

| Curriculum Vitae                                |                                                        |         |                                   |
|-------------------------------------------------|--------------------------------------------------------|---------|-----------------------------------|
| NAME:<br>Richard Eugene Frye                    | PRESENT TITLE:<br>Neurologist and Director of Research |         |                                   |
| ADDRESS:<br>4045 E Union Hills Drive, Suite 116 | BIRTHDATE:                                             |         |                                   |
|                                                 | CITIZENSHIP: USA                                       |         |                                   |
| INSTITUTION AND LOCATION                        | DEGREE                                                 | YEAR(s) | FIELD OF STUDY                    |
| Long Island University, Greenvale, NY           | B.A.                                                   | 1982-86 | Psychobiology / Computer Science  |
| Drexel University, Philadelphia, PA             | M.S.                                                   | 1988-91 | Biomedical Science/ Biostatistics |
| Georgetown University, Washington, DC           | Ph.D.                                                  | 1991-98 | Physiology and Biophysics         |
| Georgetown University, Washington, DC           | M.D.                                                   | 1991-98 | Medicine                          |

### Postgraduate Training

|               |                                                                                                                                 |
|---------------|---------------------------------------------------------------------------------------------------------------------------------|
| 5/1998-6/2000 | <b>Resident in Pediatrics</b> , Jackson Memorial Hospital, University of Miami, Miami, FL                                       |
| 7/2000-6/2003 | <b>Resident in Neurology</b> , Children's Hospital Boston, Harvard University, Boston, MA                                       |
| 7/2003-6/2005 | <b>Fellow in Behavioral Neurology and Learning Disabilities</b> ,<br>Children's Hospital Boston, Harvard University, Boston, MA |
| 7/2004-6/2005 | <b>Fellow in Psychology</b> , Department of Psychology, Boston University, Boston, MA                                           |

### Academic Appointments

|                 |                                                                                                                                                                                                          |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7/2005-6/2006   | <b>Assistant Professor</b> , Department of Pediatrics and Neurology,<br>University of Florida, Gainesville, FL                                                                                           |
| 7/2005-6/2006   | <b>Co-Medical Director</b> , Multidisciplinary Diagnostic and Training Program,<br>University of Florida, Gainesville, FL                                                                                |
| 1/2006-6/2006   | <b>Co-Director</b> , University of Florida School Problems Clinic,<br>University of Florida, Gainesville, FL                                                                                             |
| 7/2006-9/2011   | <b>Assistant Professor</b> , Department of Pediatrics, Division of Child and Adolescent<br>Neurology and The Children's Learning Institute; Department of Neurology,<br>University of Texas, Houston, TX |
| 1/2007-9/2011   | <b>Member</b> , Center for Clinical and Translational Science, University of Texas,<br>Houston, TX                                                                                                       |
| 1/2007-9/2011   | <b>Director</b> , Medically-Based Autism Clinic, Department of Pediatrics, University of Texas,<br>Houston, TX                                                                                           |
| 1/2010-9/2011   | <b>Director</b> , Laboratory for the Biological Basis of Neurodevelopmental Disorders,<br>University of Texas, Houston, TX                                                                               |
| 10/2011-12/2017 | <b>Associate Professor</b> , Department of Pediatrics, University of Arkansas for Medical<br>Sciences, Little Rock, Arkansas                                                                             |
| 10/2011-12/2017 | <b>Director of Autism Research</b> , Arkansas Children's Hospital Research Institute,<br>Little Rock, Arkansas                                                                                           |
| 3/2012-12/2017  | <b>Neurology Consultant</b> , Autism Treatment Network, University of Arkansas for<br>Medical Sciences, Little Rock, Arkansas                                                                            |
| 6/2012-12/2017  | <b>Director, Autism Multispecialty Clinic</b> , Arkansas Children's Hospital,<br>Little Rock, Arkansas                                                                                                   |
| 10/2013-12/2017 | <b>Co-Director, Neurometabolic Clinic</b> , Arkansas Children's Hospital,<br>Little Rock, Arkansas                                                                                                       |
| 8/2014-12/2017  | <b>Member, Center for Applied Research and Evaluation</b> , Arkansas Children's Hospital,<br>Little Rock, Arkansas                                                                                       |
| 1/2017-12/2017  | <b>Director, Neuroimmune Clinic</b> , Arkansas Children's Hospital, Little Rock, Arkansas                                                                                                                |
| 12/2017-9/2022  | <b>Professor of Child Health</b> ,<br>University of Arizona College of Medicine - Phoenix, Phoenix AZ                                                                                                    |
| 12/2017-9/2022  | <b>Chief, Section on Neurodevelopmental Disorders</b> , Barrow Neurological Institute,<br>Phoenix Children's Hospital, Phoenix AZ                                                                        |
| 12/2017-9/2022  | <b>Director, Neurodevelopmental and Mitochondrial Disorders Research Laboratory</b> ,                                                                                                                    |

University of Arizona College of Medicine - Phoenix, Phoenix AZ  
 12/2017-9/2022 **Director, Autism Program**, Barrow Neurological Institute,  
 Phoenix Children's Hospital, Phoenix AZ  
 1/2018-5/2019 **Director, Down Syndrome Program**, Barrow Neurological Institute,  
 Phoenix Children's Hospital, Phoenix AZ  
 4/2018- **Professor of Neurology**, Department of Neurology, Barrow Neurological Institute,  
 Phoenix Children's Hospital, Phoenix AZ  
 5/2018-9/2022 **Director, Fragile X Syndrome Program**, Barrow Neurological Institute,  
 Phoenix Children's Hospital, Phoenix AZ  
 12/2018- **Clinical Professor, Department of Neurology**,  
 Creighton University School of Medicine, Omaha, NE  
 9/2019- **Professor of Pediatric Neurology**, Mayo Clinic Alix School of Medicine,  
 Scottsdale, AZ

#### **Non-Profit Foundation Appointments:**

8/2022- **Principal Investigator**, Southwestern Autism Research and Resource Center,  
 Phoenix AZ.  
 11/2022- **President**, Autism Discovery and Treatment Foundation, Phoenix AZ

#### **Private Practice Appointments:**

8/2022- **Neurologist and Director of Research**, Rossignol Medical Center, Phoenix AZ.

#### **Hospital Appointments:**

7/2005–6/2006 **Shands Hospital**, University of Florida, Gainesville, FL  
 7/2006–9/2011 **Hermann Memorial Hospital**, University of Texas Health Science Center, Houston, TX  
 12/2011-12/2017 **University of Arkansas for Medical Sciences**, Little Rock, AR  
 1/2012-12/2017 **Arkansas Children's Hospital**, Little Rock, AR  
 12/2017-9/2022 **Phoenix Children's Hospital**, Phoenix AZ

#### **Medical Licenses:**

|          |           |                      |                                  |
|----------|-----------|----------------------|----------------------------------|
| Serbia   |           | Active               | 02/09/2023-08/08/2023            |
| Florida  | ME 159934 | Active               | 10/22/2022-01/31/2025            |
| Arizona  | 54974     | Active               | 09/28/2017-4/15/2023             |
| Arkansas | E7303     | Unlimited            | 12/02/2011-12/31/2018 (Inactive) |
| Kentucky | 51376     |                      | 06/21/2018-02/28/2019 (Inactive) |
| Texas    | M5715     | Full Medical License | 03/12/2007-11/30/2017 (Inactive) |

#### **Honors and Awards**

1991 **Distinguished Service Award**. Smell and Taste Research Center, University of Pennsylvania.  
 1991-1998 **Ruggles Scholarship**. Georgetown University Medical School, Washington, DC  
 1993-1996 **Pre-Doctoral Fellowship**. National Biomedical Research Foundation, Washington, D.C.  
 1994-1995 **ARCS Award**, Achievement Rewards for College Scientists Foundation, Washington, D.C..  
 1998 **Lawrence S. Lilienfeld, MD, PhD Award**, Department of Physiology and Biophysics,  
 Georgetown University Graduate School of Arts and Sciences  
 2003-2005 **Charles King Foundation Post-Doctoral Fellowship**, Medical Foundation, Boston, MA  
 2006 **Nelson Butters Award**, International Neuropsychological Society, Columbus, Ohio  
 2013 **Arkansas Biomedical Institute New Investigator Award**, University of Arkansas for  
 Medical Sciences, Little Rock AR  
 2018 **Ranked #2 of the Top Ten Autism Research of 2018**, Autism Speaks, New York NY  
 2018 Two Papers Selected as **2018 Editor's Pick of Journal Highlights**, Translational Psychiatry  
 2020 **Top 10% most downloaded papers**. Bioengineering & Translational Medicine

#### **Board Certifications:**

10/2004-9/2024 **Board Certification in General Pediatrics**

5/2004-4/2024  
3/2016-5/2024

**Board Certification in Neurology with Special Competence in Child Neurology**  
**Certified Principal Investigator, Association of Clinical Research Professionals**

### **Premedical School Employment**

1985 **Tern Warden**, The Nature Conservancy, Amagansett, NY  
1985-1986 **Teaching Assistant**, CW Post - Long Island University, Southampton NY  
1985-1986 **Computer Consultant**, Redding Associates, Southampton NY  
1986 **Systems Analyst**, Computer Creations, Farmingdale NY  
1987-1991 **Principal Investigator**, Sensonics Inc, Haddon Heights, NJ  
1988 **Psychophysicologist**, Smell and Taste Research Center, Hospital of the University of Pennsylvania, Philadelphia PA

### **Specialized Coursework in Health Care Quality Improvement**

- 2020 **Improvement Capability**, Institute for Healthcare Improvement, Boston MA
- QI 101: Introduction to Health Care Improvement
- QI 102: Interpreting Data: Run Charts, Control Charts, and Other Measurement Tools
- QI 103: How to Improve with the Model for Improvement
- QI 104: Testing and Measuring Changes with PDSA Cycles
- QI 105: Leading Quality Improvement
- QI 201: Planning for Spread: From Local Improvements to System-Wide Change Research
- QI 202: Addressing Small Problems to Build Safer, More Reliable Systems

### **Specialized Coursework in Clinical Trials and Translational Research**

2016 **Advanced GCP: Assessing Compliance Risk**, Association for Clinical Research Professionals, Arkansas Children's Hospital, Little Rock, AR  
2016 **ICH Gap Analysis Tool**, Association of Clinical Research Professionals, Alexandria VA  
2016 **The Drug Development Process: Improving Trial Feasibility and Exploring Your Growth Potential**, Association of Clinical Research Professionals, Alexandria VA  
2016 **GCP for the Experienced Investigator: Reducing Risk and Avoiding Common Inspection Findings**, Association of Clinical Research Professionals, Alexandria VA  
2016 **Mastering the Event Reporting Cycle: Understanding Your Impact on Patient Safety**, Association of Clinical Research Professionals, Alexandria VA  
2016 **Theory to Practice: Operationalize Your Clinical Study Protocol**, Association of Clinical Research Professionals, Alexandria VA  
2009 **Clinical Trials**, University of Texas Health Science Center, Houston, TX  
2009 **Navigating the Regulatory Highway**, University of Texas Health Science Center, Houston, TX  
2007 **Translational Research**, University of Texas Health Science Center, Houston, TX  
2004 **Introduction of Clinical Research**, Children's Hospital Boston, Boston, MA

### **Specialized Training in Neuroimaging**

2010 **ANFI Bootcamp**, University of Texas Health Science Center, Houston, TX  
2005 **Near-Infrared Spectroscopy-Diffuse Optical Imaging Visiting Fellowship**, MGH/MIT/HMS Martinos Imaging Center, Charlestown, MA  
2003 **Mini-Fellowship in Transcranial Magnetic Stimulation**, Laboratory for Magnetic Brain Stimulation, Beth-Israel Deaconess Medical Center, Boston, MA  
2003 **Siemens IDEA Software for Magnetic Resonance Sequence and Image Processing Development Training**, MGH/MIT/HMS Martinos Imaging Center, Charlestown, MA  
2003 **Basic and Advanced Magnetoencephalography Operations and Data Analysis**, Martinos Imaging Center, Charlestown, MA  
2003 **fMRI Statistics**, Martinos Imaging Center, Charlestown, MA

### **Specialized Training in Cognitive Neuroscience**

2005 **Summer Institute for Cognitive Neuroscience**, Dartmouth College, Hanover, NH



### **Specialized Training in Autism Diagnosis, Screening and Management Tools**

- 2008 **Autism Diagnostic Observation Schedule Clinical and Research Training**,  
University of Texas Health Science Center, Houston, TX
- 2019 **RITA-T**, Phoenix Children's Hospital, Phoenix AZ
- 2020 **STAT: Screening Tool for Autism in Toddlers and Young Children**,  
Phoenix Children's Hospital, Phoenix AZ
- 2021 **Sensory Inclusive™ Medical Training**, KultureCity, Birmingham, AL

### **Specialized Training in Complex and Non-linear System**

- 1996 **Complex Systems Summer School**. Santé Fe Institute, Santé Fe, NM
- 1994 **Noise Fluctuation Analysis: Characteristics of Ion-Channel Signal Ensemble**. Department  
of Physiology and Biophysics, Georgetown University, Washington, DC
- 1993 **Origins of Order: Non-Linear Systems and Evolution**. Department of Chemistry,  
Georgetown University, Washington, DC

### **Editorial Board:**

- 2021- Journal of Personalized Medicine, Editor-In-Chief, Section on Mechanisms of Diseases
- 2021- Pharmacogenomics Research and Personalized Medicine, Editorial Board
- 2020-2021 Journal of Personalized Medicine, Editorial Board
- 2020- Journal of Translational Genetics and Genomics, Editorial Board
- 2019- Annals of Translational Medicine, Editorial Board
- 2016- Clinical Medicine Insights: Pediatrics, Editorial Board
- 2016- Journal of Autism and Epilepsy, Editorial Board
- 2013- American Journal of Neuroscience Research, Advisory Editorial Board
- 2013- Journal of Central Nervous System Disease, Editorial Board
- 2013- Frontiers in Neuropsychiatric Imaging and Stimulation, Review Editorial Board
- 2013-2021 Frontiers in Child Health and Human Development, Associate Editor
- 2012- Scientific Reports Editorial Board
- 2012- OA Autism, Advisory Board Member
- 2012- The North American Journal of Medicine and Science, Advisory Editor
- 2007-2015 Computers in Biology and Medicine, Editorial Board
- 2007 Journal of Pediatric Neurology, USA Editor
- 2005-2007 Computers in Biology and Medicine, Associate Editor
- 2006-2007 Journal of Pediatric Neurology, Assistant Editor

### **Publication Indices:**

**h-index:** 58; **i10-index:** 160 **Citations:** 13,009; **ORCID ID:** 0000-0003-4442-2937

### **Special Issue Guest Editor:**

1. **Neuroconnectivity**, Computers in Biology and Medicine, Dec 2011; Volume 41, Issue 12
2. **Mitochondrial, Metabolic and Nutritional Disorders Associated with Neurodevelopmental Disorders**, Journal of Pediatric Biochemistry, Dec 2012; Volume 2, Issue 4.
3. **The Microbiome in Autism Spectrum Disorder**, Microbial Ecology in Health and Disease, S1, 2015
4. **Metabolic and Immune Disorders Associated with Psychiatric Disease: Potential Etiology and Pathway for Treatment**, Frontiers in Psychiatry, Section on Molecular Psychiatry, Aug 2020
5. **Comorbidity and Autism Spectrum Disorder**, Frontiers in Psychiatry, Section on Child and Adolescent Psychiatry, Nov 2020.
6. **Secondary vs Idiopathic Autism**, Frontiers in Psychiatry, Section on Child and Adolescent Psychiatry, April 2020.
7. **Advances in the Diagnosis and Treatment of Autism Spectrum Disorder: Part 1**, Seminars in Pediatric Neurology, May 2020.
8. **Advances in the Diagnosis and Treatment of Autism Spectrum Disorder: Part 2**, Seminars in Pediatric Neurology, September 2020.

