

MATTHEW GINSBERG, MD

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EDUCATION

CORNELL UNIVERSITY, ITHACA, NEW YORK

Bachelor of Science in Food Science, August 2003 – June 2007
Graduated Magna Cum Laude

CLEVELAND CLINIC LERNER COLLEGE OF MEDICINE AT CASE WESTERN RESERVE UNIVERSITY, CLEVELAND, OH

Doctor of Medicine with special qualifications in biomedical research,
July 2008 – June 2013

CHILDREN'S HOSPITAL OF PITTSBURGH OF UPMC, PITTSBURGH, PA

Residency in Child Neurology, July 2013 – June 2018

CLEVELAND CLINIC, CLEVELAND, OH

Neuromuscular Fellowship, July 2018 – June 2019

CERTIFICATIONS AND LICENSURE

DIPLOMATE OF THE AMERICAN BOARD OF PSYCHIATRY AND NEUROLOGY,
CHILD NEUROLOGY
December 2018

DIPLOMATE OF THE AMERICAN BOARD OF ELECTRODIAGNOSTIC MEDICINE
April 2020

DIPLOMATE OF THE AMERICAN BOARD OF PSYCHIATRY AND NEUROLOGY,
NEUROMUSCULAR
January 2021

MEDICAL LICENSE, STATE OF OHIO
Active, expiring January 1, 2023

MEDICAL LICENSE, STATE OF PENNSYLVANIA
Active, expiring 12/31/2022

WORK EXPERIENCE

AKRON CHILDREN'S HOSPITAL, AKRON, OH

August 2019 - Present
Staff Neurologist and Assistant Professor of Pediatrics

HONORS AND AWARDS**NATIONAL STUDENT RESEARCH FORUM FIRST PLACE ORAL PRESENTATION IN MOLECULAR BIOLOGY OR BIOCHEMISTRY**

National Student Research Forum, April 2012

NATIONAL STUDENT RESEARCH FORUM THIRD PLACE OVERALL ORAL PRESENTATION

National Student Research Forum, April 2012

WELLER PRIZE FOR PEDIATRIC RESEARCH

Cleveland Clinic Foundation, May 2012

MARGARET L. BAUMAN, MD AWARD FOR EXCELLENCE

Current Trends in Autism, November 2012

MEDICAL STUDENT RESEARCH AWARD

Ohio Psychiatric Physicians Foundation, April 2013

JEFFREY S. FARKAS, MD MEMORIAL PEDIATRIC INTERN TEACHING AWARD

Children's Hospital Pittsburgh, May 2014

GENERAL ACADEMIC PEDIATRICS PRIMARY CARE AWARD

Children's Hospital of Pittsburgh, June 2015

RESEARCH EXPERIENCE**ACTIVE AND ONGOING****Akron Children's Hospital - Department of Neurology**

Akron, OH

May 2021 - Ongoing

A Double-Blind, Placebo-Controlled Study to Evaluate the Efficacy and Safety of 24 Weeks Treatment with REN001 in Patients with Primary Mitochondrial Myopathy (Protocol: REN001-201)

- ◆ Co-investigator for study of investigational drug in mitochondrial myopathy

Akron Children's Hospital - Department of Neurology

Akron, OH

October 2020 - Ongoing

A Randomized, Double-Blind, Placebo-Controlled Adaptive Phase 2/3 Study with Open-Label Extension to Assess the Efficacy, Safety, and Tolerability of ASP0367 in Participants with Primary Mitochondrial Myopathy (Protocol 0367-CL-1201)

- ◆ Co-investigator for study of investigational drug in mitochondrial myopathy

Akron Children's Hospital - Department of Neurology

Akron, OH

October 2020 - Ongoing

Efficacy and Safety Study of Vatiquinone for the Treatment of Mitochondrial Disease Subjects with Refractory Epilepsy (MIT-E) Protocol: PTC743-MIT-001-EP

