

# New Developments in Understanding Chronic Illnesses:

*The Role of Immune Dysfunction and Infections*

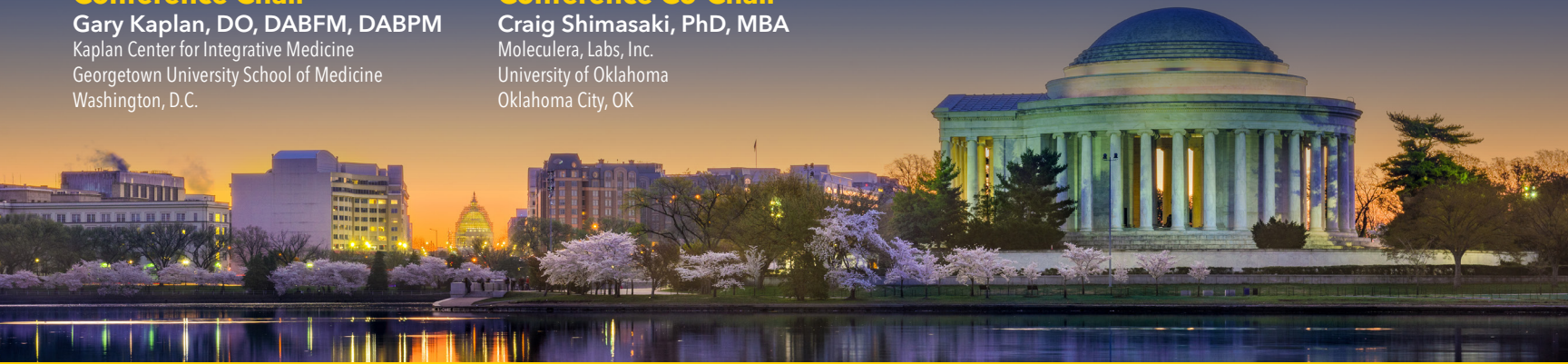
November 8 to 10, 2023 | Marriott Marquis | Washington, D.C.

## Conference Chair

Gary Kaplan, DO, DABFM, DABPM  
Kaplan Center for Integrative Medicine  
Georgetown University School of Medicine  
Washington, D.C.

## Conference Co-Chair

Craig Shimasaki, PhD, MBA  
Moleculara, Labs, Inc.  
University of Oklahoma  
Oklahoma City, OK



MedStar Health



FOUNDATION for  
TOTAL RECOVERY  
*Finding A Cure For Neuroinflammatory Diseases*

For more information and to register, visit  
**[MedStarHealth.org/NDUCI2023](https://www.MedStarHealth.org/NDUCI2023)**

# Continuing Education Credit Information

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## Course Description

There are over 20 million Americans suffering from a group of chronic disabling disorders who are diagnosed without a clear elucidation of pathophysiologic mechanisms. This includes Fibromyalgia, Myalgic Encephalomyelitis/ Chronic Fatigue Syndrome (ME/CFS), Neuropsychiatric illnesses, Posttreatment Lyme Syndrome, Pediatric Acute on Neuropsychiatric Syndrome (PANDAS/PANS).

Adding to this massive disease burden the CDC now estimates that of the 40% of Americans who were infected with COVID-19 1 in 5 continue to suffer with what is now referred to as Post-acute sequelae of COVID (PASC). Research has demonstrated that common to all these conditions is dysregulation of the immune system resulting from an infectious insult. Dramatic advances have occurred in our understanding of all these conditions as a result of COVID. It is an incredibly exciting period in medicine where these diseases are beginning to coalesce around an understanding of shared pathophysiology. We are entering a period of true hope for those millions who are suffering where we will finally be able to provide comprehensive solutions for their illness.

This conference will bring together some of the leading researchers and clinicians from around the world to discuss the advances in our understanding of these conditions and breakthroughs in diagnostic and treatment options.

## Target Audience

This conference is intended for internists, family physicians, allergists, neurologists, pediatricians, psychiatrists, psychologists, rheumatologists, physicians, residents, fellows, physician assistants, nurse practitioners, nurses, dietitians, nutritionists and other allied health professionals interested in the treatment of chronic disabling disorders.

