

COURSE FOR CLINICIAN-SCIENTISTS



**RESEARCH
CAREERS
REIMAGINED
(RCR)**

Saturday, September 14, 2024 | Hilton Orlando | Orlando, FL

**This program is made possible by the generous support of Wiley,
publisher of the American Neurological Association's journals
Annals of Neurology and *Annals of Clinical and Translational Neurology*.**



**AMERICAN
NEUROLOGICAL
ASSOCIATION™**
INNOVATORS IN DISCOVERY,
EDUCATION, AND CARE

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ABOUT THE ANA

As the global burden of neurological disorders continues to grow, a diverse community of physician-scientists are pushing the limits of neuroscience research to combat disease and bring novel treatments to people worldwide. The ANA is the professional ally of physicians and researchers who strive to make a difference through careers that combine neurological discovery, education, and clinical care.

From advances in stroke and dementia to movement disorders and epilepsy, members of the American Neurological Association are at the forefront of research and practice devoted to understanding neurological health and treating diseases of the nervous system. As the premier professional society of academic neurologists and neuroscientists since 1875, the ANA continues to set the standard for research and practice through its popular Annual Meeting, the highly ranked journals *Annals of Neurology* and *Annals of Clinical and Translational Neurology (ACTN)*, and through advocacy for national policies that serve the best interest of researchers, practitioners, and patients.

MISSION

Advancing science, education, and careers to improve neurologic health for all.

VISION

A world without neurological disease.

GUIDING PRINCIPLES

The ANA is a community of academic neurologists and neuroscientists dedicated to promoting brain health. Our work is guided by the following principles:

- Integrity in our professional work and communications
- Excellence across all programs and publications
- Community growth and cohesion
- Expanding diversity and ensuring inclusion
- Promoting innovation and discovery

BENEFITS OF MEMBERSHIP

The Annual Meeting, held in the fall, is the premier conference for late-breaking research and networking in academic neurology. The meeting convenes thousands of the nation's top academic neurologists and neuroscientists to share research on a broad spectrum of specialties and diseases. From carefully created scientific symposia, well-attended interactive lunch workshops, poster sessions, and professional development programs with practical tips on applying for grants, the Annual Meeting offers a wealth of opportunities for fellows, residents, graduate students, and postdocs. ANA members receive discounts on registration and early career poster presenters are eligible for travel and poster awards.

Highly ranked professional journals. The ANA's scientific journals, [Annals of Neurology](#) and the online [Annals of Clinical and Translational Neurology](#) (ACTN) both consistently receive high-ranking impact factors. All members receive complimentary access to these journals, as well as discounted rates for submitting research to ACTN. In addition, ANA and Wiley continue to publish InterACTN—online patient cases to sharpen your clinical skills through expert feedback. ANA fellow members will be guaranteed an external review of one manuscript per year submitted to [Annals of Neurology](#)!

OnDEC, the ANA's On Demand Education Center. OnDEC allows you to earn **AMA PRA Category I Credit(s)**[™] anywhere, from any device by giving you access to recordings from the ANA Annual Meeting and other ANA educational offerings.

Career guidance. Professional development programs at the Annual Meeting help neurologists at all career levels connect and excel.

Scholarships. The ANA established the [International Outreach Travel Scholarship \(IOTS\)](#) in recognition of the shared goal among neurologists worldwide to reduce the burden of neurological disease through research, education, clinical care, and advocacy. The IOTS is awarded to two (2) ANA members and provides the recipients with the opportunity to work in low-and middle-income countries (LMICs) in the upcoming academic year.

Awards. Members are eligible for ANA awards recognizing outstanding work in academic neurology, including the [Derek Denny-Brown Young Neurological Scholar Award](#), the [Distinguished Neurology Teacher Award](#), [The Grass Foundation - ANA Award in Neuroscience](#), and the [Wolfe Research Prize for Identifying New Causes or Novel Treatment of Neuropathy and Related Disorders](#), [The Audrey S. Penn Lectureship Award](#), [The ANA-Persyst Professional Development Award](#), [ANA IDEAS Early Career Member Award](#)

ANA Communications. Members receive a monthly newsletter that features messages from the ANA president, research highlights from ANA’s peer-reviewed journals, and the latest ANA news and opportunities. The ANA’s social media channels keep followers up to date on the latest news in academic neurology and neuroscience and the ANA.