9. **A Personalized Medicine Approach to the Diagnosis and Management of ASD.** Journal of Personalized Medicine, January 2020
10. **A Personalized Medicine Approach to the Diagnosis and Management of ASD: 2022.** Journal of Personalized Medicine, ongoing submissions
11. **Genetic basis and treatment of psychiatric disorders.** Journal of Translational Genetics and Genomics, ongoing submissions
12. **A Personalized Medicine Approach to the Diagnosis and Management of ASD: 2023.** Journal of Personalized Medicine, in press
13. **A Personalized Medicine Approach to the Diagnosis and Management of ASD: Beyond Genetic Syndromes.** Journal of Personalized Medicine, ongoing submissions

**Reviewer:** Acta Paediatrica, Autism Research, Biological Psychiatry, BMC Complementary and Alternative Medicine, BMC Psychiatry, Clinical Chemistry and Laboratory Medicine, Clinical Therapeutics, Developmental Cognitive Neuroscience, Developmental Medicine and Child Neurology, Developmental Neuroscience, Epilepsy Research, Environmental Science and Pollution Research, Expert Opinion On Therapeutic Targets, Genes, Frontiers in Child and Neurodevelopmental Psychiatry, Frontiers in Experimental Pharmacology and Drug Discovery, Frontiers in Epilepsy, Frontiers in Neuropsychiatric Imaging and Stimulation, Brain and Behavior, Headache, International Journal of Environmental Research and Public Health, International Journal of Molecular Sciences, Journal of Autism and Developmental Disorders, Journal of the International Neuropsychological Society, Journal of Neurochemistry, Journal of Neuroinflammation, Journal of Pediatric Infectious Disease, Journal of Personalized Medicine, Journal of Psychosomatic Research, Molecular Basis of Disease, Molecular Psychiatry, Neurobiology of Aging, Neuroimage, Neurology, Neuropsychologia, Neuropsychopharmacology, Neuroscience and Biobehavioral Reviews, Neuroscience Letters, New England Journal of Medicine, Nutrients, Pediatrics, Prague Medical Report, Psychiatry Research, Redox Biology, Research in Autism Spectrum Disorder, Scientific Reports, Transactions on Biomedical Engineering

#### **Service on Committees:**

- |           |                                                                                                                                    |
|-----------|------------------------------------------------------------------------------------------------------------------------------------|
| 1991-1993 | <b>Legislative Liaison, Georgetown University Chapter, American Medical Student Association</b><br>Reston VA                       |
| 1992-1993 | <b>President, Georgetown University Chapter, American Medical Student Association</b><br>Reston VA                                 |
| 1992-1993 | <b>Associate Regional Trustee for the Washington DC Area, American Medical Student Association, Reston VA</b>                      |
| 1993      | <b>Chairman, Credentials Committee, American Medical Student Association, Reston VA</b>                                            |
| 1995      | <b>Project Organizer, Holiday Hope for the Homeless Project, Georgetown University Medical School, Washington DC</b>               |
| 1998-2000 | <b>Housestaff Education Committee, Department of Pediatrics, University of Miami, Jackson Memorial Hospital, Miami FL</b>          |
| 2005-2006 | <b>Neuroimaging Development Committee, Department of Neurology, University of Florida Gainesville, FL</b>                          |
| 2005-2005 | <b>Magnetoencephalography Development Committee, Department of Pediatrics and Neurology, University of Florida, Gainesville FL</b> |
| 2006      | <b>Resident Education Committee, Department of Neurology, University of Florida Gainesville, FL</b>                                |
| 2006-2008 | <b>Faculty Senate, University of Texas Health Science Center at Houston, Houston, TX</b>                                           |
| 2006-2009 | <b>Pediatric Residency Interview Committee, University of Texas Health Science Center at Houston, Houston, TX</b>                  |
| 2011-2014 | <b>EEG Working group, Autism Treatment Network, Boston MA</b>                                                                      |
| 2012-2015 | <b>Biorepository Committee, Arkansas Children's Hospital Research Institute, Little Rock AR</b>                                    |
| 2012-2016 | <b>Inpatient Medical-Surgery Committee, Arkansas Children's Hospital, Little Rock, AR</b>                                          |
| 2013-2017 | <b>Clinical Competency Committee, Child Neurology Residency Program, Arkansas Children's Hospital, Little Rock, AR</b>             |
| 2013-2017 | <b>Arkansas Legislative Task Force on Autism, State of Arkansas, Little Rock, AR</b>                                               |
| 2017      | <b>PCRU Space Task Force, Arkansas Children's Research Institute, Little Rock, AR</b>                                              |

2018-2020 **Institutional Review Board Scientific Review Committee**,  
Phoenix Children's Hospital, Phoenix, AZ

2018-2019 **Early Access to Care AZ**, Phoenix Children's Hospital, Co-Chair

2019-2020 **MD/PhD Admissions Subcommittee**, University of Arizona College of Medicine – Phoenix,  
Phoenix, AZ

2019-2022 **Early Access to Care AZ**, Chair, Advisory Board, Phoenix Children's Hospital, Chair

2019-2022 **BNI@PCH Neuroscience Clinical Translational Research Committee**,  
Phoenix Children's Hospital, Phoenix, AZ

2020-2022 **Appointment, Promotion & Tenure (A, P & T) Committee**, University of Arizona College  
of Medicine – Phoenix, Phoenix, AZ

2021-2022 **PCH Mentoring Committee**, Phoenix Children's Hospital, Phoenix, AZ

#### **Service on National Advisory Boards**

1993 **Legislative Advisory Board**, American Medical Student Association, Reston, Va

2006-2012 **Medical Reviewer**, National Association of Rare Diseases, Danbury, CT

2008-2012 **Medical Advisor**, The American Epilepsy Outreach Foundation, Chicago, IL

2009-2012 **Scientific Advisor**, BioMarin Pharmaceuticals Inc., Novato, CA

2012-2017 **Chair, Scientific Advisory Board**, Generation Rescue, Los Angeles CA

2011 **Child Neurology Advisory Board**, Seaside Therapeutics, Cambridge MA

2012- **Scientific Advisory Board**, Talking About Curing Autism, Irvine CA

2014- **Advisory Committee**, Autism Nutrition Research Center, Tempe, AZ

2014- **Scientific Advisory Board**, Center for Advanced Diagnostics, Evaluation, and Therapeutics,  
Albuquerque, NM

2014- **Scientific Advisory Board**, The Neurological Health Foundation, Dallas TX

2015- **Scientific Advisory Board**, Autism Research Institute, San Diego CA

2015- **“Mito On Call” Physician Advisory Board**, United Mitochondrial Disease Foundation,  
Pittsburgh, PA

2017- **Developmental Delay Algorithm Development Group**, Mountain States Regional Genetics  
Network

2019- **Connective Tissue Disorder Algorithm**, Mountain States Regional Genetics Network

2019-2022 **NFXF Research Readiness Program**, National Fragile X Foundation

2020- **Clinical Advisory Board**, The Foundation For Children With Neuroimmune Disorders

2021- **Signature Study Team**, Autism Speaks, New York NY

2022- **Consultation Panel**, The Foundation For Children With Neuroimmune Disorders

#### **Service on Industry Advisory Boards**

2014-Present **Chair, Scientific Advisory Board**, Iliad Neurosciences, Plymouth Meeting, PA

2017-2018 **Scientific Advisory Board**, Aces Health, Atlanta GA

2017-Present **Scientific Advisory Board**, Neuroneeds Inc, Old Lyme CT

2018-Present **Scientific Advisory Board**, Tesseract Medical Research,

2018-2022 **Scientific Advisory Board**, Finch Therapeutics,

2019-2020 **Scientific Advisory Board**, Cox Biosciences, New York NY

2020-Present **Scientific Advisory Board**, Autism Impact Fund

2021-Present **Scientific Advisory Board**, BioRosa Inc, Boston MA

2022 **Trofinetide in Rett Syndrome Advisory Board**, Acadia Pharmaceuticals, Conshohocken, PA

#### **Service on International Advisory Boards**

2015 **American-Chinese Autism International Forum Steering Committee**

#### **Service on National and International Grant Review Boards**

2012-Present **Autism Research Institute**, San Diego, CA, USA

2012-2016 **Autism Speaks**, New York, NY, USA

2015-2016 **French National Research Agency**, Paris, France

2014,2016 **Food and Health Bureau**, Hong Kong, China

2014 **NeuroDevNet Expert Review Panel**, Ottawa, Canada  
 2014,2017 **Neurological Foundation of New Zealand**, Auckland, New Zealand  
 2017-2018, 2020 Ad Hoc Member, **Developmental Brain Disorders Study Section**,  
 National Institutes of Health, Bethesda MD  
 2018 **Agenzia Italiana del Farmco**, Roma, Italy  
 2019 **Deutsche Forschungsgemeinschaft**, Bonn, Germany  
 2019 **Medical Research Council, UK Research and Innovation**, Swindon, UK  
 2020 **Synchrony**, Pleasanton, CA  
 2020 **Valley Research Partnership**, Phoenix AZ  
 2020 Ad Hoc Member, **Neural Oxidative Metabolism, Mitochondria and Cell Death Study Section**  
 National Institutes of Health, Bethesda MD  
 2021-Present **The Brain Foundation**, Pleasanton, CA  
 2021 **Israel Science Foundation**, Jerusalem, Israel  
 2021 **Mount Sinai NIEHS Transdisciplinary Center on Early Environmental Exposures Pilot Project Grant Program**, New York, NY  
 2021-Present Standing Member, **Developmental Brain Disorders Study Section**,  
 National Institutes of Health, Bethesda MD  
 2021 **Great Ormond Street Hospital Children's Charity**, London, England  
 2023 **University of Leuven Research Council**, Belgium

### **Society Memberships**

1995-Present Society for Neuroscience  
 1998-Present American Academy of Pediatrics  
 2000-Present American Academy of Neurology  
 2000-Present Child Neurology Society  
 2008-Present International Society for Autism Research  
 2015-Present Mitochondrial Medicine Society  
 2016-Present Association for Clinical Research Professionals

### **Current Grant Support:**

Pending **Changes in Mitochondrial Function in Children with Autism and Severe Gi Disease Treated with MTT. The Brain Foundation. Principal Investigator.**  
 2020-2023 **Transcriptomic blood biomarkers for ASD diagnosis and precision medicine prognosis. United States – Israel Binational Science Foundation, Co-Investigator**  
 2018-2023 **Early Treatment of Language Impairment in Young Children with Autism Spectrum Disorder with Leucovorin Calcium. Department of Defense. Principal Investigator**  
 2017-2023 **A High-dose Folinic Acid Treatment for Core and Associated Symptoms of Autism. National Institute of Child Health and Development, Principal Investigator.**  
 2018-2023 **Treatment of Social Communication and Language Deficits with Leucovorin for Young Children with ASD. Autism Speaks, Principal Investigator.**  
 2018-2023 **Effect of a Wide Spectrum Nutritional Supplement on Mitochondrial Function in Children with Autism Spectrum Disorder (ASD). Turnabout for Autism. Principal Investigator.**  
 2021-2023 **High-Frequency Oscillation as a Biomarker of Mitochondrial Dysfunction associated with Epilepsy in Autism. The Brain Foundation. Principal Investigator.**  
 2021-2023 **Autism with Neuro-developmental Regression Associated Mitochondrial Dysfunction: Further Development of In Vitro Models and Pathways to Treatment. The Brain Foundation. Principal Investigator.**  
 2020-2023 **Molecular Studies to Identify Mechanisms that Underlie Symptom Improvement in Microbiota Transfer Therapy Patients. Department of Defense. Consultant**  
 2020-2023 **Changes in Mitochondrial Function in Children Treated with MTT. N of One Foundation. Principal Investigator.**  
 2016-2023 **Treating Gastrointestinal and Autism Symptoms in Adults with Autism Using Microbiota Transfer Therapy. Department of Defense, Co-investigator**

- 2017-2023 **Transforming Peripheral Cells into Neurons to study Mitochondrial Dysfunction in Autism.** The Jonty Foundation. **Principal Investigator**
- 2018-2023 **The effect of phytocannabinoids on mitochondrial function in Chronic Fatigue Syndrome** GW Pharmaceuticals, Cambridge, UK, **Consultant.**
- 2018-2023 **Phytocannabinoids protective effect on oxidative stress induced mitochondrial dysfunction in control and autistic cell lines** GW Pharmaceuticals, Cambridge, UK, **Consultant.**

**Current Industry Sponsored Trials:** None

**Past Industry Sponsored Trials**

- 2019-2023 **An Open-Label Extension Study to Assess the Long-Term Safety and Tolerability of ZYN002 Administered as a Transdermal Gel to Children and Adolescents with Fragile X Syndrome – CONNECT-FX Open Label Extension (OLE).** Clinical study Of caNNabidiol in childrEn and adolesCentTs with Fragile X (CONNECT-FX OLE). ZYN2-CL-017 Zynerba Pharmaceuticals, Inc., Devon, PA
- 2018-2019 **A Randomized, Double-Blind, Placebo-Controlled Multiple-Center, Efficacy and Safety Study of ZYN002 Administered as a Transdermal Gel to Children and Adolescents with Fragile X Syndrome – Clinical study Of caNNabidiol in childrEn and adolesCentTs with Fragile X (CONNECT-FX),** Zynerba Pharmaceuticals, Inc., Devon, PA
- 2015-2016 **A Double Blind Randomized Placebo Controlled Study of CM-AT for the Treatment of Autism in Children With All Levels of Fecal Chymotrypsin.** Curemark, LLC, Rye, NY.
- 2016-2017 **A Open-Label Extension Study of CM-AT for the Treatment of Autism in Children.** Curemark, LLC, Rye, NY.
- 2015-2017 **CAMP-01: Children’s Autism Metabolome Project (CAMP): Development and Clinical Evaluation of the Stemina Metabolic Biomarker-Based Test to Diagnose Autism Spectrum Disorder in Early Childhood.** Stemina Biomarker Discovery, Inc., Madison, WI
- 2016-2017 **Effect of AIMS and HSP90 inhibitors on in vitro mitochondrial respiration in control and autism lymphoblastoid cell lines.** Reata Pharmaceuticals, Inc, Irving TX. **Principal Investigator**
- 2014-2015 **A randomized, double-blind, phase 2a crossover study to assess the safety and efficacy of *Trichuris suis* ova for the treatment of Autism Spectrum Disorder.** Coronado Biosciences, Burlington, MA
- 2014-2015 **An Exploratory Open-Label Phase 2 Study of EPI-743 (Vincerinone™) in Children with Autism Spectrum Disorder,** Edison Pharmaceuticals, Inc., Mountain View, CA
- 2012-2014 **An Open-Label Extension Study of the Safety and Tolerability of Memantine in Pediatric Patients with Autism, Asperger’s Disorder or Pervasive Developmental Disorder Not Otherwise Specified (PDD-NOS) ,** Forest Laboratories, New York, NY
- 2012-2013 **An Open-Label Study Of The Safety And Tolerability Of Memantine In Pediatric Patients With Autism, Asperger’s Disorder, Or Pervasive Developmental Disorder Not Otherwise Specified (PDD-NOS),** Forest Laboratories, New York, NY
- 2012-2013 **A Double-Blind, Placebo-Controlled, Randomized Withdrawal Study of the Safety and Efficacy of Memantine in Pediatric Patients with Autism, Asperger’s Disorder, or Pervasive Developmental Disorder Not Otherwise Specified (PDD-NOS) Previously Treated with Memantine,** Forest Laboratories, New York, NY
- 2010-2012 **Biomarkers of central nervous system tetrahydrobiopterin concentration and response to tetrahydrobiopterin supplementation in children with idiopathic cognitive developmental disorders,** BioMarin Pharmaceutics Inc., Novato, CA

**Past Grant Support:**

- 2021-2026 **The FXCRC FORWARD Registry and Database. Study to Explore Early Development (SEED) Follow-up Study.** Centers for Disease Control and Prevention (CDC)
- 2021-2024 **Health Information Technology to Support Autism Spectrum Disorders (ASD) Risk Assessment for Early Diagnosis,** National Institute of Mental Health, **Co-Investigator**

2020-2022 **Autism Learning Health Network, Autism Speaks, Site Principal Investigator**

2020-2021 **Mitochondrial disease and dysfunction in neurological and neurodevelopmental disorders: Measurement of mitochondrial function in fresh human brain. Innovative Neuroscience for Kids (INK) Foundation, Principal Investigator**

2017-2021 **Folate and Cobalamin Insufficiency in Autism Spectrum Disorder: Biomarkers of treatments response and connection to autoimmunity. The Jonty Foundation. Principal Investigator**

2017-2021 **MicroRNA regulation of metabolism, immunity and behavior in Autism Spectrum Disorder. The Jonty Foundation. Principal Investigator**

2017-2018 **Atypical tryptophan metabolism is related to autism characteristics: Development of plasma and urine biomarkers. Autism Research Institute, San Diego, CA. Co-Investigator**

2018-2022 **Early Access for Care Arizona (EAC-AZ) Program. Board of Visitors, Phoenix AZ**

2018-2022 **The Sensory Child. PCH Leadership Circle, Phoenix AZ**

2020-2022 **Resting State Functional MRI to Locate Seizure Onset Zone and Pathological Neurocognitive Networks in TSC. Department of Defense. Co-Investigator**

2018-2021 **The FXCRC FORWARD Registry and Database: Using Longitudinal Data to Characterize the Natural History of Fragile X Syndrome- Component A. Centers for Disease Control and Prevention (CDC) Cooperative Agreement (1U01DD001189-01)**

2018-2021 **Protecting cardiac and skeletal muscle against pediatric cancer chemotherapy: Understanding and unlocking new pathways. Valley Research Partnership Award. Co-Principal Investigator**

2018-2021 **The FXCRC FORWARD Registry and Database: Using Longitudinal Data to Characterize the Natural History of Fragile X Syndrome- Component A. Centers for Disease Control and Prevention (CDC) Cooperative Agreement (1U01DD001189-01)**

2015-2017 **Fetal Acetaminophen: A Potential Neurobehavioral Teratogen. NARSAD Young Investigator Grant, Brain and Behavior Research Foundation, Great Neck, NY. Mentor**

