# PANS and Related Inflammatory Brain Disorders – Advances in Immunopsychiatry

# **On-Demand CME**



NEUROIMMUNE FOUNDATION

PANS and Related Inflammatory Brain Disorders – Advances in Immunopsychiatry: On-Demand CME

Hosted by Neuroimmune Foundation and accredited in collaboration with The Wisconsin Medical Society.

Up to 20 AMA PRA Category 1 Credit(s)™

# Join Us for On-Demand CME – Free to North Carolina Physicians

PANS and Related Inflammatory Brain Disorders: Advances in Immunopsychiatry features nationally and internationally renowned experts skilled in diagnostic and therapeutic approaches who will present a diverse range of emerging clinical and research challenges, insights, and advances in the field of inflammatory brain disorders.

# \$200 per credit hour for North Carolina physicians who complete all 20 credits by April 1, 2025!

Please note: there are limited spaces for compensated CME!

You must email anna@neuroimmunenc.org to verify space remains and complete a contract in order to receive payment.

Passing the post-test is also required though unlimited attempts are allowed.

The intended audience is pediatric and adult physicians. Both generalists as well as specialists will find this on-demand CME content valuable to their practices. The content is designed for pediatricians, family physicians, psychiatrists, rheumatologists, immunologists, neurologists, and infectious disease physicians. Though the content is designed for physicians, physician assistants and nurse practitioners will find the series valuable to their practices as well.

# **Learning and Outcome Objectives**

- Learn how to accurately diagnose and effectively treat inflammatory brain conditions including PANS.
- Recognize that neuropsychiatric sequelae can result from infections, autoimmune, and inflammatory conditions.
- List several immune and inflammatory markers that can be present in patients with inflammatory brain disorders.
- Report the cognitive and psychiatric effects that can occur post-infection.
- Describe appropriate treatments for patients with inflammatory brain disorders.

Please find the complete CME details at: neuroimmune.org/on-demand-cme

## PANS and Related Inflammatory Brain Disorders -Advances in Immunopsychiatry

# **On-Demand CME**

### neuroimmune.org/on-demand-cme





# **Speakers and Videos**



Jennifer Frankovich, MD Clinical Professor, Dept. of Pediatrics, Division of Immunology & Rheumatology, Stanford University School of Medicine

Rheumatology & Psychiatry – What We Can Learn From Overlapping Conditions



Elizabeth Mellins, MD
Professor of Pediatrics, Pediatric Rheumatologist and Molecular Immunologist,
Stanford University School of Medicine

Monocyte Research in PANS



Jennifer Frankovich, MD Elizabeth Mellins, MD

Clinical Professor, Dept. of Pediatrics, Division of Professor of Pediatrics, Pediatric Rheumatologist and Immunology & Rheumatology Molecular Immunologist Stanford University School of Medicine

Stanford Research Update - Evidence for PANS as an Inflammatory Brain Disorder



Shreyas Vasanawala, MD, PhD
Chief of Pediatric Radiology,
Associate Chair of Radiology

Meiqian Ma, MD
Clinical Assistant Professor,
Pediatrics / Rheumatology Stanford University School of Medicine

Arthritis, Enthesitis, and Development of Autoimmune/Inflammatory Disease in Patients with PANS



Associate Prof. of Pediatrics, Psychiatry, Epidemiology & Quantitative Biomedical Data Sciences, Geisel School of Medicine

Juliette C. Madan, MD, MS Pawel R. Kiela, DVM, PhD

Prof. of Pediatrics and Immunobiology, PANDA Endowed Professor in Autoimmune Disease Research University of Arizona

The Emerging Role of the Gut Microbiome in the Gut-Brain Axis and Neuroinflammation in PANS/PANDAS



Brian A. Fallon, MD, MPH
Director of the Center for Neuroinflammatory and Somatic Disorders,
Director of the Lyme and Tick-Borne Diseases Research Center, Columbia University

Neuropsychiatric Lyme Disease: Symptoms, the Immune Response, and the Vagus Nerve



Terence Sanger, MD, PhD
Vice President, Chief Scientific Officer, CHOC Children's Hospital,
Child Neurology and Movement Disorders, CHOC Children's Hospital, UC-Irvine