The [ANA Career Center](#) makes it simple to find open positions in academic neurology at prominent institutions across the country. With dozens of job postings ranging from entry-level to department chair, the ANA Career Center will help you advance in the field.

ANA Investigates: A Podcast Series. Each month, during these 15–20-minute episodes, we’ll delve into topics such as implicit bias in the workplace & patient care, designing and implementing a global teleneurology program, unbiased metagenomic next-generation sequencing for the diagnosis of CNS infection / inflammatory conditions, neurovirology, functional neuroimaging of functional movement disorders, and more! You can subscribe to the podcast on Apple, Google, Spotify, or listen right here on MyANA

ANA Highlights: Bite Size Learning program provides ANA members the opportunity to claim **AMA PRA Category 1 Credits™** for eligible modules.

Members can claim for **AMA PRA Category 1 Credits™** for eligible episodes

RESIDENT AND EARLY CAREER RESOURCES

It is the goal of the American Neurological Association (ANA) to provide a comprehensive collection of career development resources, mentoring, job opportunities and membership to academic neurologists and neuroscientists at all career stages including medical students, residents, junior and senior faculty. We strongly encourage you to visit the ANA website at www.myana.org for more information.

[Learn more](#) about membership to the ANA or [join](#) today.

CME Information

The American Neurological Association is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The American Neurological Association designates this live activity for a maximum of **7 AMA PRA Category 1 Credit(s)TM**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Please visit the meeting website for detailed CME information and instructions:
<https://2024.myana.org/research-careers-reimagined-rcr-course>

2024 Research Careers Reimagined (RCR) Course Agenda

All times are EDT

SATURDAY, SEPTEMBER 14, 2024

Course Moderators:

Laura J. Balcer, MD, MSCE, FANA, RCR 2024 Director; Professor of Neurology, Population Health and Ophthalmology; Vice Chair, Neurology, New York University Grossman School of Medicine, New York, NY

Craig D. Blackstone, MD, PhD, FANA, RCR 2024 Co-Director; Professor of Neurology, Harvard Medical School; Chief, Movement Disorders Division, Massachusetts General Hospital, Boston, MA

8:00 AM – 8:10 AM

Welcome and Introduction

8:10 AM – 8:35 AM

Early Strategies for Establishing Commitment to Research in Your Career

Justin C. McArthur, MBBS, MPH, FAAN, FANA, Director, Department of Neurology; Professor of Neurology, Johns Hopkins University School of Medicine, Baltimore, MD

8:35 AM – 9:00 AM

Perspective: Research Careers Reimagined, Updated for 2024

M. Elizabeth Ross, MD, PhD, FANA, Nathan E. Cumming Professor of Neurology and Neuroscience; Chair, Neuroscience Graduate Program; Director, Center for Neurogenetics, Weill Cornell Medicine, Feil Family Brain & Mind Research Institute, New York, NY

9:00 AM – 9:25 AM

Accessing NIH Funding to Advance Treatments for Neurological Disorders

Walter J. Koroshetz, MD, FANA, Director, National Institute of Neurological Disorders and Stroke (NINDS), National Institutes of Health (NIH), Bethesda, MD

9:25 AM – 9:50 AM

Flexibility and Mentoring in Early Career Research: Navigating Promotion Pathways and Doing What You Enjoy Most

Craig D. Blackstone, MD, PhD, RCR 2024 Co-Director; Professor of Neurology, Harvard Medical School; Chief, Movement Disorders Division, Massachusetts General Hospital, Boston, MA

9:50 AM – 10:15 AM

Starting and Developing a Successful Career as A Clinical Trialist: Art and Science Behind Investigator- and Industry-Initiated Studies

Brian L. Edlow, MD, Neurocritical Care Faculty, Massachusetts General Hospital; Director, Laboratory for Neuroimaging of Coma and Consciousness (NICC); Associate Director, Center for Neurotechnology and Neurorecovery (CNTR); Affiliated Faculty, Athinoula A. Martinos Center for Biomedical Imaging; Associate Professor of Neurology, Harvard Medical School, Boston, MA

10:15 AM – 10:35 AM

Panel Discussion and Q&A

10:35 AM – 11:00 AM

Coffee Break and Networking

11:00 AM – 11:25 AM

Life and Investigation in Industry – NO CME CREDITS OFFERED

Katherine Dawson, MD, Senior Vice President, Therapeutics Development Unit; Chair, Biogen, Cambridge, MA