## Learning Objectives

- Summarize the role of the innate and adaptive immune system in chronic disease.
- Explain biological mechanisms of how infections incite immune dysfunction resulting in chronic disease.
- Describe new diagnostic testing and biomarkers for defining and identifying immune dysfunction in chronic illness.
- Identify clinical and case study examples using new and repositioned treatment modalities that have been shown to be effective in treating immune-mediated chronic disorders secondary to infection.
- Summarize long haul covid and its pathophysiology and new diagnostic and treatment modalities.
- Describe a new understanding of fibromyalgia as an immunologic disorder and the role of the immune system in Myalgic Encephalomyelitis/ Chronic Fatigue Syndrome (ME/CFS).
- Recognize the role of infections and immune dysfunction as the cause of other neurologic, psychiatric, and behavioral disorders.
- Explain the role of gut microbiome in health and immune dysfunction.
- Identify the roles and responsibilities of members of the healthcare team involved in the collaborative care of patients with atypical immunological diseases.
- Integrate a team-based approach in the care of patients with atypical immunological diseases.

# Continuing Education Credit Information

## Accreditation Statement



JOINTLY ACCREDITED PROVIDER™  
INTERPROFESSIONAL CONTINUING EDUCATION

In support of improving patient care, this activity has been planned and implemented by MedStar Health and the Foundation for Total Recovery. MedStar Health is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

## Credit Designation Statement



IPCE CREDIT™

This activity was planned by and for the healthcare team, and learners will receive 20.25 Interprofessional Continuing Education (IPCE) credits for learning and change.

**Physicians:** MedStar Health designates this live activity for a maximum of 20.25 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

**Nurses:** This activity is approved for 20.25 ANCC contact hours. Nurses should claim only the credit commensurate with the extent of their participation in the activity.



### American Board of Internal Medicine MOC Credit:

Successful completion of this CME activity, which includes participation in the evaluation component, enables the participant to earn up to 20.25 MOC points in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program. It is the CME activity provider's responsibility to submit participant completion information to ACCME for the purpose of granting ABIM MOC credit.



**American Board of Pediatrics MOC Credit:** Successful completion of this CME activity, which includes participation in the evaluation component, enables the learner to earn up to 20.25 MOC points in the American Board of Pediatrics' (ABP) Maintenance of Certification (MOC) program. It is the CME activity

provider's responsibility to submit learner completion information to ACCME for the purpose of granting ABP MOC credit.

**MOC Participation Threshold:** Learner participates by writing a reflective statement and makes a commitment to change or maintain an element of practice.

## Course Director



### **Gary Kaplan, D.O. DABFM, DABPM, FAAMA**

Medical Director  
Kaplan Center for Integrative Medicine Clinical  
Associate Professor, Family Medicine  
Georgetown University School of Medicine  
Washington, D.C.

## Course Co-Director



### **Craig D. Shimasaki, PhD, MBA**

CEO, Moleculera Labs  
Adjunct Professor  
University of Oklahoma  
Oklahoma City, OK

## Faculty

### **Ronald W. Davis, PhD**

Director, Stanford Genome Technology Center  
Professor, Biochemistry and Genetics  
Member, Stanford Cancer Institute  
Stanford University  
Stanford, CA

### **Brian A. Fallon, MD**

Director, Center for Neuroinflammatory Disorders and  
Biobehavioral Medicine  
Director, Lyme, and Tick-Borne Diseases Research Center  
Columbia University  
New York, NY

### **Jennifer Frankovich, MD**

Clinical Professor, Pediatrics  
Division of Allergy, Immunology Rheumatology (AIR)  
Director, Immune Behavioral Health Program  
Stanford University School of Medicine  
Stanford, CA

### **Richard E. Frye, PhD, MD**

Director, Research and Neurology  
Rossignol Medical Center  
Principal Investigator  
Southwest Autism Research and Resource Center  
President  
Autism Discover and Treatment Foundation  
Phoenix, AZ

### **Jonathan Godbout, PhD**

Faculty Director, Chronic Brain Injury Program  
Co-Director, Neuroscience Graduate Program  
Co-Director, NNDS T32 Training Program in Neuroimmunology  
The Ohio State University College of Medicine  
Associate Director, Basic Research  
Institute of Behavioral Medicine Research  
Professor, Neuroscience  
The Ohio State University  
Columbus, OH

### **Andreas Goebel, MSc (Pain Medicine), PhD, FRCA, FFPMRCA**

Director, Pain Research Institute  
Chair of Pain Medicine  
University of Liverpool  
Honorary Consultant, Pain Medicine  
Walton Centre NHFS Foundation Trust  
Liverpool, UK

