomized, multicenter, active controlled study to evaluate the safety and efficacy of fingolimod administered orally once daily versus interferon $\beta/1a$ i.m. once weekly in pediatric patients with multiple sclerosis

Biogen Idec STRIVE Schreiner (PI) 04/22/2013--Present
A Multicenter, Observational, Open/Label, Single/Arm Study of Tysabri in Early Relapsing/Remitting Multiple Sclerosis in Anti/JCV Antibody Negative Patients

MSDX Schreiner (PI) 12/30/2013--Present
Cross/Sectional Study of MSDx Complex/1 Association with Gadolinium Enhancing Lesions in Relapsing/Remitting Multiple Sclerosis

NINDS – Environment & Genes MS Schreiner (PI) 07/14/2011--Present
Environmental and Genetic Risk Factors for Pediatric Multiple Sclerosis

NPMSC PeMSDD Database Schreiner (PI) 07/14/2011--Present
Pediatric Multiple Sclerosis and other Demyelinating Diseases Database

11. Current Grant Support as Co/Investigator

COMIRB 08/0613 Wagner (PI) 04/14/2011--Present
The Role of TH40 Cells in Multiple Sclerosis and Type 1 Diabetes Subjects.

Teva Neuroscience GATEWAY II Vollmer (PI) 07/22/2011--12/30/2014
The purpose of this study is (1) to determine if rituximab induction therapy followed by glatiramer acetate is substantially superior to placebo induction followed by GA for the treatment of clinically isolated syndrome or relapsing forms of MS and (2) to explore the changes in lymphocyte populations in the CNS as a consequence of treatment with rituximab followed by chronic GA therapy
Role: Co/PI, EDSS examiner

Biogen Idec SPMS ASCEND Miravalle (PI) 08/01/2011--7/31/2014
The primary study objective is to investigate whether treatment with natalizumab slows the accumulation of disability not related to relapses in subjects with secondary progressive MS

Role: Co/PI, EDSS examiner

Biogen Idec DECIDE Miravalle (PI) 09/15/2010--10/29/15
The primary study objective is to test the superiority of DAC HYP compared to INF B/1a in preventing MS relapse in subjects with relapsing remitting MS
Role: Co/PI, EDSS examiner

CFTY720D2306, Novartis Corboy (PI) 12/01/2009--11/30/2014
The primary goal of this study is to evaluate the effect of FTY720 relative to placebo on delaying the time to sustained disability progression for patients treated for at least 36 months.
Role: Co/PI, EDSS examiner

Roche ORATORIO Miravalle (PI) 1/1/11--9/30/15
The objective of this study is to measure the time to onset of sustained disability progression defined as an increase in EDSS score that is sustained for at least 12 weeks
Role: Co/PI, EDSS examiner

10/1143, Gateway II Teva Vollmer (PI) 10/1/2011--3/31/2014
Randomized study comparing rituximab induction therapy followed by glatiramer acetate to glatiramer acetate monotherapy in RRMS
Role: Co/PI, EDSS examiner

Roche ORCHESTRA Miravalle (PI) 3/1/12--2/28/15
The purpose of this study is to evaluate the efficacy and safety of ocrelizumab in comparison with Rebif in patients with relapsing multiple sclerosis
Role: Co/PI, EDSS examiner

12. Peer Reviewed Publication

1. Grunzke M, **Schreiner T**, Thomison JB, Jedlicka P, Albano E. Vascular compromise as a cause of sudden death in a pediatric patient with widely metastatic testicular germ cell tumor. *J Pediatr Hematol Oncol* 2009 Oct;31(10):756/7
2. Kedia, S, Stroud B, Parson J, **Schreiner, T**, Curtis D, Bagdure D, Brooks/Kayal A, Glode MP, Dominguez SR. Pediatric Neurological Complications of 2009 Pandemic Influenza A (H1N1) *Arch Neurol* 2010; Dec:13 (318) E1/E8
3. **Schreiner TL**, Miravalle A. Current and emerging therapies for the treatment of multiple sclerosis: Focus on cladribine. *J of Central Nervous System Disease* 2012:4 1/14.
4. **Teri L Schreiner** and Emmanuelle L Waubant. Pediatric Multiple Sclerosis. <http://emedicine.medscape.com/article/2091406/overview> Medscape Reference, Updated March 8, 2013.
5. Waid, D., **Schreiner, T.**, Vaitaitis, G., Carter, J., Corboy, J., & Wagner, D. Defining a new biomarker for the autoimmune component of Multiple Sclerosis: Th40 cells. *J Neuroimmunol.* 2014; 270(1/2): 75/85
6. Augusto A. Miravalle, M.D. and **Teri Schreiner**, M.D. Neurological Complications of Vaccinations. *Handbook of Clinical Neurology*, 2014; 121: 1549/1557.
7. Pastula DM, Aliabadi N, Haynes A, Messacar K, **Schreiner T**, Maloney J, Dominguez S, Davizon E, Leshem E, Fisher M, Nix W A, Oberste MS, Seward J, Feikin D, Miller L. Acute Neurologic Illness of Unknown Etiology in Children—Colorado, August-September, 2014. *Center for Disease Control Morbidity and Mortality Weekly Report* Oct. 3, 2014:63