11:25 AM – 11:45 AM

Discussion and Q&A

11:45 AM – 12:30 PM

Networking Lunch

12:30 PM – 12:55 PM

Seeing the Big Picture: From Seeking Your First Job to Becoming a Leader in Academic Neurology

David M. Greer, MD, MA, FANA, Professor and Chair, Department of Neurology, Boston University School of Medicine; Richard B. Slifka Chief of Neurology at Boston Medical Center, Boston, MA

12:55 PM – 1:20 PM

CTSI and Other Sources of Institutional Funding and Technological Support

Anthony S. Kim, MD, MAS, FANA, Associate Professor of Neurology, UCSF Weill Institute for Neurosciences; Medical Director, UCSF Stroke Center; Director, Biostatistics & Study Design, CTSI, University of California, San Francisco

1:20 PM – 1:45 PM

Global Neurology Research Careers in Academic Medicine

Omar K. Siddiqi, MD, Director, Global Neurology Program, Department of Neurology, Center for Virology and Vaccine Research, Department of Internal Medicine, Beth Israel Deaconess Medical Center; Associate Professor of Neurology, Harvard Medical School; Visiting Lecturer, University of Zambia School of Medicine

1:45 PM – 2:05 PM

Panel Discussion and Q&A

2:05 PM – 2:30 PM

Coffee Break and Networking

2:30 PM – 2:55 PM

Ask the Editor-in-Chief! Answers and Advice on Publishing

Kenneth L. Tyler, MD, FANA, Editor-in-Chief, Annals of Neurology; Louise Baum Endowed Chair of Neurology; Chair, Department of Neurology, University of Colorado, Anschutz Medical Campus, Denver, CO

2:55 PM – 3:20 PM

Generative Artificial Intelligence (AI) in Research, Scientific Writing and Academic Publishing

Tim Requarth, PhD (Neuroscience), Lecturer in Science & Writing, New York University, New York, NY

3:20 PM – 3:45 PM

Getting Your Publications, Projects and Collaborations Out There: Style Points for Social Media

Kelly Sloane, MD, MS, Assistant Professor of Neurology at the Pennsylvania Hospital; Assistant Professor of Neurology in Physical Medicine & Rehabilitation, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA

3:45 PM – 4:05 PM

Panel Discussion and Q&A

4:05 PM

Closing Remarks and Adjourn

SPEAKER BIOGRAPHIES

Laura Balcer, MD, MSCE, FANA

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Laura J. Balcer, MD, MSCE, is a neurologist and epidemiologist at the NYU School of Medicine. Dr. Balcer and her colleagues, Drs. Steven Galetta and Philip K. Moskowitz Professor and Chair of Neurology, lead national collaborative clinical and research efforts in the neuro-ophthalmology of multiple sclerosis (MS) and concussion. One important central theme to the team's research program has been the mentoring of trainees at all levels, with nearly all achieving publication and presentation of their resulting work. During the past 20 years, Dr. Balcer has served as a primary mentor for greater than 80 trainees, many of whom have received awards for their projects and presentations. At NYU, Dr. Balcer leads the faculty mentoring program, the Neurology Department's K-Club (for current and future K- awardees), and the Patient-Oriented Research Curriculum for residents.

Craig Blackstone, MD, PhD

Massachusetts General Hospital, Harvard Medical School

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Craig Blackstone is Chief of the Movement Disorders Division at Massachusetts General Hospital and Professor of Neurology at Harvard Medical School, where his research group investigates the cellular and molecular mechanisms underlying hereditary movement disorders. Previously, he was a Senior Investigator in the Intramural Research Program of the National Institute of Neurological Disorders and Stroke for nearly two decades. He is an elected member of the American Society for Clinical Investigation, Association of American Physicians, and National Academy of Medicine as well as an elected Fellow and former Vice President of the American Neurological Association (ANA). He has held numerous other leadership positions in the ANA, including on its Executive Council, Education Innovation Committee, Nominations Committee, Professional Development Committee, Translational and Clinical Research Course Committee, and Web Governance Committee.