- ◆ Co-investigator for study of investigational drug in mitochondrial epilepsy

Akron Children's Hospital - Department of Neurology

Akron, OH

March 2021 - Ongoing

Single vs. Multiple Privigen Dose Regimens in Pediatric CIDP

- ◆ Co-investigator for study of intravenous immune globulin in pediatric CIDP

Akron Children's Hospital - Department of Neurology

Akron, OH

January 2020 - Ongoing

Causes of HyperCKemia in children

- ◆ PI for project investigating the causes of hyperCKemia in mildly or asymptomatic children using retrospective study design

Akron Children's Hospital - Department of Neurology

Akron, OH

February 2020 - Ongoing

ECU-MG-303 (An open-label, multicenter study to evaluate the efficacy, safety, pharmacokinetics, and pharmacodynamics of eculizumab in pediatric patients with refractory generalized myasthenia gravis)

- ◆ Site PI for international multicenter study investigating eculizumab for generalized refractory MG in children

Akron Children's Hospital - Department of Neurology

Akron, OH

October 2019 - Ongoing

Commercial Zolgensma Safety

- ◆ Co-investigator and site PI for Ohio-wide study of gene replacement therapy for SMA post-approval

Akron Children's Hospital - Department of Neurology

Akron, OH

August 2021 - Ongoing

A Phase I, Single-Arm, Sequential Study to Evaluate the Effect of Food on the Gastrointestinal Toxicity and Pharmacokinetics of Selumetinib after Multiple Doses in Adolescent Children with Neurofibromatosis Type 1 (NF1) Related Plexiform Neurofibromas (PN)

- ◆ Co-investigator for study of effect of food on properties of selumetinib in pediatric population

COMPLETED**Cleveland Clinic - Neuromuscular Center**

Cleveland, OH

January 2019 - January 2022

Diagnostic Accuracy of Neuromuscular Ultrasound for the Diagnosis of Ulnar Neuropathy at the Elbow

- ◆ Participated in critical evidence review and guideline development for neuromuscular ultrasound use in ulnar neuropathy at the elbow

Akron Children's Hospital - Department of Neurology

Akron, OH

January 2020 - January 2021

An Expanded Access Program for Risdiplam in Patients with Type 1 or Type 2 Spinal Muscular Atrophy

- ◆ Co-investigator for expanded access program for risdiplam

Cleveland Clinic - Lerner Research Institute

Cleveland, OH

July 2008 - September 2008

The Role of Bid in Chronic Alcohol Exposure*Mentor: Ariel Feldstein, MD*

- ◆ Evaluated the effect of chronic ethanol exposure on the regulation of a pro-apoptotic protein, Bid, in the liver

Cleveland Clinic - Department of Neurological Restoration Institute

Cleveland, OH

June 2009 - December 2009

Long-term Efficacy of Deep Brain Stimulation for Essential Tremor*Mentor: Andre Machado, MD, PhD*

- ◆ Evaluated the long-term efficacy of deep brain stimulation in patients with essential tremor using validated quality of life survey and scoring system

Cleveland Clinic - Department of Genomic Medicine Institute

Cleveland, OH

June 2010 - June 2011

Brain Transcriptional and Epigenetic Associations With Autism*Mentor: Marvin Natowicz, MD, PhD*

- ◆ Performed methylomic and transcriptomic analyses of the autistic brain
- ◆ Acquired grant funding, performed project design, presented and published findings

Cleveland Clinic - Department of Pediatric Neurology

Cleveland, OH

September 2012 - May 2013

Pediatric Multiple Sclerosis*Mentor: Manikum Moodley, MD*

- ◆ Performed data analysis for large case series of pediatric multiple sclerosis

University of Pittsburgh - Department of Bioengineering

Pittsburgh, PA

September 2015 - March 2016

Clustering of Neuronal Tuning with Brain Computer Interfaces*Mentor: Aaron Batista, PhD*

- ◆ Investigated the phenomenon of neuronal tuning clustering in monkeys using brain computer interface; analyzed its effect on performance of hand- and brain-controlled tasks

