

# LYME AND TICK-BORNE DISEASE SUMMIT

State University of New York Upstate Medical University  
Central New York Lyme and Tick-Borne Disease Alliance  
September 28<sup>th</sup> & 29<sup>th</sup>, 2023

Upstate Biotech Accelerator, 841 E Fayette St, Syracuse, NY 13210

#lymesummit23



**Provided by SUNY Upstate Medical University Office of Continuing Medical Education**

**TARGET AUDIENCE:** Healthcare practitioners in CNY

**GOALS AND OBJECTIVES:**

Following this activity, learners will be able to...

- Increase awareness of medical providers regarding risk factors and epidemiological patterns of tick-borne diseases in the region
- Increase the competence of medical providers to recognize and diagnose Lyme and tick-borne diseases
- Increase the competence of medical providers to treat Lyme and tick-borne diseases

**SPEAKERS:** Katie Anderson, MD PhD, Nathaniel Cady, PhD, Scott Commins, MD, PhD, Dan Cummings, Roberta L. DeBiasi, MD, MS, Monica Embers, PhD, Brian Fallon, MD, MPH, Wes Kufel, PharmD, BCPS, AAHIVP, Brian Leydet, PhD, MPH, Rob Lochhead, PhD, Ryan Maness, JD, Kristopher Paolino, MD, Heidi S. Puc MD, FACP, ABIHM, Royale Scuderi, Adam Siegers, MD, Jaime Soule, RN, LMT, PTA, Saravanan Thangamani, PhD, Virgie Townsend, JD, Jennifer White, MPH

**ACCREDITATION:** This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of SUNY Upstate Medical University and the CNY Lyme & Tick-Borne Disease Alliance. SUNY Upstate Medical University is accredited by the ACCME to provide continuing medical education for physicians.

**CREDIT DESIGNATION:** SUNY Upstate Medical University designates this live activity for a maximum of 11.5 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.



# Lyme and Tick-Borne Disease Summit

September 28, 2023 – September 29, 2023

## *Disclosures*

### ***PLANNERS***

The following have no relevant financial relationships with ineligible companies:

Christina Lupone, MPH  
 Madison Searles, MPH  
 Anne Messenger, BA  
 Royale Scuderi, BS  
 Georgina Pinckney  
 Danielle Cummings  
 Brian Leydet, PhD, MPH

The following have disclosed:

Wesley Kufel, PharmD - *received a Research Grant from Merck & Co.*  
 Saravanan Thangamani, PhD - *received a Research Grant from Pfizer and Vitruviae*  
 Kristopher Paolino, MD - *received a Research Grant from Pfizer*

### ***SPEAKERS***

The following have no relevant financial relationships with ineligible companies:

Nathaniel Cady, PhD  
 Dan Cummings  
 Monica Embers, PhD  
 Brian Fallon, MD, MPH  
 Brian Leydet, PhD, MPH  
 Rob Lochhead, PhD  
 Ryan Maness, JD  
 Adam Seigers, MD  
 Jaimie Soule, RN  
 Jennifer White, MPH

The following have disclosed:

Kathryn Anderson, MD, PhD, MSPH - *is on the data safety monitoring board for AstraZeneca, data adjudication for Clover Pharmaceuticals, advisory board for Emergent Biosolutions.*  
 Roberta DiBiasi, MD - *Pfizer COVID and Lyme vaccine clinical trials*  
 Wesley Kufel, PharmD - *received a Research Grant from Merck & Co.*  
 Saravanan Thangamani, PhD - *received a Research Grant from Pfizer and Vitruviae*  
 Kristopher Paolino, MD - *received a Research Grant from Pfizer*  
 Scott Cummins, MD, PhD - *is on advisory board for Genentech, author received honoraria for Up-to-Date, has received research grant from Revivacor*  
 Heidi Puc, MD, FACP - *receives commission for online supplement sales from Researched Nutritionals, Fullscript, Metagenics, Beyond Balance, and Wholescript*  
 Royale Scuderi, BS - *research support support from Pfizer*  
 Virgie Townsend, JD - *employee at Strategic Communications LLL (not a pharmaceutical), consultant for Nobias Therapeutics, Drakos Dynamics, 6 Degrees PR*

**Mitigation:** All of the relevant financial relationships listed have been mitigated.

**Commercial Support:** No commercial support was received for this activity.

Greetings, attendees!

A warm welcome from the Institute for Global Health and Translational Sciences at SUNY Upstate Medical University and the Central New York Lyme and Tick-Borne Disease Alliance. We are delighted you have joined us for the much anticipated 2023 Lyme and Tick-Borne Disease Summit.

The summit is timely. Tick-borne diseases are a growing threat, and the latest 2008-2018 data are startling:

- Up 439% in Central New York
- Up 970% in the Finger lakes
- Up 817% in the Southern Tier

Bearing in mind the challenges and opportunities accompanying this rise in disease, the objectives of this summit are to:

- 1) Increase awareness of medical providers regarding risk factors and epidemiological patterns of tick-borne diseases in the region.
- 2) Increase the competence of providers to recognize and diagnose Lyme and tick-borne diseases.
- 3) Increase the competence of providers to treat Lyme and tick-borne diseases.