Katherine Dawson, MD

Biogen Foundation

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Katherine Dawson MD is Senior Vice President, Therapeutics Development Unit, leading development efforts for Biogen's emerging disease focus areas. She has over 20 years of experience developing therapies for neurologic disorders at Biogen and has served on the Research and Development Leadership team and the Medical Leadership team in multiple roles. Dr. Dawson has also served on the Biogen Foundation Board since 2016 and is a member of the National Academy of Sciences, Engineering and Medicine's Forum on Drug Discovery, Development and Translation. She is a neurologist who completed residency and fellowship at Massachusetts General Hospital and was an Attending Physician in the Neuromuscular Diagnostic Center.

Brian Edlow, MD

Massachusetts General Hospital

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Dr. Edlow is a critical care neurologist at Massachusetts General Hospital, where he is Associate Professor of Neurology, Co-Director of Mass General Neuroscience, and Associate Director of the Center for Neurotechnology and Neurorecovery. Dr. Edlow's research focuses on the development of advanced neurotechnologies to detect, predict and promote recovery from traumatic brain injury. He is the recipient of the 2019 NIH Director's New Innovator Award, the 2022 ANA Derek Denny-Brown Young Neurological Scholar Award, and the 2023 Chen Institute MGH Research Scholar Award. Dr. Edlow serves on the Scientific Advisory Board of the Neurocritical Care Society's Curing Coma Campaign, the Editorial Board of the Journal of Neurotrauma, and is Co-Chair of the NINDS Common Data Elements Project on Disorders of Consciousness. He is also the Principal Investigator of the DOD-funded ReBlast study, which aims to identify diagnostic biomarkers of brain injury from repeated blast exposure in United States Special Operations Forces.

David Greer, MD, MA, FANA

Boston University School of Medicine

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Dr. David Greer is Professor and Chair of the Department of Neurology at Boston University School of Medicine and the Richard B. Slifka Chief of Neurology at Boston Medical Center. He has been a neurointensivist since 2001, having trained at Massachusetts General Hospital, where he began his career. He was then Vice Chair at Yale from 2010-17, before joining Boston University and Boston Medical Center in 2017.



Dr. Greer has been editor-in-chief of Seminars in Neurology since 2013 and was the inaugural editor-in-chief for Neurocritical Care on Call. He has authored more than 350 peer-reviewed manuscripts, reviews, chapters, guidelines and books. He helped create the NCS Brain Death Toolkit and has previously served the Neurocritical Care Society on both the Board of Directors and the Executive Committee and is the current Treasurer for NCS.

His research interests include predicting recovery from coma after cardiac arrest, brain death, and multiple stroke-related topics, including acute stroke treatment, temperature modulation and stroke prevention. He is the co-PI for the INTREPID study, evaluating fever prevention for acute vascular brain injury, and is an R01-funded investigator evaluating multi-modality imaging and EEG for assessing neuroprognosis after cardiac arrest. He was the lead author for the World Brain Death Project, and the lead author for the 2023 AAN Practice Parameters in Brain Death.

Dr. Greer's greatest passion is in education in mentorship. In 2022, he received the prestigious A.B. Baker Lifetime Achievement Award for Neurological Education from the American Academy of Neurology. He has mentored innumerable students, residents, fellows and faculty, and considers himself a "lifelong mentor" for anyone and everyone he takes under his wing.

Anthony Kim, MD, MAS, FANA

University of California, San Francisco

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Dr. Kim is an associate professor of neurology at the University of California, San Francisco (UCSF) where he is the Erich Fried Endowed Professor of Vascular Neuroscience. He leads ongoing quality improvement and clinical innovation efforts as medical director of the UCSF Comprehensive Stroke Center and is Director of Consultation Services for the UCSF Clinical and Translational Science Institute.