8. Maloney, JA, Mirsky DM, Messacar K, Dominguez SR, **Shreiner T**, Stence NV. MRI Findings in Children with Acute Flaccid Paralysis and Cranial Nerve Dysfunction Occurring During the 2014 Enterovirus D68 Outbreak. *Am J Neuroradiol.* 2014; DOI 10.3174/ajnr.A4188. Published online ahead of printing, November, 2014.
9. Messacar K, **Schreiner TL**, Maloney JA, Wallace A, Ludke J, Oberste MS, Nix WA, Robinson CC, Glode, MP, Abzug, MJ, Dominguez SR. A cluster of acute flaccid paralysis and cranial nerve dysfunction temporally associated with an outbreak of enterovirus D68 in children in Colorado, USA. *The Lancet.* www.thelancet.com Published online January 29, 2015 [http://dx.doi.org/10.1016/S0140-6736\(14\)62457-0](http://dx.doi.org/10.1016/S0140-6736(14)62457-0)

13. Abstracts/Poster Presentations

1. **Schreiner T**, Ross C, Armstrong/Wells J. Parent/Patient Quality of Life Perception in Children with Multiple Sclerosis. Poster presented at the Child Neurology Society Annual Meeting Savannah, GA. 2011
2. Nnukwe N, Ferguson D, **Schreiner T**. Natalizumab Discontinuation: Observational Study of University of Colorado Patients with Relapsing Remitting Multiple Sclerosis. Accepted for poster presentation, 64th Annual American Academy of Neurology Annual Meeting, New Orleans, LA, April, 2012
3. **Schreiner, T**, Waid D, Wagner D, Corboy J. Costimulatory Molecule CD40 is Elevated in Patients with MS. Consortium of Multiple Sclerosis Centers Annual Meeting, San Diego, CA June, 2012
4. Campbell JD, Ghushchyan V, McQueen RB, Cahoon/Metzger S, Livingston T, Vollmer T, Corboy J, Miravalle A, **Schreiner T**, Nair K. Direct Costs, Indirect Costs, and Quality of Life Burden of Multiple Sclerosis: National US Estimates. Accepted for the American Academy of Neurology 65th Annual Meeting, San Diego, CA. March, 2013.
5. **Schreiner T**, Waid D, Yarovoy J, Wagner D, Corboy J. Co/Stimulatory Molecule CD40 Is Elevated in Type I Diabetes and Multiple Sclerosis Compared to Controls” Accepted for a poster presentation at the American Academy of Neurology 6^{5th} Annual Meeting, March 16 to March 23, 2013 at the San Diego Convention Center, San Diego, CA. March, 2013.
6. **Schreiner T**, Karlsson C, Kim C, Levine H, Barnes J, Binder J, Gabriels R, Beresford C. Neuromyelitis optica with severe behavioral dysregulation: a case report. Poster presented at the American Academy of Neurology Annual Meeting Philadelphia, PA, April, 2014
7. Swisshelm, K, **Schreiner T**. et al. A novel familial gain of 3q25.2/3q25.31 involving OMIM genes SLC33A1, GMPS, and MME. Poster accepted for presentation at the annual meeting of the American Society of Human Genetics. San Diego, CA October, 2014
8. Ness, JM, **Schreiner T**, Bhise V, Alper G, Morgan-Followell B, Hertz D, United States Network of Pediatric MS Centers. Consultation for difficult pediatric demyelinating cases via nationwide webinar. Poster P609 presented at the annual ECTRIMS meeting in Boston, MA September, 2014

14. Book Chapters

1. Kedia S, Yang ML, Knupp K, Levisohn PM, **Schreiner T**, Moe PG. Neurologic & Muscular Disorders chapter 25 in CURRENT Diagnosis and Treatment Pediatrics 22nd Edition. Ed. William Hay and Myron Levin. 2014 The McGraw/Hill Companies. ISBN/10: 007182734X.

ISBN/13: 978/0071827348

2. Augusto A. Miravalle, M.D. and Teri L. Schreiner, MD. Neurological Complications of Vaccinations. Handbook of Clinical Neurology. Ed. Jose Biller, M.D. *In press*
3. **Schreiner, TL**, Bennett, JL Neuromyelitis Optica chapter in Neurobiology of Disease, 2nd Edition. Ed. Gilman S. Oxford University Press. *In press*

15. Invited editorship

1. *Pediatric Neurology*. Elevated cerebrospinal fluid opening pressure in a pediatric demyelinating disease cohort