The summit is for individuals who share a strong concern for these matters. We have assembled a diverse group of speakers and participants who approach the issues from various angles, and we anticipate a dynamic and constructive dialogue in what is a complex field. Our aim is to foster a respectful and thoughtful exchange of ideas. Collectively, we have a valuable opportunity to craft a path towards a healthier, safer future as we explore practical solutions that can transform the lives of those grappling daily with life-changing diseases.

We are grateful you are joining us in this important endeavor. Your dedication and commitment to driving awareness and knowledge about Lyme and tick-borne diseases will be a key force behind positive change in Central New York and beyond.

Here's to learning together,

The Summit Planning Committee

Danielle Cummings<sup>1</sup>, Wes Kufel, PharmD, BCPS, AAHIVP<sup>1</sup>, Brian Leydet, PhD, MPH<sup>2</sup>, Tina Lupone, MPH<sup>3</sup>, Anne Messenger<sup>1</sup>, Kristopher Paolino, MD<sup>3</sup>, Georgina Pinckney<sup>1</sup>, Royale Scuderi<sup>1</sup>, Madison Searles, MPH<sup>3</sup>, Saravanan Thangamani, PhD<sup>3</sup>

1. Central New York Lyme and Tick-Borne Disease Alliance
2. State University of New York College of Environmental Science and Forestry
3. State University of New York Upstate Medical University

# Lyme and Tick-Borne Disease Summit

## Thursday, September 28th, 2023

8:00am – 9:00am	<b>Registration, Coffee, Pre-Survey</b> Coffee, tea, water provided
9:00am – 9:05am	<b>Opening Remarks</b> Ryan McMahon, Onondaga County Executive
9:05am - 9:10am	<b>Welcome to the Summit</b> Dan Cummings, Event Moderator
9:10am – 9:25am	<b>IDSA/ILADS Differing Approaches + Lyme Disease Case Presentation</b> Royale Scuderi, CNY Lyme and Tick-Borne Disease Alliance
9:25am – 10:10am	<b>Let's Talk, Tick Ecology and Bite Prevention (Presentation 30 minutes, Q&amp;A 15 minutes)</b> Brian Leydet, PhD, MPH, SUNY College of Environmental Science and Forestry
10:10am – 10:55pm	<b>Powassan Virus: A Tick-Borne Virus of Human Health Concern in the United States (Presentation 30 minutes, Q&amp;A 15 minutes)</b> Saravanan Thangamani, PhD, SUNY Upstate Medical University
10:55pm – 11:10am	<b>Break</b>
11:10am – 11:55am	<b>2023 State of the Ticks—Surveillance and Outreach (Presentation 30 minutes, Q&amp;A 15 minutes)</b> Jennifer White, MPH, New York State Department of Health
11:55am – 12:40pm	<b>Suddenly Meatless—How Tick Bites Are Breaking the Rules of Food Allergy (Presentation 30 minutes, Q&amp;A 15 minutes)</b> Scott Commins, MD, PhD, UNC School of Medicine (via Zoom)
12:40pm – 1:40pm	<b>Lunch at Biotech Accelerator</b> Lunch provided
1:40pm – 2:25pm	<b>Bacterial Persistence and Immune Responses to Infection (Presentation 30 minutes, Q&amp;A 15 minutes)</b> Monica Embers, PhD, Tulane National Primate Research Center
2:25pm – 3:10pm	<b>Long COVID and Long Lyme: Neuropsychiatric Implications (Presentation 30 minutes, Q&amp;A 15 minutes)</b> Brian Fallon, MD, MPH, Columbia University (via Zoom)
3:10pm – 3:55pm	<b>Lyme Disease and Autoimmunity (Presentation 30 minutes, Q&amp;A 15 minutes)</b> Rob Lochhead, PhD, Medical College of Wisconsin
3:55pm – 4:30pm	<b>An Ounce of Prevention...an Update on Lyme Vaccines (Presentation 25 minutes, Q&amp;A 10 minutes)</b> Kristopher Paolino, MD, SUNY Upstate Medical University
4:30pm – 4:40pm	<b>Day One Closing Remarks</b>