2014-2016 **Effectiveness of Services for Children with Autism Spectrum Disorders. National Institute of Child Health and Development, Co-investigator**

2014-2016 **Effectiveness of Early Intensive Behavioral Intervention Services for Children with Autism Spectrum Disorders. Autism Treatment Network, Boston, MA, Co-investigator**

2015-2016 **Mitochondrial Dysfunction in Autism Spectrum Disorder. Autism Research Institute, San Diego, CA. Principal Investigator**

2013-2016 **Folate receptor autoimmunity in autism spectrum disorders, Autism Speaks, New York NY Co-Investigator**

2015-2016 **Mitochondrial dysfunction and autism spectrum disorders - inflammatory subtype. Autism Research Institute, San Diego, CA. Co-investigator.**

2012-2015 **A folinic acid intervention for ASD: links to folate receptor autoimmunity & redox metabolism. Brenen Hornstein Autism Research and Education (BHARE) Foundation, Elk Grove Village IL; Fraternal Order of Eagles, Little Rock AR; Lee Silsby Pharmacy, Cleveland, OH; Doctors Data, Chicago, IL. Principal Investigator**

2012-2015 **Mitochondrial Dysfunction in Autism. The Jane Botsford Johnson Foundation. New York, NY. Principal Investigator**

2013-2015 **Autism Translating to Treatments Study.. Subcontract of UCSF. The Jane Botsford Johnson Foundation. New York, NY. Site Investigator**

2013-2015 **Healthy GFCF Modified Atkins Diet for Treating Seizures in Autism, Autism Research Institute, San Diego, CA. Co-investigator.**

2012-2013 **Prenatal Neuromagnetic Biomarkers for Neurodevelopmental Disorders. UAMS Translational Research Institute. Little Rock, AR**

2011-2012 **Medical Etiologies of Neurodevelopmental Disorders: Cerebral Folate Deficiency. Autism Research Institute, San Diego, CA.**

2010-2012 **Mitochondrial Dysfunction in Autism: Patient Characteristics and Relation to Mitochondrial Toxins. The Jane Botsford Johnson Foundation. New York, NY.**

2010-2011 **Survey on treatment for children with autism with and without seizures. Autism Research Institute.**

- 2009-2011 **Relational and Abstract Learning in Individuals with Autism Spectrum Disorder**, University of Texas Pilot Award, University of Texas Health Science Center, Houston, TX, Co-PI.
- 2007-2010 **Rapid Sensory Processing in Well and Poorly Compensated Young Adults with Dyslexia**, Center for Clinical and Translational Science, UTHSC, Houston, TX, Principal Investigator.
- 2007-2009 **K Award Supplement**, UTHSC, Houston, TX, Principal Investigator.
- 2005-2006 **University of Florida School Problems Clinic**, Innovative New Program Grant, Children's Miracle Network, Gainesville, FL, Principal Investigator.
- 2005-2010 **Developmental Phonological Dyslexia: Neural Mechanisms**, Mentored Patient-Oriented Research Career Development Award, NINDS, Bethesda, MD, Principal Investigator
- 2003-2005 **Auditory and Visual Phonologic Processing in Adults With and Without Dyslexia**. Martinos Imaging Center Pilot Fund, Charlestown, MA (Co-investigator with Dr. Eric Halgren).
- 2003-2005 **Charles King Trust Post-Doctoral Fellowship**. The Medical Foundation, Boston MA
- 2002-2003 **Distinct behavioral and brain activity profiles for two kinds of dyslexia: implications for individualized treatment**. Boston University Institutional Award, Boston University, Boston, MA. (Dr. Jacqueline Liederman, PI. Dr. Richard Frye and others, Co-Investigators).
- 1987-1991 **Development of a Computerized Nasal Resistance System**, Small Business Innovation Research Grant: Phase I and II, NHLBI, Bethesda, MD., Principal Investigator
- 1998 **The Nasal Cycle and its Relationship to REM/NREM, Body Movement, and Hemispheric Cerebral Activity During Sleep**. Eleanor Dana Center for Sleep Disorders, University of Pennsylvania, Philadelphia, PA, Co-Principal Investigator.

#### **Publications: Original Peer-Reviewed Papers in Journals**

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8. **Frye, R.E.** & Doty, R.L. A comparison of response characteristics of airflow and pressure transducers commonly used in rhinomanometry. IEEE Transactions in Biomedical Engineering, 37:937-44, 1990.
9. McKeown, D.A., Doty, R.L., Perl, D.P., **Frye, R.E.**, Simms, I. & Mester, A. Olfactory Function In Young Adolescents With Down's Syndrome, Journal of Neurology, Neurosurgery and Psychiatry, 61:412-414, 1996.
10. **Frye, R.E.** Advances in Image Analysis: Developing Shift-Invariant Texture Descriptors, Scientific Computing and Automation, 13(5):43-4, 1996.
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13. **Frye, R.E.**, Ascher, S. & Thomasson, D. Magnetic Resonance Hysterosalpinography: Sequence Optimization and Simulation of Normal and Abnormal Tube Patency. Radiology, 214: 107-112, 2000.
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15. **Frye, R.E.,** Nugent, A., Newburger, J.W. and Sahin, M. **Focal Seizure and Cerebral Contrast Retention after Cardiac Catheterization,** Pediatric Neurology, 32:213-216, 2005.
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17. **Frye, R.E.** and Gorman, M. **"Index of Suspicion" case of Hashimoto encephalopathy.** Pediatrics in Review, 27(1):29-33, 2006.
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20. **Frye, R.E.** **Recurrent Aseptic Encephalitis in Periodic Fever, Aphthous Stomatitis, Pharyngitis and Adenopathy (PFAPA) Syndrome.** The Pediatric Infectious Disease Journal, 25(5): 2006.
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43. Kamali, A., Hasan, K.M., Kramer, K.A. **Frye, R.E.** **Diffusion Tensor Tractography of the Human Brain Cortico-Ponto-Cerebellar Pathways: A Quantitative Preliminary Study.** Journal of Magnetic Resonance Imaging, 2010; 32:809-17.
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89. Rose, S., **Frye, R.E.**, Slattery, J., Wynne, R., Tippet, M., Melnyk, S., James, S.J. **Oxidative stress induces mitochondrial dysfunction in a subset of autism lymphoblastoid cell lines.** Society for Neuroscience, San Diego, CA 2013 (Poster).
90. MacFabe, D.F., Melnyk, S., **Frye, R.E.** **Unique acyl-carnitine profiles in the propionic acid rat model of autism predict potential biomarkers for mitochondrial dysfunction in autistic patients,** Society for Neuroscience, San Diego, CA 2013 (Poster).
91. **Frye, R.E.**, Rose, S., Slattery, J., Wynne, R.A., Melnyk, S., James, S.J. **Abnormal Mitochondrial Function in Immune Cells derived from a Subset of Children with Autism Spectrum Disorder.** Arkansas Biosciences Institute Conference, Fayetteville AR 2013 (Poster).
92. **Frye, R.E.**, Melnyk, S., Fuchs, G., Reid, T., Jernigan, S., Pavliv, O., Hubanks, A., Gaylor, D.W., Walters, L., James, S.J. **Effectiveness of methylcobalamin and folinic acid treatment on adaptive behavior in children with autistic disorder is related to glutathione redox status.** International Meeting for Autism Research, Atlanta, GA 2014 (Poster)
93. **Frye, R.E.**, Slattery, J.C., Delhey, L., Tippet, M., Melnyk, S., Rose, S., Quadros, E., Sequeira, J.M., James, S.J. **The Efficacy of High-Dose Folinic Acid for Autism Spectrum Disorder: A Double-Blind Placebo Controlled Study.** International Meeting for Autism Research, Atlanta, GA 2014 (Poster)
94. Rose, S., **Frye, R.E.**, Slattery, J., Wynne, R., Tippet, M., Melnyk, S., James, S.J. **Oxidative stress induces mitochondrial dysfunction in a subset of autism lymphoblastoid cell lines.** International Meeting for Autism Research, Atlanta, GA 2014. (Poster)
95. Rose, S., **Frye, R.E.**, Slattery, J., Melnyk, S., Wynne, R., Tippet, M., James, S.J. **Oxidative Stress Induces Mitochondrial Dysfunction in a Subset of Autism Lymphoblastoid Cell Lines in a Well-Matched Case Control Cohort.** Society for Inherited Metabolic Disease, Asilomar, CA 2014.
96. **Frye, R.E.**, Kahler, S., Slattery, J., Rose, S., James, J.S. **Treatable Metabolic Disorders Associated with Autism Spectrum Disorder.** Society for Inherited Metabolic Disease, Asilomar, CA 2014
97. Cox, D., Kahler, S., **Frye, R.E.**, Danylichuk, N., Vuk, J. **Autistic like features in Phelan-McDermid syndrome. Possible correlations to patient's genetic information.** American College of Medical Genetics Annual Clinical Genetics Meeting, Nashville, TN 2014.
98. **Frye, R.E.**, Rose, S., Slattery, J., Wynne, R.A., Tippet, M., Melnyk, S., James, S.J. **Mitochondrial dysfunction in a subset of immune cells derived from children with autism spectrum disorder: A**

- unique metabolic endophenotype.** Medical Academy of Pediatric Special Needs, Costa Mesa CA 2014 (Platform).
99. MacFabe, D.F., Melnyk, S., **Frye, R.E. Acyl-Carnitine and Redox Profiles in Propionic Acid Exposed Rats Predict Biomarkers for Acquired Mitochondrial Dysfunction in ASD**, American Society for Neurochemistry, Long Beach, CA 2014 (Poster).
  100. **Frye, R.E.**, Rose, S., Slattery, J., Wynne, R.A., Tippet, M., Melnyk, S., James, S.J. **Oxidative-stress induced mitochondrial dysfunction is found in immune cells derived from a significant subset of children with autism spectrum disorder**. Mitochondrial Medicine, Pittsburgh PA, 2014 (Poster).
  101. Delhey, L., Slattery, J.C., Deepmala, Furgerson, B., Strickland, T., Tippet, M., Sailey, A., Wynne, R., Rose, S., Melnyk, S., James, S.J., Sequeira, J.M., Quadros, E., **Frye, R.E. Efficacy and Safety of High Dose Folinic Acid in Autism Spectrum Disorder: Open Label Follow-up of a Randomized Controlled Trial**. American Academy of Child and Adolescent Psychiatry, San Antonio TX, 2015 (Poster).
  102. **Frye, R.E.**, Delhey, L., Slattery, J.C., Tippet, M., Li, Y., Wynne, R., Rose, S., Bennuri, S., Melnyk, S. **Mitochondrial, Metabolic, Cognitive, Behavioral and Clinical Characteristics of Children with Autism and Epilepsy: A Case-Control Study**. Global Symposium on Ketogenic Therapies, Banf, Alberta, CN 2016.
  103. Carvalho, E., Rose, S., Hurren, N.M., Cotter, M., Azhar, G., Schutzler, S., **Frye, R.**, Børshiem, E. **Mitochondrial oxidative capacity is decreased in peripheral blood mononuclear cells after chronic amino acid supplementation in older adults with hypertriacylglycerolaemia**. ASPET Annual Meeting at Experimental Biology, Chicago IL 2017
  104. Jyonouchi, H., Geng, L., Wynne, R., Rose, S., **Frye, R.E. An association between IL-1 $\beta$  production and mitochondrial functions in patients with autism spectrum disorders (ASD)**. AAAAI Annual Meeting, Atlanta GA, 2017 (Poster).
  105. Ray-Griffith, S.L., Gill, P.S., Bhattacharyya, S., **Frye, R.E.**, James, L., Newport, J.D., Stowe, Z.N. **Perinatal Acetaminophen Use: Characterizing Potential Developmental Risk**. American College of Neuropsychopharmacology. 2016 (Poster).
  106. **Frye, R.E. Microbiome metabolites and their effect on mitochondrial function**. Arkansas Bioinformatics Consortium 2017. Little Rock, AR 2017 (Platform)
  107. Rose, S., Bennuri, S.C., Buie, T., Winter, H., Murray, K.F., **Frye, R.E.. Cecum Specific Mitochondrial Dysfunction in Children with Autistic Disorder and Gastrointestinal Symptoms**. Arkansas Bioinformatics Consortium (AR-BIC), Little Rock, Arkansas, April 2017 (Poster)
  108. Slattery, J.C., MacFabe, D.F., Kahler, S. **Frye, R.E. Enteric Ecosystem Disruption in Autism Spectrum Disorder: Can the Microbiota and Macrobiota be Restored?**. Arkansas Bioinformatics Consortium (AR-BIC), Little Rock, Arkansas, April 2017 (Poster)
  109. Rose, S., Bennuri, S.C., Buie, T., Winter, H., Murray, K.F., **Frye, R.E.. Cecum Specific Mitochondrial Dysfunction in Children with Autistic Disorder and Gastrointestinal Symptoms**. UAMS/NCTR Symposium: Mitochondrial Mania, Little Rock, Arkansas, April 2017 (Poster)
  110. Slattery, J.C., MacFabe, D.F., Kahler, S. **Frye, R.E. Enteric Ecosystem Disruption in Autism Spectrum Disorder: Can the Microbiota and Macrobiota be Restored?**. UAMS/NCTR Symposium: Mitochondrial Mania, Little Rock, Arkansas, April 2017 (Poster)
  111. Kahler, S., Slattery, J.C., Tippet, M., Frye, R.E. **A Multi-Specialty Autism Clinic**. International Congress of Inborn Errors of Metabolism, Rio De Janeiro, Brazil, Sept 2017 (Poster).
  112. Rose, S.. **Frye, R.E. Butyrate enhances mitochondrial function in autism lymphoblastoid cells under physiological stress**. American Physiological Society: Physiological Bioenergetics: Mitochondria from Bench to Bedside San Diego, California 2017 (Poster and Platform).
  113. Carvalho, E., Rose, S., Hurren, N.M., Cotter, M., Azhar, G., Schutzler, S., **Frye, R.**, Børshiem, E. **Mitochondrial oxidative capacity is decreased in peripheral blood mononuclear cells after chronic amino acid supplementation in older adults with hypertriacylglycerolaemia**. American Physiological Society: Physiological Bioenergetics: Mitochondria from Bench to Bedside San Diego, California 2017 (Poster)
  114. Chain, J.L., Cox, C.J., Alvarez, K.M., Menendez, C.M., Reim, S.M., Shawler, P.M., Richmand, B., Stoner, J., **Frye, R.E.**, Swedo, S.E., McBride, B., Cunningham, M.W. **Anti-neuronal and anti-microbial immunity contribute to antibody activation of calcium/calmodulin- dependent protein kinase II**