Movement Disorders in Pediatric Inflammatory Brain Disease



### Josep Dalmau, MD, PhD, FAAN

Research Professor ICREA-IDIBAPS, Service of Neurology, Hospital Clinic, University of Barcelona; Adjunct Professor Neurology, University of Pennsylvania

The Antibody-Mediated Encephalitis From Discovery to New Clinical Insights and Mechanisms



Avindra Nath, MD

Chief of Section of Infections of the Nervous System, Clinical Director, NINDS, NIH\*

\*Dr. Nath is presenting in his personal capacity. The views expressed are his own and do not

Pathophysiology of Neuropsychiatric Syndromes Post-COVID



Mark Pasternack, MD

Chief of Pediatric Infectious Disease, Massachusetts General Hospital ssociate Professor of Pediatrics, Massachusetts General Hospital, Harva  $Use \ of \ Antibiotics \ in \ Infection \ Associated \ Neuropsychiatric \ Syndromes \ Including \ PANS$ 



### Sudarshini Ramanathan, BSc (Med), MBBS (Hons), FRACP, PhD

Head, Translational Neuroimmunology Group; Associate Professor, Sydney Medical School; Faculty of Medicine and Health, University of Sydney

Immunotherapy in Autoimmune Encephalitis



Michael Eriksen Benros, MD, PhD
Professor of Immunopsychiatry, Department of Immunology and Microbiology,
Health and Medical Sciences, University of Copenhagen

Immunopsychiatry - Evidence From Large-Scale Studies to Detailed Clinical CSF Studies



Theresa Willett, MD, PhD Pediatrics – Immunology, Allergy Medica Health Clinic, Stanford University School Clinical Assistant Professor Pediatrics - In edical Director, Children's Immune Behaviora

Clues from the Clinical Exam



Theresa Willett, MD, PhD

Clinical Assistant Professor, Pediatrics – Immunology, Allergy Medical Director, Children's Immune Behavioral
Health Clinic, Stanford University School of Medicine

PANS/PANDAS for the Busy Primary Care Provider



Christopher Pittenger, MD, PhD try; Deputy Chair for Translational Research, Psychiatry; Director, OCD Research Clinic, Yale

Antibodies in Children with PANDAS Bind to and Inhibit Specific Interneurons in the Basal Ganglia



Janet Cunningham, MD, PhD Associate Professor in the Department of Neuroscience; Associate Pr Psychiatrist, Uppsala University, Swe

Clinical and Biological Heterogeneity in an Adult Patient Cohort with Psychiatric Symptoms Enriched for Suspected Immunological Involvement



Sarosh Irani, FRCP, DPhil, FEAN
Professor of Autoimmune Neurology, University of Oxford, lead of Autoimmune Neurology Group at University of Oxford

The Immunology Underlying Autoantibody Associated CNS Diseases



# Wei Zhao, MD, PhD

Professor and Chief, Division of Allergy and Immunology, Virginia Commonwealth University

Plasmapheresis in Treatment of PANS



**Jill Hollenbach, PhD, MPH** ment of Neurology, University of California, San Francisco Associate Professor, Departr

Immunogenetic Variation in PANS and Neuroinflammatory Disease

Overview of the JCAP Clinical Management and Treatment Guidelines - Panel Presentation and Discussion



### Jennifer Frankovich, MD

Clinical Professor, Dept. of Pediatrics, Division of Immunology & Rheumatology, Stanford University Rheumatology, Stanford University
School of Medicine



### Mark Pasternack, MD

Chief of Infectious Disease, Associate Professor of Pediatrics, Massachusetts General Hospital, Harvard



# **Cynthia Kapphahn, MD**Clinical Professor, Division of Adolescent Medicine,

Stanford University School of Medicine



# Chris Ikonomidou, MD, PhD

Chief, Pediatric Neurology Section, American Family Children's Hospital Faculty, UW School of Medicine and Public Health



# Gail Bernstein, MD

Professor, Dept. of Psychiatry and Behavioral Sciences, University of Minnesota Medical School



# Kiki Chang, MD

Adjunct Prof. of Psychiatry, Dept. of Psychiatry and Behavioral Sciences, McGovern Medical School, UTHealth Houston