Cleveland Clinic - Neuromuscular Center

Cleveland, OH

October 2018 - June 2019

Utility of EMG for Peripheral Neuropathy*Mentor: John Morren, MD*

- ◆ Evaluating the diagnostic utility of EMG in cases of suspected sensorimotor polyneuropathy and factors associated with EMG diagnoses

**RESEARCH
SUPPORT**

EPIGENETIC FACTORS IN AUTISM

Matthew Ginsberg, MD, Principal Investigator
 Granting Agency: Research Program Committee
 Award Amount: \$25,000
 Term of Award: October 2010 – September 2011
 Role: Principal Investigator

EPIGENETIC FACTORS IN AUTISM

Marvin Natowicz, MD, PhD, Principal Investigator
 Granting Agency: Autism Research Institute
 Award Amount: \$9,000
 Term of Award: June 2011 – June 2012

PUBLICATIONS

Articles

Ginsberg MR, Rubin RA, Falcone T, Ting AH, Natowicz MR. "Brain transcriptional and epigenetic associations with autism". *PLOS One*, 2012; 7(9), e44736

de Oliveira TH, Ginsberg MR, Cooper S, Nowacki A, Rezai A, Deogaonkar M, Machado AG. "Long-Term Effects of Deep Brain Stimulation for Essential Tremor with Subjective and Objective Quantification via Mailed-In Questionnaires". *Stereotactic and Functional Neurosurgery*, 2012; 90(6), 394-400. PMID: 23018417

Ginsberg MR, Rubin RA, and Natowicz MR. "Patterning of Regional Gene Expression in Autism: New Complexity". *Scientific Reports*, 2013; 3(1831), e1-3. PMID: 23665920.
<http://www.nature.com/srep/2013/130513/srep01831/full/srep01831.html>

Yamamoto E, Ginsberg M, Rensel M, Moodley M. "Pediatric-Onset Multiple Sclerosis: A Single Center Study". *Journal of Child Neurology*, 2018; 33(1), 98-105. PMID: 29246096.

Ginsberg MR, McCarty AJ, Lacomis D, Abdel-Hamid HZ. "Duchenne muscular dystrophy caused by a novel deep intronic DMD mutation". *Muscle and Nerve*, 2018. PMID: 29346715.

Ginsberg MR and Morren JA. "Utility of electrodiagnostic studies in patients referred with a diagnosis of polyneuropathy." *Muscle and Nerve*, 2020; 61(3), 288-292. PMID: 31650552.

Waldrop MA, et al. "Gene Therapy for Spinal Muscular Atrophy: Safety and Early Outcomes." *Pediatrics*. 2020; 146(3), e20200729. PMID: 32843442.

Ginsberg MR, Morren JA, and Levin K. "Using and interpreting electrodiagnostic tests." *Cleve Clin J Med*, 2020; 87(11), 671-682. PMID: 33139261.

Shook SJ et al. "Evidence-based guideline: Neuromuscular ultrasound for the diagnosis of ulnar neuropathy at the elbow." *Muscle and Nerve*, 2022; 65:147-153.

PMID: 34921428

Book Chapters

Ginsberg M. "QFC Basic Science Resource Guide- Evaluation for Chromosomal Abnormalities". Dell M (editors), CLIPP: Computer-assisted Learning in Pediatrics Project, <http://www.med-u.org>, 2013

Ginsberg M, Natowicz M. "Epigenetics in Autism". Hu V (editors), *Frontiers in Autism Research*, 1st edition, World Scientific Publishing Company, 2014

**SCIENTIFIC
PRESENTATIONS****TRANSCRIPTIONAL HETEROGENEITY IN THE AUTISTIC BRAIN AND BEHAVIORAL CORRELATES**

National Student Research Forum, University of Texas, Galveston, TX, April 2012
Oral Presentation