- (CaMKII) in autism spectrum disorders with neuropsychiatric disease.** American Association of Immunologists. Austin, Texas 2018 (Poster).
115. Bennuri, S.C., Rose, S., Wynne, R., **Frye, R.E.** **Molecular regulation in lymphoblastoid cell lines from children with autism and mitochondrial dysfunction.** Cell Symposia: Multifaceted Mitochondria 2018. San Diego CA 2018 (Poster).
  116. Vargason, T., Roth, E., Grivas, G., **Frye, R.E.**, Hahn, J. **Do Comorbid Medical Conditions Affect Autism Spectrum Disorder Diagnosis Via Big Data Analysis of Plasma Metabolites?** American Institute of Chemical Engineers, Applied Math for Biological and Biomedical Systems and Applications. 2019 (Platform)
  117. **Frye, R.E.** **Redox and Other Metabolic Disorders Associated with Autism: Strategic role of Butyrate.** Paris Redox World Congress Paris France 2019.
  118. Niyazov, D, Kahler, S, **Frye, R.E.** **Importance of distinction between primary mitochondrial disease and secondary mitochondrial dysfunction.** World Congress on Targeting Mitochondria, Berlin 2019 (Platform).
  119. **Frye, R.E.** **Mitochondrial Dysfunction in Autism Spectrum Disorder and Potential treatment with the Ketogenic Diet.** Winter Conference on Brain Research, Big Sky, MT 2020 (Platform)
  120. Singh. I., Garvin, A.M., Nunez, W., Karim, M. **Frye, R.E.**, Hale, T.M. **Protecting cardiac and skeletal muscle against pediatric cancer chemotherapy: Understanding and unlocking new pathways.** Arizona Biomedical Research Consortium Research Day Phoenix AZ 2020 (Poster)
  121. **Frye, R.E.** **Mitochondrial Dysfunction in Autism is Distinct from Mitochondrial Disease.** Targeting Mitochondria 2020 Congress of the World Mitochondrial Society. (Virtual Platform) Berlin, Germany October 2020
  122. Singh. I., Garvin, A.M., Nunez, W., Karim, M. **Frye, R.E.**, Hale, T.M. **Metformin Protects the Heart from Doxorubicin Toxicity through Modulation of Mitochondrial Function: Implication for Pediatric Cancer Chemotherapy.** Arizona Biomedical Research Centre-Flinn Research Conference Phoenix AZ 2021 (Platform)
  123. **Frye, R.E.**, Singh. I.N., Garvin, A.M., Nunez, W., Karim, M. Ferrera, K. Hale, T.M. **Metformin Protects the Heart from Doxorubicin Toxicity through Modulation of Mitochondrial Function: Implication for Pediatric Cancer Chemotherapy.** United Mitochondrial Disease Foundation Mitochondrial Medicine 2021 Conference 2021 (Poster)
  124. **Frye, R.E.**, Cakir, J., Rose, S., Delhey, L., Tippet, M., Palmer, R.F., Arora, M. **Prenatal Environmental Exposures Regulate Long-Term Bioenergetics in Autism Spectrum Disorder.** United Mitochondrial Disease Foundation Mitochondrial Medicine 2021 Conference 2021 (Poster)
  125. Rose, S., Delhey, L., Bennuri, S.C., Tippet, M., **Frye, R.E.** **Mitochondrial Dysfunction in Autism is Distinct from Mitochondrial Disease.** United Mitochondrial Disease Foundation Mitochondrial Medicine 2021 Conference 2021 (Poster)
  126. McCarty, P., Ammanamanchi, A., Singh. I., Karim, M. **Frye, R.E.** **Redox-modulated reserve capacity alterations in fibroblasts from children with autism spectrum disorder.** United Mitochondrial Disease Foundation Mitochondrial Medicine 2021 Conference 2021 (Poster)
  127. Singh. I., McCarty, P., Ammanamanchi, A., Vassall, S., McLees, S., Burrows, B., Flores, A., Pankratz, M., Brown, D., Karim, M. Wilfong, A., Adelson, P.D., **Frye, R.E.** **Mitochondrial dysfunction in neurological disorders measured in fresh human brain.** United Mitochondrial Disease Foundation Mitochondrial Medicine 2021 Conference 2021 (Poster).
  128. Ghering, J.R., Rose, S. Delhay, L., **Frye, R.E.** **PRENATAL FACTORS INFLUENCING LONG-TERM BIOENERGETICS IN CHILDREN WITH AUTISM.** Targeting Mitochondria 2021 Congress of the World Mitochondrial Society. (E-Poster) Berlin, Germany October 2021
  129. Ghering, J.R., Rose, S. Delhay, L., **Frye, R.E.** **PRENATAL FACTORS INFLUENCING LONG-TERM BEHAVIOR IN CHILDREN WITH AUTISM.** 21st WPA World Congress of Psychiatry. (E-Poster) Berlin, Germany October 2021
  130. Jensen, A., Foldes, S., Jacobson, A., Vassall S., Guthery, A., Brown, D., Levine, T., Tyler, W.J., **Frye, R.E.** **Transdermal electrical neuromodulation improves anxiety in autism spectrum disorder: Feasibility and Preliminary Findings.** World Neuroscience and Psychiatry Conference, Bangkok, Thailand, 2021 (Platform)

131. **Frye, R.E.** Werner, B.A., McCarty, P.J., Lane, A.L., Scheck, A.C., Singh, I.N. **Redox Sensitive Autonomous Complex IV Activity in Autism Spectrum Disorder and Control Fibroblasts.** Metabolic Health Summit, Santa Barbara, CA May 2022 (Poster).
132. McLees, S.E., Lane, A.L., Werner, B.A., McCarty, P.J., Scheck, A.C., **Frye, R.E.** **Disrupted Folate Metabolism in Autism Spectrum Disorder: Relationship to Behavior, Treatment Response and Significance of the Soluble Folate Receptor.** Metabolic Health Summit, Santa Barbara, CA May 2022 (Poster).
133. Werner, B.A., Singh, I.N., Scheck, A.C., Lane, A.L., McCarty, P.J., McLees, S.E., Burrows, B.T., Brown, D., Wilfong, A., Adelson, D.A., **Frye, R.E.** **Mitochondrial Dysfunctional in Neurological Disorders from Fresh Human Brain.** Metabolic Health Summit, Santa Barbara, CA May 2022 (Poster).
134. Werner, B.A., Singh, I.N., Scheck, A.C., Lane, A.L., McCarty, P.J., McLees, S.E., Burrows, B.T., Brown, D., Wilfong, A., Adelson, D.A., **Frye, R.E.** **Mitochondrial Respiration Alterations in Epileptic Foci from Fresh Brain.** Metabolic Health Summit, Santa Barbara, CA May 2022 (Poster).
135. Lane, A.L., Werner, B.A., McCarty, P.J., Singh, I.N., Scheck, A.C., **Frye, R.E.** **Unique Bioenergetic Profiles of Children with Autism Spectrum Disorder with and without Neurodevelopmental Regression.** Metabolic Health Summit, Santa Barbara, CA May 2022 (Poster).
136. Jensen, A., Foldes, S., Jacobson, A., Vassall S., Guthery, A., Brown, D., Levine, T., Tyler, W.J., **Frye, R.E.** **Transdermal electrical neuromodulation improves anxiety in autism spectrum disorder: Feasibility and Preliminary Findings.** International Neuromodulation Society's (INS) 15th World Congress, Barcelona, Spain, May 2022 (Poster)
137. **Frye, R.E.** Werner, B.A., McCarty, P.J., Lane, A.L., Scheck, A.C., Singh, I.N. **Redox Sensitive Autonomous Complex IV Activity in Autism Spectrum Disorder and Control Fibroblasts.** United Mitochondrial Disease Foundation, Phoenix, AZ June 2022 (Poster).
138. Werner, B.A., Singh, I.N., Scheck, A.C., Lane, A.L., McCarty, P.J., McLees, S.E., Burrows, B.T., Brown, D., Wilfong, A., Adelson, D.A., **Frye, R.E.** **Mitochondrial Respiration Alterations in Epileptic Foci from Fresh Brain.** United Mitochondrial Disease Foundation, Phoenix, AZ June 2022 (Platform).
139. Lane, A.L., Werner, B.A., McCarty, P.J., Singh, I.N., Scheck, A.C., **Frye, R.E.** **Unique Bioenergetic Profiles of Children with Autism Spectrum Disorder with and without Neurodevelopmental Regression.** United Mitochondrial Disease Foundation, Phoenix, AZ June 2022 (Platform).
140. Alemkawi, A.K., Sheets, R., Werner, B.A., Perryman, R.A., Singh, I.N., Karim, M., **Frye, R.E.**, Syed, N., Scheck, A.C. **Mitochondrial and gene expression changes in brain tumor cells grown in  $\beta$ -hydroxybutyrate.** Society for Neuro-Oncology. Nov 2022

#### **Other Professional Communications: Invited Presentations**

141. **Frye, R.E.** **Early detection of cancer through stereo X-ray Imaging.** Department of Physiology and Biophysics Seminar Series, Georgetown University, Washington DC 1995 (Platform).
142. **Frye, R.E.** **The Pediatrician: The Front Line for Detecting and Evaluating Learning Difficulties.** Dartmouth Medical Center Pediatric Grand Rounds, Hanover NH 2004 (Platform).
143. **Frye, R. E.**, **Nasal Patency and the Dynamics of Nasal Airflow.** The University Of Pennsylvania Anosmia Symposium, Philadelphia PA 2004 (Platform).
144. **Frye, R.E.** **Reorganization of Language Networks During Word Learning in Normal and Developmental Phonologic Dyslexic Readers.** Loyola University Medical Center Pediatric Grand Rounds, Chicago IL 2004 (Platform).
145. **Frye, R.E.** **The Neurological Basis of Dyslexia:** The Marcus Institute Grand Rounds, Atlanta GA 2005 (Platform).
146. **Frye, R.E.** **The Neurological Basis of Dyslexia: Historical Perspective and Functional Neuroimaging Evidence,** University of Florida Pediatric Grand Rounds, Gainesville FL 2005 (Platform).
147. **Frye, R.E.** **Cortical Dynamics of Phonological Processing in Dyslexic and Normal Readers.** Center for Neuropsychological Studies, University of Florida, Gainesville FL 2005 (Platform).
148. **Frye, R.E.** **Neurological Basis of Word Decoding in Normal and Dyslexic Readers,** Department of Neuroscience, University of Florida Medical Center, Gainesville FL 2005 (Platform).
149. **Frye, R.E.** and Slinger, A.M. **The University of Florida School Problems Clinic.** Department of Pediatrics, University of Florida, Gainesville FL 2005 (Platform).

150. **Frye, R.E., The Neurological Basis of Dyslexia: Evidence from Multiple Imaging Modalities.** The Florida Society of Neurology Annual Course in Behavioral Neurology and Neuropsychology, Orlando FL 2006 (Platform).
151. **Frye, R.E. Visualization of the Cortical Dynamics of Dyslexia using Magnetoencephalography.** Department of Computer Science, University of Houston, Houston TX 2006 (Platform).
152. **Frye, R.E., Cortical Dynamics of Language Processing in Dyslexia: Evidence from Multiple Imaging Modalities.** Grand Rounds, Department of Neurosurgery, University of Texas, Houston TX 2006 (Platform).
153. **Frye, R.E. Neurobiological causes of Autism.** Merrill Lynch Commodities, Inc., Houston TX 2007. (Platform).
154. Papanicolaou, A., Bowyer, S. **Frye, R.E., Moratti, S. Language/Plasticity Roundtable. 4-D Neuroimaging International Users Group Meeting, Denver CO 2007 (Platform)**
155. **Frye, R.E., Cortical Dynamics of Language Processing in Dyslexia: Evidence from Multiple Imaging Modalities.** Grand Rounds, Department of Pediatrics, University of Texas, Houston TX 2007 (Platform).
156. **Frye, R.E., Neural Compensatory Mechanism for Reading in Dyslexia.** Research Retreat, University of Texas. Houston TX 2007(Platform).
157. **Frye, R.E. The Biological Basis of Neurodevelopmental Disorders,** The University of Texas Presidential Lunch, Houston TX 2008 (Platform).
158. Poling, J.S., **Frye, R.E. Mitochondrial Autism – A Unique Subpopulation and Piece of the Puzzle?** Autism One, Chicago IL 2008 (Platform).
159. **Frye, R.E. Neurobiological causes of Autism.** Department of Pediatrics Grand Rounds, University of Texas, Houston TX 2008 (Platform).
160. **Frye, R.E. Mitochondrial Autism – A Unique Subpopulation and Piece of the Puzzle?** Katy Autism Support Group, Katy TX 2008 (Platform).
161. **Frye, R.E. The Neurobiology of Dyslexia.** Children's Learning Institute Collaborative Lecture Series, Department of Pediatrics, Houston TX 2008 (Platform).
162. **Frye, R.E. Subclinical Seizures and Developmental Cognitive Disorders.** Autism Research Institute Think Tank, Dallas TX 2009 (Platform).
163. **Frye, R.E., Brain connectivity in individuals with reading disability born at term and prematurely.** Grand Rounds, Department of Neurology, University of Texas Houston TX 2009 (Platform).
164. **Frye, R.E., Subclinical Seizures in Autism.** The Elias Tembenis Seizures Think Tank, Autism One. Chicago IL 2009 (Platform).
165. **Frye, R.E., Subclinical Seizures and Functional Reorganization in Developmental Cognitive Disorders.** Autism One. Chicago IL 2009 (Platform).
166. **Frye, R.E. Tetrahydrobiopterin Deficiency and Autism.** BioMarin Pharmaceuticals, Inc., Novato CA 2009 (Platform)
167. **Frye, R.E. Subclinical epileptiform discharges and functional reorganization in atypical cognitive development.** AutismOne. 2009 Chicago IL (Platform).
168. **Frye, R.E. Biomarkers of Energy Metabolism in Children with Autism** Autism One Canada, Toronto Canada 2009 (Platform).
169. **Frye, R.E. Subclinical discharges and functional reorganization in atypical cognitive development.** Autism Research Institute Fall Meeting, Dallas TX 2009 (Platform).
170. **Frye, R.E. The Significance of Tetrahydrobiopterin in Developmental Disorders and Autism.** BioMarin Pharmaceuticals Investigator Sponsored Trial Investigator Meeting, Sausalito CA 2009 (Platform).
171. **Frye, R.E. Neurobiological causes of Autism.** North Houston Autism Support Group Tomball TX 2009. (Platform).
172. **Frye, R.E. Seizures treatments in autism.** Autism Research Institute Winter Think Tank, Dallas TX 2010 (Platform).
173. **Frye, R.E. Fatty-acid abnormalities as markers of mitochondrial dysfunction in children with autism.** Autism Research Institute Winter Think Tank, Dallas TX 2010 (Platform).
174. **Frye, R.E. Seizures Treatment Survey Results.** Autism One. Chicago IL 2010 (Platform).

175. **Frye, R.E. Mitochondrial Disorder and Autism**, Autism Conferences of America, Arizona "Back to School" Autism/Asperger's Conference, Phoenix AZ 2010 (Platform).
176. **Frye, R.E. Seizures in Autism: A New National Survey on Treatments**, Autism Conferences of America, Arizona "Back to School" Autism/Asperger's Conference, Phoenix AZ 2010 (Platform).
177. **Frye, R.E. Neurological Abnormalities in PKU**, PKU and BH4 Scientific Development Summit II, San Diego CA 2010 (Platform)
178. **Frye, R.E. Biomarkers for Central Tetrahydrobiopterin in Developmental Disorders and Autism**, PKU and BH4 Scientific Development Summit II, San Diego CA 2010 (Platform)
179. **Frye, R.E. Biomarkers of central nervous system BH4 concentration and response to BH4 supplementation in children with idiopathic cognitive developmental disorders**, BioMarin Pharmaceuticals Investigator Sponsored Trial Investigator Meeting, Woodinville WA 2010 (Platform).
180. **Frye, R.E. Research Studies for Children with Autism Spectrum Disorder**, Westwood School, Katy, TX. 2011 (Platform)
181. **Frye, R.E. A Comprehensive Behavior - Biomedical Approach to Autism**, Friends of the Children's Learning Institute at The University of Texas Medical School at Houston Lecture & Luncheon, Houston TX 2011 (Platform)
182. **Frye, R.E. Medical Disorders Associated with Autism: Pathways for Treatments that Augment Recovery**, Arkansas Children's Hospital Research Conference, Little Rock AR 2011 (Platform)
183. **Frye, R.E. Using Magnetoencephalography to understand neurodevelopmental disorders**, Los Angeles Children's Hospital Neurology Grand Rounds, Los Angeles, CA 2011 (Platform)
184. **Frye, R.E. The Significance of Subclinical Electrical Discharges in Neurodevelopmental Disorders**, AutismOne General Session on Seizures in Autism, Chicago IL 2011 (Platform)
185. **Frye, R.E. Mitochondrial Dysfunction Endophenotypes in Autism**, AutismOne Think Tank, Chicago IL 2011 (Platform)
186. **Frye, R.E. Tetrahydrobiopterin concentrations in neurodevelopmental disorder**, BioMarin Pharmaceuticals Autism Submit, Denver, CO 2011 (Platform).
187. **Frye, R.E. Oxidative stress in neurodevelopmental disorder**, BioMarin Pharmaceuticals Neurotransmitter Submit, Chicago, IL 2011 (Platform).
188. **Frye, R.E. Open-label trial of the behavior and metabolic effects BH4 supplementation in children with idiopathic cognitive developmental disorders**, BioMarin Pharmaceuticals Investigator Sponsored Trial Investigator Meeting, Woodinville, WA 2011 (Platform).
189. **Frye, R.E. The folate autoantibody in autism spectrum disorder**, Arkansas Children's Hospital Pediatric Neurology Grand Rounds, Little Rock, AR 2012 (Platform)
190. **Frye, R.E. Seizures in Autism: A New National Survey on Treatments**, Talking About Curing Autism, Las Vegas, NV 2012 (Platform).
191. **Frye, R.E. Mitochondrial Disorders in Autism**, Talking About Curing Autism, Las Vegas, NV 2012 (Platform).
192. **Frye, R.E. Autism Research at Arkansas Children's Hospital**, Fraternal Order of Eagles, Mena, AR.
193. **Frye, R.E. Immunological Abnormalities in Autism Spectrum Disorder**, Arkansas Children's Hospital Pediatric Immunology Grand Rounds, Little Rock, AR 2012 (Platform)
194. **Frye, R.E. Seizures in Autism**, AutismOne, Chicago, IL 2012 (Platform).
195. **Frye, R.E. Seizures in Autism**, California Integrative Hyperbaric Center, Irvine, CA 2012 (Platform).
196. **Frye, R.E. Neurological Abnormalities in Autism**, Talking About Curing Autism, Philadelphia, PA 2012 (Platform).
197. **Frye, R.E. Seizures in Autism**, Talking About Curing Autism, Philadelphia, PA 2012 (Platform).
198. **Frye, R.E. Mitochondrial Disorders in Autism**, Talking About Curing Autism, Philadelphia, PA 2012 (Platform).
199. **Frye, R.E. Epilepsy and Seizures in Autism**, Talking About Curing Autism, Atlanta, GA 2012 (Platform).
200. **Frye, R.E. Mitochondrial Disorders in Autism**, Talking About Curing Autism, Atlanta, GA 2012 (Platform).
201. **Frye, R.E. The Behavioral and Metabolic Effects of Kuvan in Neurodevelopment Disorders in an Open-Label Trial**, BioMarin Pharmaceuticals Investigator Sponsored Trial Investigator Meeting, Berkley, CA 2012 (Platform).