### **Moviglia A. Gustavo, MD, PhD**

Associate Professor, Wake Forest Institute for Regenerative Medicine  
Wake Forest University School of Medicine  
Winston-Salem, NC

### **Maureen R. Hanson, PhD, BS**

Director, Center for Enervating Neuroimmune Disease  
Liberty Hyde Bailey Professor, Molecular Biology and Genetics  
Cornell University  
Ithaca, NY



# Faculty

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## **Elizabeth P. Irias, LMFT**

Psychotherapist, Utilization Review Trainer  
President and Founder, Clearly Clinical  
Portland, OR

## **Sandra Kaufman, MD**

CEO and Founder, Kaufmann Anti-Aging Institute  
Author, Kaufmann Protocol: Why we Age and How to Stop it  
The Kaufmann Protocol: Aging Solutions  
Chair, Pediatric Anesthesia Consortium of Envision  
Director, National Integration and Transition Pediatric Anesthesia  
Pediatric Anesthesia  
Memorial Health Care  
Miami Beach, FL

## **Kyle Landry, BS, MS, PhD**

President  
Delavie Sciences LLC  
Lecturer, Health Sciences  
Boston University College of Health & Rehabilitation Sciences  
Sargent College  
Boston, MA

## **M. Elizabeth Latimer, MD**

Pediatric Neurologist  
Latimer Neurology Center  
Clinical Assistant Professor, Pediatrics and Neurology  
Georgetown University Medical Center  
Washington, D.C.

## **Kim Lewis, PhD, BSc**

Director, Antimicrobial Discover Center  
University Distinguished Professor, Biology  
Northeastern University  
Boston, MA

## **Cherie Marvel, PhD**

Associate Professor, Neurology, Psychiatry &  
Behavioral Sciences  
Johns Hopkins University School of Medicine  
Baltimore, MD

## **Isaac Melamed, MD**

IMMUNOe, Member of Veros Health  
Associate Clinical Professor, Pediatrics  
University of Colorado Anschutz Medical Campus  
Centennial, CO

## **Avindra Nath, MD**

Chief, Section of Infections of the Nervous System  
National Institute of Neurological Disorders and Stroke  
National Institutes of Health  
Bethesda, MD

## **Bruce K. Patterson, MD**

CEO and Founder  
incellDx  
Palo Alto, CA

## **Claude Steriade, MD, CM**

Assistant Professor, Epilepsy Center  
NYU Langone Health  
New York City, NY

## **Eric J. Wang, MD**

Program Director, Multidisciplinary Pain Medicine Fellowship  
Director, Pain Treatment Center, Johns Hopkins Bayview  
Medical Center  
Assistant Professor, Anesthesiology and Critical Care Medicine  
Johns Hopkins University School of Medicine  
Baltimore, Maryland

# Agenda

## **DAY ONE | Wednesday, November 8**

10:00 a.m. **Registration Open and Visit the Exhibits**

12:00 p.m. **Opening Remarks**  
Gary Kaplan, DO, DABFM, DABPM, FAAMA

12:15 p.m. **Epidemiology: How Big is the Problem?  
Immune Dysregulation Secondary to Infections as a Cause of  
Chronic Disease. From Symptoms to a New Pathophysiologic  
Understanding of Chronic Illness**  
Gary Kaplan, DO, DABFM, DABPM, FAAMA

1:00 p.m. **Acute and Chronic Neurological Disorders in COVID-19:  
Potential Mechanisms of Disease**  
Avindra Nath, MD

1:45 p.m. **NIH Data / Myalgic Encephalomyelitis/Chronic Fatigue  
Syndrome (ME/CFS) Data**  
Avindra Nath, MD

2:30 p.m. **The Enterovirus Theory of Disease Etiology in Myalgic  
Encephalomyelitis/Chronic Fatigue Syndrome:  
A Critical Review**  
Maureen R. Hanson, PhD, BS

3:15 p.m.

3:45 p.m.

4:30 p.m.

5:15 p.m.

6:00 p.m.

6:10 p.m.

6:15 p.m.