Walter Koroshetz, MD, FANA

National Institute of Neurological Disorders and Stroke

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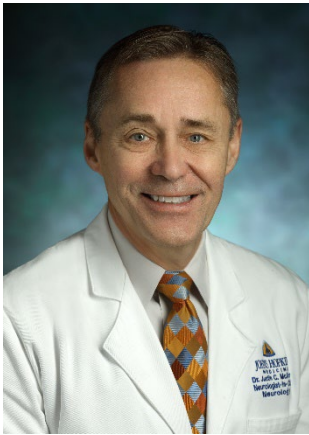
Walter Koroshetz is the Director of the National Institute of Neurological Disorders and Stroke (NINDS). He works to advance the mission of the Institute, to improve fundamental knowledge about the brain and the nervous system, and to use that knowledge to reduce the burden of neurological disorders. He joined NINDS as the Deputy Director in 2007. Before coming to NIH Dr. Koroshetz was a Harvard Professor of Neurology, Vice Chair of Neurology at the Massachusetts General Hospital, director of Stroke and Neurointensive Care, and a member of the MGH Movement Disorders clinic. His research activities spanned basic neurobiology to clinical trials. He directed Neurology training at MGH for 16 years. A graduate of Georgetown University and University of Chicago Medical School Dr. Koroshetz specialized in Internal Medicine and Neurology.

Justin Charles McArthur, MBBS, MPH, FAAN, FANA

Johns Hopkins University School of Medicine

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Dr. Justin McArthur received his medical degree from Guys Hospital Medical School at the University of London. He then completed an internship and residency in Internal Medicine at The Johns Hopkins Hospital. Dr. McArthur stayed at Johns Hopkins to complete a second residency in Neurology and to achieve a master's degree in public health.



Now a Professor of Neurology, Pathology, Medicine and Epidemiology, Dr. McArthur has become nationally and internationally recognized for his work in the epidemiology and treatment of HIV infection, multiple sclerosis, and other neurological infections and immune-mediated neurological disorders. He has been instrumental in the design and conduct of numerous clinical trials for these disorders. With the late Jack Griffin, he developed a clinically validated technique to use cutaneous nerves to study sensory neuropathies, including those associated with chemotherapy, HIV infection, and diabetes mellitus. He was the recipient of the Department of Medicine Osler House-staff Award in recognition of outstanding contributions to House staff teaching for four years, and then the JHU Professor's Award for Distinction in Teaching in the Clinical Sciences. In 2013 he received the Mitchell Max award for neuropathic pain from the American Academy of Neurology. He received an endowed chair in Jack Griffin's name in 2016 and was inducted into the Association of American Physicians in 2016. He is currently President-elect of the American Neurological Association.

Tim Requarth, PhD

New York University Grossman School of Medicine

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As a lecturer in science and writing, Tim Requarth, PhD. Opens in a new tab, develops core science and science communication curricula for students enrolled in PhD and MD/PhD programs at Vilcek Institute of Graduate Biomedical Sciences.



Dr. Requarth received a PhD in neuroscience from Columbia University and has since worked as a science journalist, an academic writing consultant, and an instructor at Columbia University and NYU. As an academic writing consultant, Tim has worked with students, postdoctoral fellows, and faculty at Columbia University, University College London, the Santa Fe Institute, and others. His scientific work has been published in *Neuron* and *Journal of Neuroscience*, and his journalism has appeared in publications such as *The New York Times*, *Newsweek*, *The Nation*, *Slate*, *Foreign Policy*, *The New Republic*, *Science*, and *Scientific American*. For nine years, he directed the NeuWrite science writing workshops. Opens in a new tab for scientists and writers.

M. Elizabeth Ross, MD, PhD, FANA

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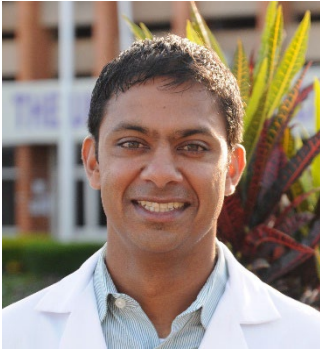


M. Elizabeth Ross, MD, PhD, FANA, is the Nathan Cummings Professor of Neurology and Neuroscience. She Directs the Center for Neurogenetics (CNG) and Chairs the Neuroscience Graduate Program at Weill Cornell Medicine (WCM). The CNG in the Brain and Mind Research Institute at WCM supports research into the genetic causes of neurological disorders in children and adults. The Center has both basic science and clinical arms, evaluating patients with neurological disorders due to a single gene mutation or requiring multi-gene interactions to manifest. The CNG operates a patient DNA and cell biobank that supports translational research across the neurological community at Weill Cornell. Neuroscientist faculty in the Center investigate the mechanisms underlying pathogenesis of brain diseases. Her own research group, the Laboratory of Neurogenetics and Development, focuses on gene mutations associated with structural malformations of CNS, developmental disorders and neurodegeneration. Major themes encompass: complex genetics of spina bifida; cell cycle regulation and its role in growth and cellular patterning of brain; and regulation of neuronal movement, connectivity, and synapse dynamics critical to the function of developing and aging brain. These three areas of study are approached using biochemical, cell biological, human stem cell and mouse genetic tools, coupled with clinical genetics, to pursue how sequence variation-in one or multiple genes together-causes impaired brain function. Her current national service includes as an editorial board member of *Annals of Neurology* and *Neurology Genetics*, Chair of the NIH-CHHD-C study section, and President of the American Neurological Association.