202. **Frye, R.E., Mitochondrial Disorders and Seizures in Autism.** Talking About Curing Autism, Honolulu, HI 2012 (Platform).
203. **Frye, R.E. Epilepsy and Seizures in Autism,** Talking About Curing Autism, Costa Mesa, CA 2013 (Platform).
204. **Frye, R.E. Acylcarnitine Profiles in Autism Spectrum Disorder.** AutismOne, Chicago, IL 2013 (Platform).
205. **Frye, R.E. Oxidative Stress Induced Mitochondrial Dysfunction in Children with Autism Spectrum Disorder.** AutismOne, Chicago, IL 2013 (Platform).
206. **Frye, R.E. Epilepsy and Seizures in Autism,** Talking About Curing Autism Family Picnic, Anaheim, CA 2013 (Platform).
207. **Frye, R.E. Immune and Metabolic Conditions in Patients with Autism Spectrum Disorder,** Interagency Autism Coordinating Committee, National Institutes of Health, Bethesda, MD 2013 (Platform).
208. **Frye, R.E. Epilepsy and Seizures in Autism,** National Autism Association, St. Petersburg, FL 2013 (Platform).
209. **Frye, R.E. First Signs of Autism,** Primer Taller de Capacitación en Trastornos del Desarrollo: Espectro Autista, Hospital Zambrano Hellion TecSalud, Monterrey, Nuevo León, Mexico.
210. **Frye, R.E. Screening for Autism,** Primer Taller de Capacitación en Trastornos del Desarrollo: Espectro Autista, Hospital Zambrano Hellion TecSalud, Monterrey, Nuevo León, Mexico.
211. **Frye, R.E. MD/PhD Lecture Series,** University of Arkansas for Medical Sciences Medical School, Little Rock AR 2014 (Platform)
212. **Frye, R.E. Cerebral Folate Deficiency and Autism: A Multicenter Double Blind Placebo Controlled Trial.** Schmieding Developmental Center, Lowell AR 2014 (Platform)
213. **Frye, R.E. Folinic Acid Intervention, Clinical Trials and Other Medical Treatments for Autism.** UAMS/ACH Centers for Children, Lowell AR 2014 (Platform)
214. **Frye, R.E. Biomedical Abnormalities Associated with Autism Spectrum Disorder and their Treatment.** Autism Research Institute International Conference, Moscow, Russia 2014 (Platform).
215. **Frye, R.E. Seizure and Epilepsy in Autism Spectrum Disorder.** Autism Research Institute International Conference, Moscow, Russia 2014 (Platform).
216. **Frye, R.E., Rose, S. Oxidative Stress Induced Mitochondrial Dysfunction in Children with Autism Spectrum Disorder.** University of Alabama Center for Free Radical Biology, Birmingham AL 2014 (Platform).
217. **Frye, R.E. Oxidative Stress Induced Mitochondrial Dysfunction in Autism.** Autism One. [Main Sessions and Workshop] Chicago IL 2014 (Platform).
218. **Frye, R.E. Oxidative Stress Induced Mitochondrial Function Associated with Autism.** United Mitochondrial Disease Foundation Parent Conference, Pittsburg PA 2014 (Platform).
219. **Frye, R.E. Adaptive Changes in Mitochondrial Function Associated with Autism.** Autism Research Institute Think Tank, Toronto CA 2014 (Platform).
220. **Frye, R.E. Mitochondrial Function Alterations From Microbiome Metabolites in Children with Autism.** International Symposium on the Microbiome in Health and Disease with a Special Focus on Autism, Little Rock AR 2014 (Platform).
221. **Frye, R.E. Biomedical Abnormalities Associated with Autism Spectrum Disorder and their Treatment.** Arkansas Children's Hospital Pediatric Neurology Grand Rounds, Little Rock, AR 2014 (Platform)
222. **Frye, R.E., Goh, S., Kahler, S. Mitochondrial Dysfunction,** Autism Education Summit, Dallas TX 2014 (Platform).
223. **Frye, R.E., Seizures,** Autism Education Summit, Dallas TX 2014 (Platform).
224. **Frye, R.E., Neurology,** Autism Education Summit, Dallas TX 2014 (Platform).
225. **Frye, R.E., Rossignol, D.A. Medical Workshop,** Autism Education Summit, Dallas TX 2014 (Platform).
226. **Frye, R.E. Epilepsy and Seizures in Autism,** National Autism Association, St. Petersburg, FL 2014 (Platform).
227. **Frye, R.E. Clinical Aspects of Mitochondrial Dysfunction in Neuropsychiatric Disorders.** University of Alabama Mitochondrial Symposium: Translational and Applied Bioenergetics, Birmingham AL 2015 (Platform).

228. **Frye, R.E. Physiological Abnormalities Associated with Autism and Their Treatment.** Houston Astros Special Event. Houston TX 2015 (Platform).
229. **Frye, R.E. Treatable Causes of Autism.** Autism One. Chicago IL 2015 (Platform).
230. **Frye, R.E. Epilepsy and Seizures in Autism,** National Autism Association, 2015 (Webinar).
231. **Frye, R.E. Neurometabolic Disorders Associated with Autism,** Shenzhen Autism International Conference, Shenzhen China, 2015 (Platform).
232. **Frye, R.E. Treatment for Mitochondrial Disorders,** OPTIONS Downs Conference, Little Rock AR 2015 (Platform)
233. **Frye, R.E. The role of melatonin in the treatment of ASD.** European College of Neuropsychopharmacology Congress, Amsterdam, The Netherlands 2015 (Platform)
234. **Frye, R.E., Metabolism,** Autism Education Summit, Dallas TX 2015 (Platform).
235. **Frye, R.E., Neurology,** Autism Education Summit, Dallas TX 2015 (Platform).
236. **Frye, R.E., Clinical Cases,** Autism Education Summit, Dallas TX 2015 (Platform).
237. **Frye, R.E., Kahler, S. Autism Center of Excellence at Arkansas Children's Hospital.** Arkansas Legislative Task Force on Autism, State of Arkansas, Little Rock, AR 2015 (Platform)
238. **Frye, R.E. Epilepsy and Seizures in Autism,** National Autism Association, St. Petersburg, FL 2015 (Platform).
239. **Frye, R.E., Kahler, S. Cutting Edge Medical Care in a Precision Medicine Autism Multispecialty Clinic.** Genetic Section Clinical Case Conference, Arkansas Children's Hospital, Little Rock, AR 2016 (Platform)
240. **Frye, R.E. Unique Mitochondrial Dysfunction in the Autism Gut: Relation to Microbiome Metabolites.** Autism Research Institute Think Tank. Dallas, TX 2016 (platform)
241. **Frye, R.E. Neuroimmune Aspects of Neurodevelopmental Disorders: Application to Autism Spectrum Disorder.** Moleculera Labs. Oklahoma City, OK 2016 (Platform).
242. **Frye, R.E. Metabolic disorders associated with Autism: A pathway towards obtaining optimal outcomes.** Annual Alberta Children's Hospital Research Institute Symposium. Calgary, Alberta, CN 2016 (Platform).
243. **Frye, R.E. Metabolic Disorders Associated with Autism.** Autism One. Chicago IL 2016 (Platform)
244. **Frye, R.E. Treatment of Autism Pathophysiology to Achieve Optimal Outcomes.** Alberta Children's Hospital Neurology Grand Rounds. Calgary, Alberta, CN 2016 (Platform).
245. **Frye, R.E., Foundations of Neurology,** Autism Education Summit, Dallas TX 2016 (Platform).
246. **Frye, R.E., Rossignol, D. Neurology and Epilepsy,** Autism Education Summit, Dallas TX 2016 (Platform).
247. **Frye, R.E. Neuroimmune Aspects of Neurodevelopmental Disorders.** OPTIONS Downs Conference, Little Rock AR 2016 (Platform)
248. **Frye, R.E. Autism.** Little Rock Montessori. Little Rock AR 2017 (Platform)
249. **Frye, R.E. Folate Metabolism, Mitochondrial Disease and Autism.** Autism Research Institute, San Diego, CA 2016 (Webinar)
250. **Frye, R.E. Folate receptor alpha autoantibody in autism spectrum disorder.** Autism Research Institute Think Tank, Dallas, TX 2017 (Platform)
251. **Rossignol, D., Frye, R.E. Case Study on Lead Poisoning in an Autistic Patient.** Autism Research Institute Think Tank, Dallas, TX 2017 (Platform)
252. **Frye, R.E. Mitochondrial disorders associated with autism.** Autism One. Colorado Springs, CO 2017 (Platform).
253. **Frye, R.E. How Enteric Microbiome Modulates Mitochondrial Function.** MitoAction Boston MA 2017 (Webinar). <http://www.mitoaction.org/podcasts/how-enteric-microbiome-modulates-mitochondrial-function>
254. **Frye, R.E., Seizures and Autism,** TACA Annual Conference, Costa Mesa, CA 2017 (Platform)
255. **Frye, R.E., Friday Night Coffee Talk, Seizures and Autism,** TACA Annual Conference, Costa Mesa, CA 2017 (Roundtable)
256. **Frye, R.E., Mitochondria and Cerebral Folate Issues in Autism,** TACA Annual Conference, Costa Mesa, CA 2017 (Platform)

257. **Frye, R.E. Metabolic Abnormalities in Children with Autism: Targeted Treatments for Obtaining Optimal Outcomes.** Center for Translational Medicine, Children's Hospital of Philadelphia Philadelphia, PA 2017 (Platform)
258. **Frye, R.E. Modulation of Metabolism and Immune Function by Short Chain Fatty Acids in Autism Spectrum Disorder.** Gut-Brain Axis Summit, San Francisco, CA 2017 (Platform).
259. **Frye, R.E. Metabolic Abnormalities in Children with Autism.** The Autism Research Foundation Boston MA 2018 (Platform)
260. **Frye, R.E. Association of Down and Autism Syndromes.** DS Connex Workshops, Mesa AZ 2018 (Platform)
261. **Frye, R.E. Autism Research at Phoenix Children's Hospital: The Role of Abnormal Physiology and the Potential of Novel Treatments.** Autism Speaks Autism Research Series: Discovery to Solutions. Phoenix AZ 2018
262. **Frye, R.E. Autism: Early Signs and Associated Medical Conditions. Psychology Didactics Session.** Barrow Neurological Institute at Phoenix Children's Hospital Grand Rounds, Phoenix AZ 2018 (Platform)
263. **Frye, R.E. Science Behind Autism: Future of Diagnosis and Treatment.** The Autism Society of Greater Phoenix. Phoenix AZ 2018 (Platform)
264. **Frye, R.E. The Role of Abnormal Physiology in Children with Autism Spectrum Disorder and the Potential of Novel Treatments to Promote Optimal Outcomes.** Talk About Curing Autism. Chicago IL 2018
265. **Frye, R.E. Mitochondrial Dysfunction in Autism: Roads to Understanding and Treating Autism.** Turnabout for Autism Research ThinkTank, Pleasington, CA 2018 (Platform)
266. **Frye, R.E. The Role of Abnormal Physiology in Children with Autism Spectrum Disorder and the Potential of Novel Treatments to Promote Optimal Outcomes.** Turnabout for Autism, Pleasington, CA 2018 (Platform)
267. **Frye, R.E. Mitochondrial Dysfunction in Autism: New Roads to Understanding the Mitochondria.** Turnabout for Autism Research Update, Pleasington, CA 2018 (Platform)
268. **Frye, R.E. The Role of Abnormal Physiology in Children with Autism Spectrum Disorder and the Potential of Novel Treatments to Promote Optimal Outcomes.** Talk About Curing Autism. West Chester PA 2019
269. **Frye, R.E. Mitochondrial Dysfunction in Autism Spectrum Disorder.** MitoAction. Phoenix AZ 2019 (Platform).
270. **Frye, R.E. Folic acid verses folate, Organic foods and Consumption of clean seafood during pregnancy.** Neurological Health Foundation. Dallas TX 2019 (Teleconference)
271. **Frye, R.E. Secondary Mitochondrial Dysfunction in Neurodevelopmental Disorders: Origins, Significance and Treatment.** MitoAction 2019 (Webinar)
272. **Frye, R.E. The Role of Abnormal Physiology in Children with Autism Spectrum Disorder and the Potential of Novel Treatments to Promote Optimal Outcomes.** Thinking Autism. London England 2019 (Platform).
273. **Frye, R.E. Seizures and Epilepsy in Autism Spectrum Disorder.** Thinking Autism. London England 2019 (Platform).
274. **Frye, R.E. PANS/PANDAS.** Symposium on Autoimmune Encephalopathy of Infectious Etiologies. Washington DC. 2019 (platform)
275. **Frye, R.E. Redox and Other Metabolic Disorders Associated with Autism: Strategic role of Butyrate.** 21st International Conference on Oxidative Stress Reduction, Redox Homeostasis and Antioxidants. Paris France, 2019 (Platform)
276. **Frye, R.E. Autism Program at Phoenix Children's Hospital and University of Arizona College of Medicine.** ASD Translational Team Mini-Conference, Phoenix AZ 2019 (Platform)
277. **Frye, R.E. Childhood Onset Neurobehavioral Syndrome: The Overlap Between Immunological and Metabolic Etiologies.** A Neuroimmune Approach to Complex Patients. Denver CO 2019 (Platform)
278. **Frye, R.E., The Impact of EAC-AZ on Arizona** Early Access for Care – Arizona presents Setting Up Your Own EAC-AZ Practice, Phoenix AZ 2019
279. **Frye, R.E. Science Behind Autism: Future of Diagnosis and Treatment.** Autism Society of Greater Phoenix, Phoenix AZ 2019 (Platform)

280. **Frye, R.E.** The Role of Abnormal Physiology in Children with Autism Spectrum Disorder and the Potential of Novel Treatments to Promote Optimal Outcomes. Talk About Curing Autism. Mesa AZ 2019
281. **Frye, R.E.** The Role of Abnormal Physiology in Children with Autism Spectrum Disorder and the Potential of Novel Treatments to Promote Optimal Outcomes. Talk About Curing Autism. Costa Mesa, CA 2019
282. **Frye, R.E.** Metabolic Issues Associated with Autism. Outreach Autism Services Network. Ocala FL 2019
283. **Frye, R.E.** Childhood Onset Neuropsychiatric Syndromes (CONS): The Overlap Between Immunologic, Metabolic, Epileptiform Etiologies. Outreach Autism Services Network. Ocala FL 2019
284. **Frye, R.E.** Mitochondria, Oxidative Stress and Immunity and ASD. Synchrony. Pleasington, CA 2019
285. **Frye, R.E.** Metabolic causes of neurobehavioral exacerbations in ASD. Synchrony. Pleasington, CA 2019
286. **Frye, R.E.** Imperative for a Platform for Systems Biology Research – Large Scale Autism Registry and Biobank. Synchrony. Pleasington, CA 2019
287. **Frye, R.E.** Seizures, Mitochondrial and Metabolic Comorbidities. Synchrony. Pleasington, CA 2019
288. **Frye, R.E.** Treatment trial to address mitochondrial and metabolic comorbidities. Synchrony. Pleasington, CA 2019
289. **Frye, R.E.** Autoimmune Encephalitis in Autism: Connection with PANS and PANDAS. SANE Sweden 2019 PANS Conference. Malmo, Sweden 2019
290. **Frye, R.E.** MD/PhD Presentation. University of Arizona College of Medicine – Phoenix, Phoenix AZ
291. **Frye, R.E.** The Role of Abnormal Physiology in Children with Autism Spectrum Disorder and the Potential of Novel Treatments to Promote Optimal Outcomes. Department of Biochemistry & Molecular Medicine, The George Washington University. Washington DC 2020 (Platform)
292. **Frye, R.E.** Mitochondrial Dysfunction in Autism, New Roads to Understanding the Mitochondria. Pacific Autism Family Network, Vancouver CA 2020 (Platform)
293. **Frye, R.E.** Novel Treatments to Promote Optimal Outcomes in Autism Spectrum Disorder. Pacific Autism Family Network, Vancouver CA 2020 (Platform)
294. **Frye, R.E.** Introduction of the Early Access for Care Arizona Webinar Curriculum: Cohort 4. Phoenix Children's Hospital. Phoenix AZ 2020 (Webinar)
295. **Frye, R.E.** Neurodevelopmental and Metabolic Disorders Research Laboratory Update 2020. Barrow Neurological Institute at Phoenix Children's Hospital Grand Rounds, Phoenix AZ 2020 (Platform)
296. **Frye, R.E.** Concomitant medical problems (CMP) to ASD. TEAx2020, Buenos Aires, Argentina (Webinar) March 2020
297. **Frye, R.E.** Childhood Onset Neuropsychiatric Syndromes (CONS): The Overlap Between Immunologic, Metabolic, Epileptiform Etiologies. Sociedad Argentina de Neurodesarrollo y Trastornos Asociados.as part of the Postgraduate Course on Neurodevelopment and Autistic Spectrum Disorders, Buenos Aires, Argentina (Webinar) April 2020
298. **Frye, R.E.** Treatable Metabolic Disorders in Autism Spectrum Disorder. Sociedad Argentina de Neurodesarrollo y Trastornos Asociados.as part of the Postgraduate Course on Neurodevelopment and Autistic Spectrum Disorders, Buenos Aires, Argentina (Webinar) April 2020
299. **Frye, R.E.** Seizures and Epilepsy in Autism Spectrum Disorder. Sociedad Argentina de Neurodesarrollo y Trastornos Asociados.as part of the Postgraduate Course on Neurodevelopment and Autistic Spectrum Disorders, Buenos Aires, Argentina (Webinar) April 2020
300. **Frye, R.E.** Autoimmune Encephalitis in Autism: An Overview and Connection with PANS and PANDAS. Sociedad Argentina de Neurodesarrollo y Trastornos Asociados. as part of the Postgraduate Course on Neurodevelopment and Autistic Spectrum Disorders, Buenos Aires, Argentina (Webinar) April 2020
301. **Frye, R.E.** The prenatal environment influences autism symptomatology through mitochondrial metabolism. Synchrony 2020 (Virtual Platform) Nov 2020
302. **Frye, R.E.** Cerebral Folate Metabolism Abnormalities in Neurodevelopmental Disorders. International Conference on Medical Aspects of Genetics and Comorbidities in Autism Poland (Virtual Platform) Nov 2020