**Afternoon Break and Visit the Exhibits and Patient Vignettes**

**Long Covid and Long Lyme: Mental Health Implications**  
Brian A. Fallon, MD

**The Neuroimmunology of Social Stress Induced Sensitization**  
Jonathan Godbout, PhD

**PANS: Update on Our Understanding of Inflammation  
Characteristics, Clinical Course, and Comorbidities**  
Jennifer Frankovich, MD

**Day One Closing Remarks**  
Gary Kaplan, DO, DABFM, DABPM, FAAMA

**Adjourn**

### **Welcome Reception**

**Please join us Wednesday, November 8 at 6:15 p.m. for the  
Welcome Reception with Exhibitors.**

Enjoy festive hors d'oeuvres and drinks while interacting with  
exhibitors. Maximize your opportunity for meeting valuable new  
contacts and networking with colleagues

# Agenda

## DAY TWO | Thursday, November 9

|            |  |           |   |
|------------|--|-----------|---|
| 7:00 a.m.  | <b>Registration and Breakfast and Visit the Exhibits</b>   | 1:30 p.m. | <b>Diagnosis and Treatment of Chronic Inflammatory Conditions including Long COVID and ME-CFS</b><br>Bruce K. Patterson, MD   |
| 7:50 a.m.  | <b>Day Two Welcome Remarks</b><br>Craig D. Shimasaki, PhD, MBA   |           |   |
| 8:00 a.m.  | <b>Chronic Pain and Infection: Mechanisms, Causes, Conditions, Treatments, and Controversies</b><br>Eric J. Wang, MD | 2:15 p.m. | <b>Modulation of the Acquired Immune System \ Autoimmune Therapy Stem Cells Topic</b><br>Moviglia A. Gustavo, MD, PhD         |
| 8:45 a.m.  | <b>The Autoimmune Aetiology of Unexplained Chronic Pain</b><br>Andreas Goebel, PhD                                   | 3:00 p.m. | <b>Afternoon Break and Visit the Exhibits and Patient Vignettes</b>   |
| 9:30 a.m.  | <b>The Brain and Gut Connection: More Impactful Than You Think</b><br>Kyle Landry, BS, MS, PhD                       | 3:30 p.m. | <b>Molecular Mimicry: The Infection Connection to the Immune System and Chronic Disorders</b><br>Craig D. Shimasaki, PhD, MBA |
| 10:15 a.m. | <b>Morning Break and Visit the Exhibits and Patient Vignettes</b>  | 4:15 p.m. | <b>The Axis of Infectious Immune as a Player in Neuro Immune Disease</b><br>Isaac Melamed, MD                                 |
| 10:45 a.m. | <b>Current and Practical Techniques to Support the Gut Microbiome</b><br>Kyle Landry, BS, MS, PhD                    | 5:00 p.m. | <b>Autoimmunity and Epilepsy</b><br>Claude Steriade, MD, CM   |
| 11:30 a.m. | <b>Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS)</b><br>Ronald W. Davis, PhD                           | 5:50 p.m. | <b>Day Two Closing Remarks</b><br>Craig D. Shimasaki, PhD, MBA  |
| 12:15 p.m. | <b>Lunch and Visit the Exhibits</b>  | 5:50 p.m. | <b>Adjourn</b>  |

# Agenda

## DAY THREE | Friday, November 10

|            |   |            |  |
|------------|---|------------|--|
| 7:00 a.m.  | Registration and Breakfast and Visit the Exhibits   | 12:15 p.m. | Denied Due to Lack of Medical Necessity: Preventing & Responding to Insurance Denials for PANS/PANDAS Treatments<br>Elizabeth P. Irias, LMFT                     |
| 7:50 a.m.  | Day Three Welcome Remarks<br>Gary Kaplan, DO, DABFM, DABPM, FAAMA   |            |  |
| 8:00 a.m.  | The Clinical Significance of Metabolic Immune Interactions: Implication for Treatment<br>Richard E. Frye, PhD, MD | 1:00 p.m.  | Panel: Treatment<br>Moderator: Gary Kaplan, DO, DABFM, DABPM, FAAMA<br>Panelists: Isaac Melamed, MD; M. Elizabeth Latimer, MD                                    |
| 8:45 a.m.  | Rituximab Treatment of PANS/PANDAS<br>M. Elizabeth Latimer, MD  | 1:45 p.m.  | Panel: Post Treatment Lyme-PANS/PANDAS<br>Moderator: Craig D. Shimasaki, PhD, MBA<br>Panelists: Brian A. Fallon, MD; Jennifer Frankovich, MD; Cherie Marvel, PhD |
| 9:30 a.m.  | Long Lyme: Opportunities for Prevention and Treatment<br>Kim Lewis, PhD, BSc                                      | 2:30 p.m.  | Closing Remarks<br>Gary Kaplan, DO, DABFM, DABPM, FAAMA; Craig D. Shimasaki, PhD, MBA  |
| 10:15 a.m. | Brain Changes and Clinical Outcome Correlates in Post-Treatment Lyme Disease<br>Cherie Marvel, PhD                | 2:35 p.m.  | Adjourn  |
| 11:00 a.m. | Nutritional Supplements for Immune and Mitochondrial Dysfunction<br>Sandra Kaufman, MD                            |            |  |
| 11:45 a.m. | Afternoon Break and Visit the Exhibits and Patient Vignettes  |            |  |