Omar Siddiqi, MD

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Dr. Omar Siddiqi is an Associate Professor of Neurology at Beth Israel Deaconess Medical Center, Harvard Medical School. He was based full-time at the University of Zambia School of Medicine from 2010–2021 where he continues to hold an appointment as Visiting Lecturer. Dr. Siddiqi's laboratory has been involved in research to understand the disease burden of central nervous system opportunistic infections in HIV-infected Zambian adults. His laboratory uses molecular diagnostics and post-mortem tissue samples to classify the etiology of meningitis and encephalitis in the adult population and more recently in pediatrics. He is one of the founding members of the Zambia Institute of Neurological Care, Research, and Education (ZINCARE).

Kelly Sloane, MD, MS

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Dr. Kelly Sloane is an Assistant Professor of Neurology and Assistant Professor of Physical Medicine and Rehabilitation at the University of Pennsylvania. She received her B.A. in Classics at the University of Pennsylvania. She received her M.D. from Johns Hopkins School of Medicine and went on to complete her residency in Neurology at Johns Hopkins Hospital. After residency, she earned fellowships in Vascular Neurology at Massachusetts General Hospital/Brigham and Women's Hospital as well as Neurorecovery at Mass General/Spaulding Rehabilitation Hospital.

Dr. Sloane's clinical and research interests include post-stroke cognitive impairment with a particular focus on recovery. Her research involves the use of neuromodulation to understand and ameliorate neuroplastic changes after brain injury.

Kenneth L. Tyler, MD, FANA

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Dr. Tyler received his B.A. from Harvard University and M.D. from Johns Hopkins. He trained in internal medicine at the Brigham and in Neurology at MGH, followed by postdoctoral fellowship in Microbiology & Molecular Genetics with Dr. Bernard Fields at Harvard Medical School. He joined the University of Colorado School of Medicine in 1991, becoming Chair of the Neurology Department in 2009, and is the Louise Baum Endowed Chair of Neurology and Professor of Medicine and Immunology-Microbiology. Dr. Tyler is a member of the Association of American Physicians, the American Society for Clinical Investigation, and a Fellow of the American Association for the Advancement of Science, American Academy of Neurology (AAN), American Neurological Association (ANA), Infectious Disease Society of America (IDSA), and the American Society of Microbiology (ASM). He is a past Vice-President and Treasurer of the ANA and has served as a Director of the AAN, the Association of University Professors of Neurology (AUPN), and the international Society for Neurovirology (ISNV). He is a past Chair of the NIH's Clinical Neuroimmunology & Brain Tumors (CNBT) Study Section and several NIH Special Emphasis Panels. Dr. Tyler is the current Editor-in-Chief of *Annals of Neurology* and an Associate Editor of the *Journal of Neurovirology*. He has served on the Editorial Boards of *Neurology*, *JAMA Neurology*, *Experimental Neurology*, *Virology*, *Journal of Virology*, *Journal of Infectious Disease*, *Apoptosis and Microbial Pathogenesis*. Dr. Tyler is an internationally recognized authority in the area of infections of the nervous system. He has made seminal contributions to understanding the pathogenesis and clinical features of viral infections of the Central Nervous System (CNS). His contributions include identifying viral genes involved in determining pathways of viral spread to the CNS, characterizing the role of defined components of the host's immune response in the protection against CNS infection and identifying key cellular pathways involved in mediating virus-induced neural cell death, and developing novel animal models to study CNS viral infections, including those caused by West Nile and EV-D68. In over 200 peer-reviewed papers and 130 reviews and book chapters he has also made key contributions of our understanding of the neurology of infections caused by herpes simplex virus, JC virus, West Nile virus, Enteroviruses and most recently SARS-CoV-2.