303. **Frye, R.E. Treatable Metabolic Disorders in Autism Spectrum Disorder.** International Conference on Medical Aspects of Genetics and Comorbidities in Autism Poland (Virtual Platform) Nov 2020
304. **Frye, R.E. The Use of Intravenous Immunoglobulin in the Treatment of Autism Spectrum Disorder.** International Conference on Medical Aspects of Genetics and Comorbidities in Autism Poland (Virtual Platform) Nov 2020
305. **Frye, R.E. Treatable Metabolic Disorders in Autism Spectrum Disorder.** The Synapse Center for Neurodevelopment Ipswich UK (Virtual Platform) Nov 2020
306. **Frye, R.E. Overview of Curriculum.** Sociedad Argentina de Neurodesarrollo y Trastornos Asociados. as part of the Postgraduate Course on Neurodevelopment and Autistic Spectrum Disorders, Buenos Aires, Argentina (Webinar) Dec 2020
307. **Frye, R.E. The prenatal environment influences autism symptomatology through mitochondrial metabolism.** Seminar Series, University of Cincinnati, Environmental and Public Health Sciences College of Medicine, Jan 2021 (Webinar)
308. **Frye, R.E. Autism Research and Clinic at Phoenix Children's Hospital.** Advances in Autism Research and Care (AARC) webinar series. Autism Speaks Jan 2021 (Webinar)
309. **Frye, R.E. Novel Treatments to Promote Optimal Outcomes in Autism Spectrum Disorder.** IX Annual Moscow Conference "Autism: Challenges and Solutions April 2021
310. **Frye, R.E. Mitochondrial Dysfunction in Autism Spectrum Disorder: Unique Abnormalities and Targeted Treatments.** National Autism Association National Autism Conference May 2021
311. **Frye, R.E. Novel Treatments to Promote Optimal Outcomes in Autism Spectrum Disorder.** Autism Research Coalition May 2021
312. **Frye, R.E. The Doreen Granpeesheh Endowed Inaugurate Lecture: The Medical and Biological Complexity of Autism.** Association for Behavior Analysis International Annual Convention, May 2021
313. **Frye, R.E. ASD and Mitochondria.** 2nd International Congress on Autism Spectrum Disorder: Clinical and Scientific Update and 2nd International Meeting of Associations, Families and Caregivers, Brazil, June 2021
314. **Frye, R.E. The Medical and Biological Complexity of Autism.** SUNY Downstate REACH Program, July 2021 (Webinar)
315. **Frye, R.E. The New Autism Research and Treatment.** Talk About Curing Autism. Mesa AZ July 2021 (Webinar)
316. **Frye, R.E. One-Carbon Metabolism Abnormalities in Autism Spectrum Disorder.** 13th International Conference One-Carbon Metabolism, B Vitamins and Homocysteine. Poland Sept 2021 (Platform)
317. **Frye, R.E. Methylation and One-Carbon Metabolism Abnormalities in Autism Spectrum Disorder.** Autism Society of Greater Phoenix Annual Conference. Phoenix AZ 2021.
318. **Frye, R.E. Modulation of Mitochondrial Metabolism and Immune Function by Enteric Short Chain Fatty Acids.** 4th International Conference of the JIRU MicroMeNu. Quebec Canada Oct 2021
319. **Frye, R.E. Metabolic Issues in Autism Spectrum Disorder.** Talk About Curing Autism National Conference (Virtual). Oct 2021
320. **Frye, R.E. Science Behind Autism: Future of Diagnosis and Treatment.** Arizona Autism Coalition, ASD and I/DD Conference (In Presence). Oct 2021
321. **Frye, R.E. The prenatal environment influences autism symptomatology through mitochondrial metabolism.** Autism Research Institute Research Meeting (Virtual). Oct 2021
322. **Frye, R.E. Metabolic Issues in Autism Spectrum Disorder** INTERNATIONAL ONLINE CONFERENCE MEDICAL ASPECTS OF GENETICS AND COMORBIDITIES IN AUTISM (Virtual) Nov 2021
323. **Frye, R.E. Cerebral Folate Deficiency in Autism Spectrum Disorder.** Cerbios-Pharma SA. Lugano, Switzerland May 2022 (Platform).
324. **Frye, R.E. Cerebral Folate Deficiency in Autism Spectrum Disorder.** The South East European Conference on Autism (SEECA). Belgrade Serbia May 2022 (Platform).
325. **Frye, R.E. Mitochondrial Dysfunction and Autism Spectrum Disorder.** The South East European Conference on Autism (SEECA). Belgrade Serbia May 2022 (Platform).
326. **Frye, R.E. Intravenous Immunoglobulin and Autism Spectrum Disorder.** The South East European Conference on Autism (SEECA). Belgrade Serbia May 2022 (Platform).

327. **Frye, R.E. Cerebral Folate Deficiency in Autism Spectrum Disorder.** Fundación Síndrome de West. Madrid Spain Oct 2022 (Platform).
328. **Frye, R.E. Mitochondrial Dysfunction and Autism Spectrum Disorder.** Fundación Síndrome de West. Madrid Spain Oct 2022 (Platform).
329. **Frye, R.E. The role of mitochondria and folate in prenatal health and offspring neurodevelopment.** The Autism Community in Action Think Tank. Costa Mesa CA 2022 (Platform).
330. **Frye, R.E. Cutting Edge Research and Treatments For Autism.** Arizona State University Class PTX 301 Tempe AZ 2022 (Webinar).
331. **Frye, R.E. Diagnosis and Treatment of mitochondrial dysfunction in autism.** Serbian Autism Conference, Vojvodina Serbia Dec 2022 (Virutal).

#### **Other Professional Communications: Continuing Medical Education Lectures**

332. **Frye, R.E. The Neurological Basis of Learning Disabilities.** Texas Pediatric Society, Woodlands, TX 2008 (Platform)
333. **Frye, R.E. Energy Deficits: Autism and Mitochondrial Problems.** Autism Society of America. Dallas, TX 2010 (Platform)
334. **Frye, R.E. Neurological Abnormalities in ASD: Level 1 Clinician Seminar.** Autism Research Institute Fall Conference, Long Beach, CA, 2010 (Platform)
335. **Frye, R.E. Neurological Abnormalities in ASD: Level 2 Clinician Seminar.** Autism Research Institute Fall Conference, Long Beach, CA, 2010 (Platform)
336. **Frye, R.E. The Role of the Nervous System in Autism Spectrum Disorder.** Autism Research Institute Fall Conference, Long Beach, CA, 2010 (Platform)
337. **Frye, R.E. The Effectiveness of Traditional and Non-Traditional Treatments for Children with Autism and Seizures.** Autism Research Institute Fall Conference, Long Beach CA, 2010 (Platform)
338. **Frye, R.E. Neurology: Level 1 Clinician Seminar.** Autism Research Institute Spring Conference, Atlanta, GA, 2011 (Platform)
339. **Frye, R.E. The Role of the Nervous System in ASD.** Autism Research Institute Spring Conference, Atlanta, GA, 2011 (Platform)
340. **Frye, R.E. The Effectiveness of Traditional and Non-Traditional Treatments for Children with Autism and Seizures: Evening Workshop.** Autism Research Institute Spring Conference, Atlanta, GA, 2011 (Platform)
341. **Frye, R.E. Medical Disorders Associated with Autism: Pathways for Treatments that Augment Recovery.** Team Up: Evidence Based Interventions for Children with Autism Conference, Little Rock AR 2011 (Platform)
342. **Frye, R.E. The Role of the Nervous System in ASD.** AutismOne CME Program for Professionals, 2011 Chicago IL (Platform)
343. **Frye, R.E. Neurological abnormalities in ASD: Level 1 Clinician Seminar.** Autism Research Institute Fall Conference, Las Vegas, NV, 2011 (Platform)
344. **Frye, R.E. Clinical Update: Tetrahydrobiopterin (BH4) in Autism Spectrum Disorder.** Autism Research Institute Fall Conference, Las Vegas, NV, 2011 (Platform)
345. **Frye, R.E. Clinical Update: Mitochondrial Dysfunction in Autism Spectrum Disorder.** Autism Research Institute Fall Conference, Las Vegas, NV, 2011 (Platform)
346. **Frye, R.E. Mitochondrial and metabolic abnormalities.** Medical Academy of Pediatric Special Needs. Las Vegas, NV, 2012 (Platform).
347. **Frye, R.E. Neurology and neurophysiology.** Medical Academy of Pediatric Special Needs. Las Vegas, NV, 2012 (Platform).
348. **Frye, R.E. Neurological abnormalities in Autism Spectrum Disorder.** Autism Research Institute Spring Conference, Newark, NJ 2012 (Platform)
349. **Frye, R.E. Neurological abnormalities in Autism Spectrum Disorder.** AutismOne, Chicago, IL 2012 (Platform)
350. **Frye, R.E. Overview: Introduction to neurology and neurophysiology.** Medical Academy of Pediatric Special Needs. Orlando, FL 2012 (Platform).
351. **Frye, R.E. Overview: Neurotransmitters and seizures.** Medical Academy of Pediatric Special Needs. Orlando, FL 2012 (Platform).

352. **Frye, R.E. Advanced: Neurological abnormalities.** Medical Academy of Pediatric Special Needs. Orlando, FL 2012 (Platform).
353. **Frye, R.E. Advanced: Seizures and neurotransmitters.** Medical Academy of Pediatric Special Needs. Orlando, FL 2012 (Platform)
354. **Frye, R.E. Advanced: Metabolic abnormalities.** Medical Academy of Pediatric Special Needs. Orlando, FL 2012 (Platform)
355. **Frye, R.E. Neurology of Autism Spectrum Disorder.** Hawaii Autism Foundation, Honolulu, HI 2012 (Platform)
356. **Frye, R.E. Neurobiology of Autism Spectrum Disorder.** Arkansas Children's Hospital Child Neurology Grand Rounds, Little Rock, AR 2012 (Platform)
357. **Frye, R.E. Foundations of Metabolism.** Medical Academy of Pediatric Special Needs. Costa Mesa, CA 2013 (Platform)
358. **Frye, R.E. Foundations of Neurology.** Medical Academy of Pediatric Special Needs. Costa Mesa, CA 2013 (Platform)
359. **Frye, R.E. MAPS in Clinical Practice.** Medical Academy of Pediatric Special Needs. Costa Mesa, CA 2013 (Platform)
360. **Frye, R.E. Cutting Edge and Novel Treatments.** Medical Academy of Pediatric Special Needs. Costa Mesa, CA 2013 (Platform).
361. **Frye, R.E. Acquired Mitochondrial Disorders in Children with Autism Spectrum Disorder.** NAAvigating the Maze: Current Trends in Autism Research. New York, NY 2013 (Platform).
362. **Frye, R.E. Cerebral Folate Deficiency in Autism Spectrum Disorder.** NAAvigating the Maze: Current Trends in Autism Research. New York, NY 2013 (Platform).
363. **Frye, R.E. Foundations of Neurology.** Medical Academy of Pediatric Special Needs. Tampa, FL 2013 (Platform).
364. **Frye, R.E. Potentially Reversible Causes of Autism.** Medical Academy of Pediatric Special Needs. Tampa, FL 2013 (Platform).
365. **Frye, R.E. N-acetylcysteine Treatment in Autism.** Medical Academy of Pediatric Special Needs. Tampa, FL 2013 (Platform).
366. **Frye, R.E. Connecting the Pieces: Treatable Causes of Autism.** Autism Society West New York Chapter. Buffalo, NY 2013 (Platform).
367. **Frye, R.E. Novel Treatments for Potentially Reversible Causes of Autism Spectrum Disorder.** Arkansas Children's Hospital Neurology Grand Rounds, Little Rock AR 2013 (Platform).
368. **Frye, R.E. Neurobiological Basis of Autism Spectrum Disorder.** University of Arkansas for Medical Sciences Neurology Grand Rounds, Little Rock AR 2013.
369. **Frye, R.E. Foundations of Neurology.** Medical Academy of Pediatric Special Needs. Costa Mesa, CA 2014 (Platform).
370. **Frye, R.E. Neurotransmitters and Neurotransmission.** Medical Academy of Pediatric Special Needs. Costa Mesa, CA 2014 (Platform).
371. **Frye, R.E. Foundations of Neurology.** Medical Academy of Pediatric Special Needs. Orlando, FL 2014 (Platform).
372. **Frye, R.E. Neuroanatomy of Autism.** Interdisciplinary Perspectives on Autism Spectrum Disorder. University of Central Arkansas, Conway, AR 2014 (Platform).
373. **Frye, R.E. The Mito Cocktail: Using supplements as a frontline treatment approach,** Managing Mitochondrial Disease: Current Trends and Perspectives, Atlanta, GA 2015 (Platform).
374. **Frye, R.E. Mito-Autism: The new co-diagnosis of autism with mitochondrial dysfunction,** Managing Mitochondrial Disease: Current Trends and Perspectives, Atlanta, GA 2015 (Platform).
375. **Frye, R.E. Foundations of Neurology, Foundations of MAPS.** Medical Academy of Pediatric Special Needs. Costa Mesa, CA 2015 (Platform).
376. **Frye, R.E. Reversible Causes of Autism, ACM: Metabolism.** Medical Academy of Pediatric Special Needs. Costa Mesa, CA 2015 (Platform).
377. **Frye, R.E. Update on New Research, Special Session: Metabolism / Mito.** Medical Academy of Pediatric Special Needs. Costa Mesa, CA 2015 (Platform).
378. **Frye, R.E. Cases, Special Session: Metabolism / Mito.** Medical Academy of Pediatric Special Needs. Costa Mesa, CA 2015 (Platform).