# Registration Information

| REGISTRATION TYPE          | <b>LIVE</b><br>Early Bird<br>Through August 4 | <b>VIRTUAL</b><br>Early Bird<br>Through August 4 | <b>LIVE</b><br>Advance Rate<br>August 5 – November 2 | <b>VIRTUAL</b><br>Advance Rate<br>August 5 – November 2 | <b>LIVE</b><br>Conference<br>November 8 – 10 | <b>VIRTUAL</b><br>Conference<br>November 8 – 10 |
|----------------------------|---|--|--|---|--|---|
| Physician                  | \$695   | \$695  | \$795  | \$795   | \$895  | \$895   |
| Resident or Fellow         | \$595   | \$595  | \$695  | \$695   | \$795  | \$795   |
| Physician Assistant        | \$595   | \$595  | \$695  | \$695   | \$795  | \$795   |
| Nurse Practitioner         | \$595   | \$595  | \$695  | \$695   | \$795  | \$795   |
| Nurse                      | \$595   | \$595  | \$695  | \$695   | \$795  | \$795   |
| Allied Health Professional | \$595   | \$595  | \$695  | \$695   | \$795  | \$795   |
| Medical Student            | \$350   | \$350  | \$450  | \$450   | \$550  | \$550   |
| Industry Professional      | \$750   | \$750  | \$850  | \$850   | \$950  | \$950   |
| Patient                    | –   | \$195  | –  | \$295   | –  | \$395   |

## Online Registration Preferred

Please visit [CE.MedStarHealth.org/NDUCI2023](https://CE.MedStarHealth.org/NDUCI2023) for updated program and registration information. We are unable to accept registrations or cancellations by telephone.

## Cancellation Policy

Cancellations made in writing by September 25 will be subject to a 50% penalty. No refunds will be given after September 25. Cancellations will not be accepted by telephone. In the unlikely event that the course is canceled, MedStar Health will refund the registration fee, but is not responsible for any travel costs.

# Venue Information

## Marriott Marquis

901 Massachusetts Ave NW  
Washington, D.C.  
(202) 824-9200

**Room Block:** Stay onsite to reduce your commute time! Reserve your room at the Marriott Marquis to receive a discounted room rate.

**Visit:** <https://book.passkey.com/go/ChronicIllnessesConference>

**Room Rate:** \$329 plus tax  
Reserve by October 27, 2023



## Registration Information

Information will be emailed closer to the conference date with login instructions. This will be sent to the email address you registered with.

If you need to change your registration from virtual to live, or live to virtual, changes must be submitted by email by September 25. No changes will be accepted after that date.

Patient registration is ONLY for the virtual option. If you register for the live conference, you will be contacted with updates to your registration.

All registrations will be confirmed by email only. If you have questions or do not receive a confirmation within 1-2 business days, please contact us at [MedStarCPE@MedStar.net](mailto:MedStarCPE@MedStar.net) or (833) 731-1273.

## Special Assistance

MedStar Health wishes to ensure that no individual with a disability is excluded, denied services, segregated or otherwise treated differently from other individuals because of the absence of auxiliary aids or services identified in the Americans with Disabilities Act. Please contact (833) 731-1273 to notify us of your needs.

**For grant information please contact Ada Guo at [ada.guo@medstar.net](mailto:ada.guo@medstar.net)**  
**For exhibit support information please contact Elizabeth Romano at [elizabeth.s.romano@medstar.net](mailto:elizabeth.s.romano@medstar.net)**

For more information and to register, visit [MedStarHealth.org/NDUCI2023](https://MedStarHealth.org/NDUCI2023)