TRANSCRIPTIONAL HETEROGENEITY IN THE AUTISTIC BRAIN AND BEHAVIORAL CORRELATES

Neurological Institute Research Day, Cleveland Clinic, Cleveland, OH, May 2012
Oral Presentation

CASE STUDIES: UNUSUAL DIAGNOSTIC AND MANAGEMENT OF CASES IN NEUROMUSCULAR DISEASE

American Academy of Neurology 69th Annual Meeting, Boston, MA, April 2017
Oral Presentation

MUSCLE ULTRASOUND: AN EXCELLENT TOOL FOR EARLY IDENTIFICATION OF AUTOSOMAL RECESSIVE RYR1-RELATED MYOPATHY

Ryr1 Foundation Conference, Pittsburgh, PA, July 2018
Oral and Poster Presentation

TAKOTSUBO CARDIOMYOPATHY AS A COMPLICATION OF JUVENILE MYASTHENIA GRAVIS

AANEM National Meeting, National Harbor, MD, October 2018
Poster Presentation

**TEACHING
EXPERIENCE****Presentations**

Advanced Research in Medicine Seminar - Epigenetics and Psychiatry
Cleveland Clinic, Lerner College of Medicine, Cleveland, OH
April 2011

The Floppy Baby - A New Neurologic Emergency (New treatment for spinal muscular atrophy)

Children's Hospital of Pittsburgh, Pittsburgh, PA
May 2017

Pediatric Autonomic Neurology

Children's Hospital of Pittsburgh, Pittsburgh, PA
October 2016

Myopathies 101

Cleveland Clinic, Cleveland, OH
October 2018

Emerging Molecular Therapies for Neuromuscular Disorders

Cleveland Clinic, Cleveland, OH
November 2018

Neuromuscular Ultrasound Skills Workshop

American Academy of Neurology Fall Conference
October 2019

Breakthroughs in gene-based therapies for neuromuscular disorders

Northern Arizona University
March 2021

Teaching**Advanced Physical Diagnosis Course**

Children's Hospital Pittsburgh, Pittsburgh, PA
October 2016
~9 contact hours, 1st and 2nd year medical students

Pediatric Neuromuscular Case Studies

Children's Hospital Pittsburgh, Pittsburgh, PA
September 2017 - June 2018
Development of over a dozen software-based, interactive case studies for residents and fellows
~100 hours development

Clinical Instructor of Medicine

Cleveland Clinic Lerner College of Medicine, Cleveland, OH
2018-2019
~20 hours, constructive evaluation of essays by 1st and 2nd year medical students during neurology block

Assistant Professor of Pediatrics

Northeast Ohio Medical University, Akron, OH
2019-Present
~5 hours per week, 7 weeks a year direct teaching of pediatrics resident on inpatient service in addition to periodic outpatient teaching half-days for residents on rotation. Also mentored a summer research scholar directly through the Summer Pediatric Research Scholar program with direct shadowing and teaching in addition to project work. I also act as an evaluator for clinical skills assessments for medical students.

**COMMITTEE
SERVICE**

ADMISSIONS COMMITTEE, CLEVELAND CLINIC LERNER COLLEGE OF MEDICINE
Board Member and Interviewer, Cleveland Clinic, Cleveland, OH, 2010-2013

RESIDENT EDUCATION COMMITTEE
Member, Children's Hospital of Pittsburgh, 2017-2018

ABSTRACT REVIEW COMMITTEE
Member, AANEM, 2019-2021

SMARTSET REVIEW COMMITTEE
Member, Akron Children's Hospital, 2021-Present

LABORATORY UTILIZATION COMMITTEE
Member, Akron Children's Hospital, 2021-Present

**PROFESSIONAL
MEMBERSHIP**

- ◆ American Association of Pediatrics, Member, 2013 - 2018
- ◆ American Academy of Neurology, 2016 - present
- ◆ American Association of Neuromuscular & Electrodiagnostic Medicine, 2017 - present
- ◆ Child Neurology Society, Member, 2019-Present