379. **Frye, R.E. Cases, Special Session: Advanced Clinical Cases.** Medical Academy of Pediatric Special Needs. Costa Mesa, CA 2015 (Platform).
380. **Frye, R.E. Diagnosis and Treatment of Autism: A Practical Approach.** Arkansas Academy of Family Practice. Little Rock, AR 2015 (Platform).
381. **Frye, R.E. Foundations of Neurology, Foundations of MAPS.** Medical Academy of Pediatric Special Needs. Orlando FL 2015 (Platform).
382. **Frye, R.E. Reversible Causes of Autism, ACM: Metabolism.** Medical Academy of Pediatric Special Needs. Orlando FL 2015 (Platform).
383. **Frye, R.E. Epilepsy and Seizures, ACM: Neurology.** Medical Academy of Pediatric Special Needs. Orlando FL 2015 (Platform).
384. **Frye, R.E. Neurotransmitters, ACM: Neurology.** Medical Academy of Pediatric Special Needs. Orlando FL 2015 (Platform).
385. **Frye, R.E. Potentially Reversible Causes of Autism.** Pediatric Neuroscience Grand Rounds. Arkansas Children's Hospital, Little Rock, AR 2015 (Platform).
386. **Frye, R.E. Potentially Reversible Causes of Autism.** Psychiatric Grand Rounds. University of Arkansas for Medical Sciences, Little Rock, AR 2015 (Platform).
387. **Frye, R.E. The Microbiome in Health and Disease: A Practical Approach.** Arkansas Academy of Family Practice. Little Rock, AR 2015 (Platform).
388. **Frye, R.E. Mitochondrial and metabolic management; cerebral folate deficiency.** Autism One. Chicago IL 2016 (Platform).
389. **Frye, R.E. Cerebral Folate Deficiency in Autism Spectrum Disorder with Directions for Therapy.** Autism One. Chicago IL 2016 (Platform).
390. **Frye, R.E. Foundations of Neurology, Foundations of MAPS.** Medical Academy of Pediatric Special Needs. Atlanta GA 2016 (Platform).
391. **Frye, R.E. Reversible Causes of Autism, ACM: Metabolism.** Medical Academy of Pediatric Special Needs. Atlanta GA 2016 (Platform).
392. **Frye, R.E. Clinical Cases.** Medical Academy of Pediatric Special Needs. Atlanta GA 2016 (Platform).
393. **Frye, R.E. Advanced Clinical Cases.** Medical Academy of Pediatric Special Needs. Atlanta GA 2016 (Platform).
394. **Frye, R.E. Autism & Seizures: Impairments in Metabolism, Mitochondria, Microbiome & Personalized Nutrient Interventions.** America College of Nutrition, San Diego CA 2016 (Platform)
395. **Frye, R.E. Treatment of Autism Pathophysiology to Achieve Optimal Outcomes.** Pediatric Neuroscience Grand Rounds. Arkansas Children's Hospital, Little Rock, AR 2017 (Platform).
396. **Frye, R.E. Foundations of Neurology, Foundations of MAPS.** Medical Academy of Pediatric Special Needs. Costa Mesa, CA 2017 (Platform).
397. **Frye, R.E. Reversible Causes of Autism, ACM: Metabolism.** Medical Academy of Pediatric Special Needs. Costa Mesa, CA 2017 (Platform).
398. **Frye, R.E. Cases.** Medical Academy of Pediatric Special Needs. Costa Mesa, CA 2017 (Platform).
399. **Frye, R.E. Treatment of Autism Pathophysiology to Achieve Optimal Outcomes.** University of Kentucky Neurology Grand Rounds, Lexington, KY
400. **Frye, R.E. Mitochondrial and metabolic abnormalities associated with autism.** Autism One. Colorado Springs, CO 2017 (Platform).
401. **Frye, R.E. Mitochondrial dysfunction: Beyond Genetics.** Autism One. Colorado Springs, CO 2017 (Platform).
402. **Frye, R.E. Treatment of Autism Pathophysiology to Achieve Optimal Outcomes.** University of Arkansas for Medical Sciences Psychiatry Grand Rounds, 2017 Little Rock, AR
403. **Frye, R.E. Foundations of Neurology, Foundations of MAPS.** Medical Academy of Pediatric Special Needs. Costa Mesa, CA 2018 (Platform).
404. **Frye, R.E. Seizures.** Medical Academy of Pediatric Special Needs. Costa Mesa, CA 2018 (Platform).
405. **Frye, R.E. Cases.** Medical Academy of Pediatric Special Needs. Costa Mesa, CA 2018 (Platform).
406. **Frye, R.E. Advanced Cases.** Medical Academy of Pediatric Special Needs. Costa Mesa, CA 2018 (Platform).

407. **Frye, R.E. Metabolic Abnormalities in Children with Autism: Targeted Treatments for Obtaining Optimal Outcomes.** Saint Christopher's Hospital for Children Grand Rounds Philadelphia, PA 2017 (Platform)
408. **Frye, R.E. The Science behind Autism: The Future of Diagnosis and Management.** Barrow Neuroscience Symposium. Phoenix AZ 2018 (Platform)
409. **Frye, R.E. Treatment of Autism Pathophysiology to Achieve Optimal Outcomes.** Barrow Neurological Institute at Phoenix Children's Hospital Grand Rounds, Phoenix AZ 2018 (Platform)
410. **Frye, R.E. Treatment of Autism Pathophysiology to Achieve Optimal Outcomes.** University of Arizona Medical Center Pediatric Grand Rounds, Tucson AZ 2018 (Platform)
411. **Frye, R.E. Foundations of Neurology, Foundations of MAPS.** Medical Academy of Pediatric Special Needs. Atlanta GA 2018 (Platform).
412. **Frye, R.E. ACM Neurology: Seizures.** Medical Academy of Pediatric Special Needs. Atlanta GA 2018 (Platform).
413. **Frye, R.E. ACM MAPS in Clinical Practice.** Medical Academy of Pediatric Special Needs. Atlanta GA 2018 (Platform).
414. **Frye, R.E. ACM Neurology: Cases.** Medical Academy of Pediatric Special Needs. Atlanta GA 2018 (Platform).
415. **Frye, R.E. Foundations of Neurology, Foundations of MAPS.** Medical Academy of Pediatric Special Needs. Costa Mesa, CA 2019 (Platform).
416. **Frye, R.E. Advance Clinical Matrix: Metabolism, Reversible Causes of Autism.** Medical Academy of Pediatric Special Needs. Costa Mesa, CA 2019 (Platform).
417. **Frye, R.E. Advance Clinical Matrix: Metabolism, Cases.** Medical Academy of Pediatric Special Needs. Costa Mesa, CA 2019 (Platform).
418. **Frye, R.E. Advanced Cases.** Medical Academy of Pediatric Special Needs. Costa Mesa, CA 2019 (Platform).
419. **Frye, R.E. Understanding The Overlap of PANS and Autism: An Overview of Research on Antineuronal Antibodies in Patients With Autism.** The Foundation For Children With Neuroimmune Disorders. March 2019 (Webinar)
420. **Frye, R.E. Science Behind Autism: Future of Diagnosis and Treatment.** 42nd Annual Melvin L. Cohen Pediatric Update. Phoenix AZ 2019 (Platform).
421. **Frye, R.E. NeuroDevelopmental Delay evaluation and when to refer.** Children's Barrow Neurological Institute Neuroscience Symposium. Phoenix AZ 2019 (Platform)
422. **Frye, R.E., Conklin-Aguilera, C. Review of the EAC-AZ Program.** Early Access for Care – Arizona presents Diagnosis and Treatment of Autism Spectrum Disorder, Phoenix AZ 2019 (Platform)
423. **Frye, R.E. Identification and Treatment of Epilepsy and Sleep Problems in Autism Spectrum Disorder.** Early Access for Care – Arizona presents Diagnosis and Treatment of Autism Spectrum Disorder, Phoenix AZ 2019 (Platform)
424. **Frye, R.E. Cutting Edge Treatment for Autism Spectrum Disorder.** Early Access for Care – Arizona presents Diagnosis and Treatment of Autism Spectrum Disorder, Phoenix AZ 2019 (Platform)
425. **Frye, R.E. Ketogenic Diet Treatment for Autism Spectrum Disorder.** 2019 Summit on Ketogenic Diet Therapies. Phoenix AZ 2019 (Platform)
426. **Frye, R.E., Conklin-Aguilera, C. Review of the EAC-AZ Program. Early Access for Care – Arizona, Phoenix AZ 2019 (Platform)** Early Access for Care – Arizona presents Diagnosis and Treatment of Autism Spectrum Disorder,
427. **Frye, R.E. Treatment of Autism Associated Autoimmune Encephalopathy with Intravenous Immunoglobulin.** Ig National Society, Las Vegas NV 2019 (Platform)
428. **Frye, R.E. Epilepsy and Seizures, ACM: Neurology.** Medical Academy of Pediatric Special Needs. Scottsdale AZ 2020 (Platform).
429. **Frye, R.E. Review of the EAC-AZ Program.** Early Access for Care – Arizona presents Diagnosis and Treatment of Autism Spectrum Disorder, Phoenix AZ 2020 (Platform)
430. **Frye, R.E. The Diagnosis of Autism.** Early Access for Care – Arizona presents Diagnosis and Treatment of Autism Spectrum Disorder, Phoenix AZ 2020 (Platform)
431. **Frye, R.E. Epilepsy and Sleep Problems in Autism Spectrum Disorder.** Early Access for Care – Arizona presents Diagnosis and Treatment of Autism Spectrum Disorder, Phoenix AZ 2020 (Platform)

432. **Frye, R.E. Updated in Autism Treatment.** Early Access for Care – Arizona presents Diagnosis and Treatment of Autism Spectrum Disorder, Phoenix AZ 2020 (Platform)
433. **Frye, R.E., Conklin-Aguilera, C. Review of the EAC-AZ Program. Early Access for Care – Arizona, Phoenix AZ 2020 (Platform)** Early Access for Care – Arizona presents Setting Up Your Own EAC-AZ Practice, Phoenix AZ 2020 (Platform)
434. **Frye, R.E. Reversible Causes of Autism, ACM: Metabolic.** Medical Academy of Pediatric Special Needs. Orlando FL 2021 (Platform).
435. **Frye, R.E. Advanced Case Presentation, ACM: Metabolic.** Medical Academy of Pediatric Special Needs. Orlando FL 2021 (Platform).
436. **Frye, R.E.. Review of the EAC-AZ Program. Early Access for Care – Arizona, Phoenix AZ 2021** Early Access for Care – Arizona Practitioner Training Program. Phoenix AZ 2021 (Webinar)
437. **Frye, R.E.. Case Discussion: Developmental Screening** Early Access for Care – Arizona Practitioner Training Program. Phoenix AZ 2021 (Webinar)
438. **Frye, R.E. Metabolic and Mitochondrial Considerations in Neuropsychiatric Deteriorations.** Inflammatory Brain Disorders Conference 2021 (Webinar)
439. **Frye, R.E. Autism: Neurobiology and Targeted Treatments.** Children's Barrow Neurological Institute Grand Rounds. Phoenix AZ 2021 (Platform)
440. **Frye, R.E. Cutting Edge Research and Treatments For Autism.** Children's Barrow Neurological Institute Grand Rounds. Phoenix AZ Oct 2021 (Virtual)
441. **Frye, R.E. Review of the EAC-AZ Program.** Early Access for Care – Arizona presents Diagnosis and Treatment of Autism Spectrum Disorder, Phoenix AZ Oct 2021 (Virtual)
442. **Frye, R.E. Epilepsy and Sleep Problems in Autism Spectrum Disorder.** Early Access for Care – Arizona presents Diagnosis and Treatment of Autism Spectrum Disorder, Phoenix AZ Oct 2021 (Virtual)
443. **Frye, R.E. Updated in Autism Treatment.** Early Access for Care – Arizona presents Diagnosis and Treatment of Autism Spectrum Disorder, Phoenix AZ Oct 2021 (Virtual)
444. **Frye, R.E. Review of the EAC-AZ Program. Early Access for Care – Arizona, Phoenix AZ 2021 (Platform)** Early Access for Care – Arizona presents Setting Up Your Own EAC-AZ Practice, Phoenix AZ Oct 2021 (Virtual)
445. **Frye, R.E. Novel Treatments to Promote Optimal Outcomes in Autism Spectrum Disorder.** SUNY Downstate Department of Pediatrics Grand Rounds, Brooklyn NY Feb 2022 (Virtual)
446. **Frye, R.E.. Review of the EAC-AZ Program. Early Access for Care – Arizona, Phoenix AZ 2021** Early Access for Care – Arizona Practitioner Training Program. Phoenix AZ Feb 2022 (Webinar)
447. **Frye, R.E. The role of mitochondria and folate in prenatal health and offspring neurodevelopment.** Medical Academy of Pediatric Special Needs. Costa Mesa CA 2022 (Platform).
448. **Frye, R.E. Update on Mitochondrial Research.** Synchrony 2022 Pleasanton CA Dec 2022 (Platform).

#### **Other Professional Communications: Question and Answer Sessions.**

449. **Frye, R.E. Q and A with Dr Frye.** The Foundation For Children With Neuroimmune Disorders. March 2019 (Webinar)
450. **Frye, R.E. Question and Answer for Medical Providers.** The Foundation For Children With Neuroimmune Disorders. Jan 2021 (Webinar)
451. **Frye, R.E. Question and Answer for Parents.** The Foundation For Children With Neuroimmune Disorders. Jan 2021 (Webinar)
452. **Frye, R.E. Meet and Greet.** Association for Behavior Analysis International Annual Convention, May 2021
453. **Frye, R.E. Coffee Talk.** Talk About Curing Autism National Conference (Virtual). Oct 2021
454. **Frye, R.E. and others** INTERNATIONAL ONLINE CONFERENCE „MEDICAL ASPECTS OF GENETICS AND COMORBIDITIES IN AUTISM (Virtual) Nov 2021
455. **Frye, R.E. Question and Answer for Medical Providers.** The Foundation For Children With Neuroimmune Disorders. Jan 2021 (Webinar)
456. **Frye, R.E. Question and Answer for Parents.** The Foundation For Children With Neuroimmune Disorders. Jan 2021 (Webinar)

457. Rossignol, L., Surprise, V., **Frye, R.E. Coffee Talk.** Talk About Curing Autism National Conference. Costa Mesa, CA. Oct 2022
458. Rossignol, D., Skowron, J., Buckley, J., Ingels, D., **Frye, R.E. Physician Panel.** Talk About Curing Autism National Conference. Costa Mesa, CA. Oct 2022

#### **Other Professional Communications: Conference Sessions Chaired or Moderated**

459. **Frye, R.** Co-Chaired. Session on Neuroimaging, WSEAS International Conference on Computers, Crete Greece 2007.
460. **Frye, R.E** Moderator, The Elias Tembenis Seizures Think Tank, Autism One Canada. Toronto, Canada 2009
461. **Frye, R.E.** and Adams, J. Moderators, The Elias Tembenis Seizures Think Tank, Autism One. Chicago IL 2010
462. **Frye, R.E.** and Adams, J. Moderators, Elias Tembenis Think Tank, Autism One. Chicago IL 2011.
463. **Frye, R.E.** Moderator, **Metabolism -- Alternative Complementary Medicine.** Medical Academy of Pediatric Special Needs. Tampa, FL 2013.
464. **Frye, R.E.** and Slattery and Rodakis, Moderators. International Symposium on the Microbiome in Health and Disease with a Special Focus on Autism, Little Rock AR 2014.
465. **Frye, R.E.**, Moderator. International Workshop on the Microbiome in Autism, Little Rock AR 2014.
466. **Frye, R.E.** Chair. **Session 2: Oxidative Stress, Mitochondria and Microbiota.** Paris Redox World Congress Paris France 2019.
467. **Frye, R.E.**, Moderator. Fragile X Parental Education Conference. Phoenix Children's Hospital, Phoenix AZ 2019
468. **Frye, R.E.**, Conklin-Aguilera, C. Co-Chair Early Access for Care – Arizona presents Diagnosis and Treatment of Autism Spectrum Disorder, Phoenix AZ 2019
469. **Frye, R.E.**, Conklin-Aguilera, C. Co-Chair Early Access for Care – Arizona presents Setting Up Your Own EAC-AZ Practice, Phoenix AZ 2019
470. **Frye, R.E.**, Chair Early Access for Care – Arizona presents Diagnosis and Treatment of Autism Spectrum Disorder, Phoenix AZ 2020
471. **Frye, R.E.** Chair Early Access for Care – Arizona presents Setting Up Your Own EAC-AZ Practice, Phoenix AZ 2020
472. **Frye, R.E.** Chair. **Neuro-metabolic session.** Synchrony 2020 (Virtual Platform) Nov 2020
473. **Frye, R.E.** Moderator. Autism. Pediatric Update, Phoenix AZ (Webinar) 2021
474. Smith, A.D., Praticò, D., **Frye, R.E.** Co-Chair. **Homocysteine and Neurodegeneration.** 13th International Conference One-Carbon Metabolism, B Vitamins and Homocysteine. Poland Sept 2021
475. **Frye, R.E.**, Chair Early Access for Care – Arizona presents Diagnosis and Treatment of Autism Spectrum Disorder, Phoenix AZ 2021
476. **Frye, R.E.** Chair Early Access for Care – Arizona presents Setting Up Your Own EAC-AZ Practice, Phoenix AZ 2021
477. **Frye, R.E.** Chair. **Roundtable: Seizures in ASD.** Synchrony 2022 Pleasanton CA Dec 2022

#### **Other Professional Communications: Presentations to Government / Regulatory Agencies**

478. **Frye, R.E.** Autoimmune Encephalopathy and Autism. Arkansas State Legislative Subcommittee, Little Rock, AR 2017 (Platform).
479. **Frye, R.E.** Methylcobalamin Treatment For Autism Spectrum Disorder. Nominated presenter to the Food and Drug Administration Center for Drug Evaluation and Research Pharmacy Compounding Advisory Committee Meeting. June 9<sup>th</sup> 2021

### **Resident Lectures**

480. **Frye, R.E. Autism: Diagnosis and Treatment.** Phoenix Children's Hospital. Phoenix AZ 2021 (Webinar)

### **Undergraduate and Graduate Dialectic Lectures**

481. **Frye, R.E.** The Neurological Basis of Developmental Disorders. Cognitive Neuroscience, Department of Psychology, Rice University, Houston, TX. 2009
482. **Frye, R.E. Methods in Cognitive Neuroscience II: Electroencephalography and Magnetoencephalography.** Introduction of Cognitive Neuroscience, Department of Neuroanatomy, University of Texas, Houston TX. 2010-11
483. **Frye, R.E. Neurobiology of Disease: Dyslexia.** Introduction of Cognitive Neuroscience, Department of Neuroanatomy, University of Texas, Houston TX. 2010-11
484. **Frye, R.E. Neurobiology of Disease: Autism.** Introduction of Cognitive Neuroscience, Department of Neuroanatomy, University of Texas, Houston TX. 2010-11

### **Continuing Medical Education Programs / Courses Developed**

1. **Frye, R.E.**, Conklin-Aguilera, C. Co-Director Early Access for Care – Arizona presents Diagnosis and Treatment of Autism Spectrum Disorder, Phoenix AZ 2019
2. **Frye, R.E.** Director. Early Access for Care – Arizona Cohort 4 Training 2020, Phoenix AZ 2020.
3. **Frye, R.E.**, Director Early Access for Care – Arizona presents Diagnosis and Treatment of Autism Spectrum Disorder, Phoenix AZ 2020
4. **Frye, R.E.** Director. Early Access for Care – Arizona Cohort 5 Training 2021, Phoenix AZ 2021.
5. **Frye, R.E.** The Medical and Biological Complexity of Autism. Association for Behavior Analysis International Learning Center. Portage, MI 2021-Onward
6. **Frye, R.E. Roundtable: Seizures in ASD.** Synchrony 2022 Pleasanton CA Dec 2022

### **Professional Training Programs Hosted**

1. ADOS Clinical and Research Training, University of Texas Health Science Center – Houston, Houston TX, 2009
2. RITA-T Training. Phoenix Children's Hospital, Phoenix AZ 2019
3. STAT Training. Phoenix Children's Hospital, Phoenix AZ 2020

### **Other Professional Communications: Workshops Attended**

1. Autism Research Institute Think Tank, Autism Research Institute, Baltimore 2009
2. The Elias Tembenis Seizures Think Tank, Autism One. Chicago IL 2009
3. The Elias Tembenis Seizures Think Tank, Autism One Canada. Toronto, Canada 2009
4. Autism Research Institute Think Tank, Autism Research Institute, Baltimore 2010
5. The Elias Tembenis Seizures Think Tank, Autism One. Chicago IL 2010
6. Autism Research Institute Think Tank, Autism Research Institute, Baltimore 2011
7. The Elias Tembenis Think Tank, Autism One. Chicago IL 2011
8. Translating Mechanisms to Treatment Working Group. University of California San Francisco, San Francisco, CA 2012
9. Autism Research Institute Think Tank, Autism Research Institute, Baltimore 2013
10. Medical Academy of Pediatric Special Needs Think Tank, Costa Mesa CA 2014
11. Think Tank, Autism One. Chicago IL 2014
12. Parent Workshop on Mitochondrial Disease and Autism, United Mitochondrial Disease Foundation Conference, Pittsburg, PA
13. Examining a Multi-Systems Approach to Autism and the Environment: Challenges and Opportunities for Research. Autism Research Institute, Toronto 2014
14. International Workshop on the Microbiome in Autism, Little Rock AR 2014.
15. American-Chinese Autism International Forum Steering Committee Workshop, China, 2015
16. Autism Research Institute Think Tank, Autism Research Institute, Dallas TX 2016
17. Microbiome Think Tank, Arkansas Children's Research Institute. Little Rock AR 2016.
18. Autism Research Institute Think Tank, Autism Research Institute, Dallas TX 2017

19. Autism Speaks Think Tank, Autism Speaks, NYC NY 2018
20. Autism Speaks Autism Learning Health Network Learning Session, Autism Speaks, Washington DC 2019
21. Autism Research Institute Think Tank, Autism Research Institute (Virtual) Nov 2021
22. Autism Research Institute Think Tank, Autism Research Institute Dallas March 2022
23. TACA Think Tank, TACA Costa Mesa Oct 2022
24. Autism Research Institute Think Tank, Autism Research Institute, Virtual, Oct March 2022
25. Neuroinflammation Working Group, Synchrony 2022, Pleasanton CA Dec 2022
26. Biomarker Roundtable, Synchrony 2022, Pleasanton CA Dec 2022

#### **News Articles on Dr Frye's Research and Clinical Work**

1. Texas Medical Center Publications, **Cerebral Folate Deficiency Breakthrough**, February 2011 by Mika Rao
2. Arkansas Biosciences Institute 2013 Annual Report, **2013 New Investigator of the Year Award**, 2013
3. Arkansas Children's Hospital Research Institute, Board Report, **Dr. Richard Frye Receives Inaugural ABI New Investigator Research Award**, November 2013
4. Arkansas Children's Hospital Research Institute, **Research Highlights, Summer Science Program 2015**, August 2015 by John Gregan
5. Physician Spotlight, **Richard E Frye, MD, PhD. is "All In" for Autistic Children**. Arkansas Medical News, November 11 2015 by Becky Gillette
6. Arkansas Children's Hospital Research Institute, **Research Update, Clinical Researcher Spotlight: Richard Frye, MD, PhD**, April 2015 by John Gregan
7. Carrie Arnold. **The Families That Launch Their Own Autism Studies**. The Atlantic. Sep 30 2016  
<http://www.theatlantic.com/health/archive/2016/09/the-families-that-launch-their-own-autism-studies/502025/>
8. **Folinic acid improves communication, eases autism symptoms in small study**. Autism Speaks. Oct 18, 2016 <https://www.autismspeaks.org/science/science-news/folinic-acid-improves-communication-eases-autism-symptoms-small-study>
9. Ryan Mass. **Folinic acid may help children with autism communicate better**. UPI Health News. Oct 18 2016 [http://www.upi.com/Health\\_News/2016/10/18/Folinic-acid-may-help-children-with-autism-communicate-better/5721476800957/](http://www.upi.com/Health_News/2016/10/18/Folinic-acid-may-help-children-with-autism-communicate-better/5721476800957/)
10. **Folinic acid may help children with autism communicate better**. Medical Press. Oct 18 2016.  
<http://medicalxpress.com/news/2016-10-folinic-acid-children-autism.html>
11. **Folinic acid may help children with autism communicate better**. AAAS EurekAlert! Oct 18 2016.  
[https://www.eurekalert.org/pub\\_releases/2016-10/s-fac101816.php](https://www.eurekalert.org/pub_releases/2016-10/s-fac101816.php)
12. **N of One: Autism Research Foundation Interviews Richard Frye, MD PhD on Folinic Acid & Autism Trial**. N of One Autism Research Foundation 2016. <http://www.nofone.org/dr-frye-q-and-a-folinic>
13. (<http://psychnews.psychiatryonline.org/doi/full/10.1176/appi.pn.2016.pp12a2>).
14. **Health Matters: Shedding Light on PANS and PANDAS** by Susanne Brunner. Posted July 26 2017  
<http://www.arkansasmatters.com/amazing/amazing-stories/health-matters-shedding-light-on-pans-and-pandas/775300783>
15. **Success of blood test for autism affirmed**. Science Daily. June 19 2018.  
<https://www.sciencedaily.com/releases/2018/06/180619122434.htm>
16. **Barrow Neurological Institute at Phoenix Children's is at the Forefront of Autism Research with Two New Grants: Neurologist Richard E. Frye, MD, PhD, earned two separate grant-funded medical trials offering patients new treatment options**. Phoenix Children's Hospital Jan 2019
17. **Phoenix doctor's treatment helps speech and communication for kids with autism**. Brittini Thomason AZfamily.com. Sept 17 2021. [https://www.azfamily.com/news/phoenix-doctor-treating-kids-with-autism/article\\_91b96898-1817-11ec-805a-ef42e1d7d6bc.html](https://www.azfamily.com/news/phoenix-doctor-treating-kids-with-autism/article_91b96898-1817-11ec-805a-ef42e1d7d6bc.html)
18. **Researchers connect autism symptoms with mitochondrial morphology** by Natalya Ortolano. Drug Discovery News. Posted March 4<sup>th</sup> 2022. <https://www.drugdiscoverynews.com/researchers-connect-autism-symptoms-with-mitochondrial-morphology-15357>
19. **Wright-Patt doctor finds treatment path for military child with rare neurological condition**. By Darrius Parker. 88th Air Base Wing Public Affairs. <https://www.wpafb.af.mil/News/Article-Display/Article/3280575/wright-patt-doctor-finds-treatment-path-for-military-child-with-rare-neurologic/>



## **Journal Articles on Dr Frye and his Research**

1. Barbara Geller. **Can Immunotherapy Treat Autism?** NEJM Journal Watch  
<https://www.jwatch.org/NA47358>

## **Published Interviews with Dr Frye**

1. Anna Conkey. **PANS, Autism, And The Immune System: An Interview With Expert Neurologist Dr. Richard Frye.** The Foundation for Children with Neuroimmune Disorders. Published Sept 3 2018.  
<http://www.neuroimmune.org/interview-dr-richard-frye>
2. **Mitochondrial Dysfunction and Folate Metabolism Abnormalities in Autism.** Autism Research Coalition. **May 14 2021.** [https://www.youtube.com/watch?v=4vL15HVXO\\_U](https://www.youtube.com/watch?v=4vL15HVXO_U)

## **News Article Quotes**

1. Bobby Ampezzan. **The kindest cut? Appendix inflames debate about its purpose.** Quotes from Dr Frye as a Microbiome Expert. Arkansas Democrat Gazette.
2. Diana Kwon. **Could mitochondria be the key to a healthy brain?** Quotes Dr Frye on Studies Linking Environmental Influences of Autism to the Mitochondria. Annual Reviews Knowable Magazine

## **Magazine Articles**

1. Jamie Stringfellow. **High-tech Care.** Story about Dr Frye's approach to treating children with autism. Continental Magazine. January 2011
2. **Advancing Medical Research.** Mention of Dr Richard Frye and Dr Jill James research on treatments for autism. Soiree Magazine. November 2013
3. Dwani Hebda. **Pieces of the puzzle.** Story about Dr Frye's research. Savvy Magazine. April 2015

## **Radio (also available as podcasts)**

1. KERA National Public Radio, Dallas-Fort Worth, Texas. THINK, an hour long live interview with Richard Frye. Aired July 14<sup>th</sup> Noon to 1pm 2015. <http://www.kera.org/2015/07/14/autism-and-care/>
2. KERA National Public Radio, Dallas-Fort Worth, Texas. THINK, Understanding Autism: A Father's Search Beyond Genetics. Story about John Rodakis' son with short interview with Dr Richard Frye.  
<http://breakthroughs.kera.org/understanding-autism-a-fathers-search-beyond-genetics/>
3. KUAF National Public Radio. Fayetteville, Arkansas. Research Shows Folinic Acid Could Help Autistic Children Communicate Better. by Antoniette Grajeda. <http://kuaf.com/post/research-shows-folinic-acid-could-help-autistic-children-communicate-better>
4. KTAR Local Phoenix News. Phoenix AZ by Taylor Kinnerup

## **Podcasts**

1. Autism Research Connections #1: A Conversation with Dr Richard E Frye. March 19<sup>th</sup> 2016  
<https://autismrc.com/>
2. MitoAction. Oxidative Stress and Mitochondrial Dysfunction. May 2 2014.  
<http://www.mitoaction.org/blog/autism-mito-and-oxidative-stress>
3. MitoAction. Biomarkers of Abnormal Energy Metabolism in Children with Autism Spectrum Disorder. Oct 9 2014 <http://www.mitoaction.org/autism/summary-and-informal-discussion-dr-richard-frye%E2%80%99s-paper-titled-biomarkers-abnormal-energy>
4. The Autism Enigma. Dr. Richard Frye Interview. <http://cogentbenger.com/autism/interviews/richard-frye-interview/>
5. <http://podbay.fm/show/290467730/e/1338584495?autostart=1>
6. <http://epiphanyasd.blogspot.com/2016/04/interview-series-with-leading-autism.html>

## **Television**

1. KTHV Nightly News. Kelley Cooper interviews Dr Frye on autism research. Interview April 24<sup>th</sup> 2013.
2. KATV Daybreak Program Morning. Interview with Dr Frye on new autism research. Jan 16 2013
3. KATV Good Morning Arkansas. Interview with Dr Frye on clinical trials for autism at Arkansas Children's Hospital. Aired Oct 17<sup>th</sup> 2012.
4. KTHV Nightly News: New Treatment for Autism. Oct 18<sup>th</sup> 2016.

5. KARK Nightly News: Health Matters: Shedding Light on PANS and PANDAS by Susanne Brunner. Aired July 26 2017.
6. KPHO/KTVK, Nightly News: AZ Family **Phoenix doctor's treatment helps speech and communication for kids with autism**. Brittini Thomason. Sept 17 2021

### Film

1. The Nature of Things. The autism enigma: Are bacteria to blame? Interview with Dr Richard Frye included in the film. Produced by Cogent/Benger Productions, Canadian Broadcasting Corporation and ARTE France.
2. IN OUR OWN HANDS: How Patients Are Reinventing Medicine, Interview with Dr Richard Frye included in the film, Produced by Steve Michelson. Screened at the Orlando Film Festival

### Mentoring

|           |                                                                                                                                                                                |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2004      | Kerry A. Hensley, Senior Thesis Committee, <b>Context Effects and Categorization of a Consonant Vowel Continuum</b> , Boston University, Department of Psychology, Boston MA   |
| 2003-2007 | Janet McGraw Fisher, Doctoral Thesis Committee, Boston University, Department of Psychology, Boston MA                                                                         |
| 2005-2006 | Sarah McCann, Master's Thesis Advisor, University of Florida, Department of Neuropsychology, Gainesville, FL                                                                   |
| 2007-2010 | Roger Wu, PhD, Thesis Committee, University of Houston, Department of Computer Science, Houston TX                                                                             |
| 2012-2014 | Devin Cox, Genetic Counseling Fellow, Arkansas Children's Hospital Research Institute, Little Rock, AR                                                                         |
| 2013-2014 | Alessandra Milesi-halle, Children Neurology Research Fellow, Arkansas Children's Hospital Research Institute, Little Rock, AR                                                  |
| 2014      | Jeff Chacko, Medical Student, University of Arkansas for Medical Sciences, Little Rock, AR                                                                                     |
| 2015      | Jakeira Davis, College Student Intern, Summer Science Program, Arkansas Children's Hospital Research Institute, Little Rock, AR                                                |
| 2015      | Ekim Nur Kilinc, M.D., Research Fellow, Arkansas Children's Hospital Research Institute, Little Rock, AR                                                                       |
| 2015-2017 | Shona Ray-Griffith, <b>Fetal Acetaminophen: A Potential Neurobehavioral Teratogen</b> . Department of Psychiatry, University of Arkansas for Medical Sciences, Little Rock, AR |
| 2012-2017 | Shannon Rose, Post-doctoral fellow, Arkansas Children's Hospital Research Institute, Little Rock, AR                                                                           |
| 2016      | Kristi-Ann Villagonzalo, Reviewer for thesis entitled <b>Redox Biology and Autism</b> , PhD Candidate, The University of Melbourne, Melbourne, Australia                       |
| 2017      | Kathlyn Connely, Medical Student, University of Arkansas for Medical Sciences, Little Rock, AR.                                                                                |
| 2019-     | Geoff Gideon, Medical Student, Midwestern University, Phoenix AZ.                                                                                                              |
| 2019-     | Maya Patel, Medical Student, University of Arizona College of Medicine – Phoenix                                                                                               |
| 2019-     | Bernice May Alcanzo (Fryar), Medical Pathway Student, Univ of Arizona College of Medicine – Phoenix, Laboratory Mentor and Thesis Advisor                                      |
| 2019-2021 | Amrit Ammanamanchi, Undergraduate ASU, Laboratory Mentor and Thesis Committee Advisor                                                                                          |
| 2019-2021 | Andrew Pine, Medical Student, Mayo Medical School, Phoenix AZ                                                                                                                  |
| 2019-2022 | Raymond Bunch, Psychiatrist, BNI@PCH                                                                                                                                           |
| 2020-2022 | Rohin Singh, Mayo School of Medicine, Scottsdale AZ                                                                                                                            |
| 2020-2022 | Maya Harrington, Mayo School of Medicine, Scottsdale AZ                                                                                                                        |
| 2020-2022 | Te'Ron, Linsey, PsyD Student, Laboratory Mentor and Thesis Committee Advisor Northern Arizona University                                                                       |
| 2020-2021 | Julia Ghering, Medical Student, University of Arizona College of Medicine – Phoenix                                                                                            |
| 2020-2021 | Kyle Steiger, Mayo School of Medicine, Scottsdale AZ                                                                                                                           |
| 2021      | Farizah Ali, Summer Lab Student, Creighton Medical School, Nebraska                                                                                                            |
| 2021-2022 | Danielle Brister, Undergraduate Student, Arizona State University, Tempe AZ                                                                                                    |
| 2021-2022 | John Fitzgerald, Creighton Medical School, Nebraska                                                                                                                            |
| 2021-2022 | Thomas DeCesare, Creighton Medical School, Nebraska                                                                                                                            |

|                   |                                                                                                                                                                                      |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2021-2022<br>2022 | Tyler Brandon Engle, University of Arizona College of Medicine – Phoenix<br>Dr Kareem Makkawi, Post-Doctoral Research Fellow, University of Arizona College of Medicine<br>– Phoenix |
| 2022-2023         | Beliz Su Gundogdu. Medical Student. Koc University School of Medicine, Istanbul Turkey.<br>Observership                                                                              |