**Friday, September 29th, 2023**

- 8:00am – 9:00am      **Coffee at Biotech Accelerator**  
Coffee, tea, water provided
- 9:00am – 9:25am      **Tick borne diseases as a public health priority in Central New York (Presentation 15 minutes, Q&A 10 minutes)**  
Katie Anderson, MD PhD, Onondaga County Health Commissioner
- 9:25am – 10:45am    **Living with Lyme...and More, Please Hear Me — (Patient Panel with Q&A)**  
Dan Cummings, Moderator  
Ryan Maness, JD & Virgie Townsend, JD, Patients  
Adam Siegers, MD & Jaime Soule, RN, LMT, PTA, Patients and Caregivers  
Royale Scuderi, Patient
- 10:45am – 11:00 am    **Break**
- 11:00am – 11:45pm    **Pediatric Lyme Update: Clinical Pearls, Outcomes and Research (Presentation 30 minutes, Q&A 15 minutes)**  
Roberta L. DeBiasi, MD, MS, Children’s National Hospital, Washington DC (via Zoom)
- 11:45pm – 12:25pm    **‘PEP’ to the Step: Comprehensive Evaluation of Tick Bite Post-Exposure Prophylaxis (Presentation 30 minutes, Q&A 10 minutes)**  
Wes Kufel, PharmD, BCPS, AAHIVP, Binghamton University
- 12:25pm – 1:25pm     **Lunch at Biotech Accelerator**  
Lunch provided
- 1:25pm – 2:10pm      **Rapid and Accurate Lyme Disease Diagnosis Using a Plasmonic Biosensing Platform (Presentation 30 minutes, Q&A 15 minutes)**  
Nathaniel Cady, PhD, SUNY Polytechnic Institute
- 2:10pm – 3:10pm      **Oral Lyme Disease Case Study Discussion (60 min)**  
Kris Paolino, MD, SUNY Upstate Institute for Global Health and Translational Sciences  
Heidi S. Puc MD, FACP, ABIHM, Integrative Medicine of Central New York (via Zoom)
- 3:10pm – 3:15pm      **Post-Event Survey/Evaluation**
- 3:15pm – 3:30pm      **Summit Wrap Up**  
Anne Messenger, CNY Lyme and Tick-Borne Disease Alliance

## Summit Speakers



**Katie Anderson, MD, PhD, CTropMed**  
 Commissioner of Health and Associate Professor  
 Onondaga County Health Department  
 andekath@upstate.edu

Kathryn B. Anderson, MD/PhD, is a physician-scientist, an internist and epidemiologist, with 20 years of experience researching emerging infectious diseases. In this capacity, she has worked with the Centers for Disease Control and Prevention, the US Army, and multiple academic institutions. She received her Masters of Science in Public Health, her MD, and her PhD in epidemiology from Emory University and has worked for several years as an internal medicine physician and as a federally-funded researcher conducting community-based research on emerging viral diseases. She moved to Central New York from Minnesota in late 2019 to lead SUNY Upstate's Center for International Research and was quickly pulled into the response to SARS-CoV-2 at the institutional and community level. She began her role as County Health Commissioner in Onondaga County in early November 2022 and is proud to work with the Health Department in tackling diverse health threats such as lead, opioids, health access, and health disparities.



**Nathaniel Cady, PhD**  
 Professor and Interim VP of Research  
 SUNY Polytechnic Institute, College of Nanoscale Science & Engineering  
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Prof. Cady earned his BA and Ph.D. from Cornell University in Ithaca, NY and is currently an Empire Innovation Professor of Nanobioscience and Interim Vice President of Research in the College of Nanoscale Science & Engineering at SUNY Polytechnic Institute. Prof. Cady has active research interests in the development of novel biosensor technologies and biology-inspired nanoelectronics, including novel hardware for neuromorphic computing. He is also the executive director of the SUNY Applied Materials Research Institute (SAMRI) that funds collaborative research efforts between SUNY faculty and industry partner Applied Materials (AMAT).



**Scott P. Commins, MD, PhD**  
 Associate Professor  
 University of North Carolina School of Medicine  
 scommins@email.unc.edu

Dr. Scott Commins joined the faculty of The University of North Carolina at Chapel Hill in 2015 and is currently an Associate Professor of Medicine and Pediatrics. He is a member of the UNC Food Allergy Initiative and the Institute for Global Health and Infectious Diseases. Dr. Commins maintains an active clinical practice and research program related to the alpha-gal mammalian meat allergy syndrome and the human immune response to tick bites.

Dr. Commins received both M.D. & Ph.D. (Biochemistry & Molecular Biology) degrees from the Medical University of South Carolina (Charleston, SC) as part of their Medical Scientist Training Program. Following a residency in Internal Medicine, Scott completed a fellowship in Allergy and Clinical Immunology at The University of Virginia (Charlottesville, VA). Dr. Commins is a member of the American Academy of Allergy, Asthma, and Immunology and was a member of the Congressionally-appointed Tick-Borne Disease Working Group (2018-2020) where he was co-chair of the alpha-gal syndrome and public comment subcommittees.



**Dan Cummings**  
 NewsChannel 9 WSYR-TV Syracuse, Retired  
 dancummings24@icloud.com

After a 45-year career in broadcast news, Dan Cummings retired from NewsChannel 9 (WSYR-TV, ABC) in 2021. In his 37 years at Channel 9, he anchored and reported for every major newscast and hosted Channel 9's public affairs programs "Central Issues" and "Newsmakers."

Dan was born and raised in southern Cayuga County. He holds a bachelor's degree from SUNY Geneseo, a master's degree from Cornell University, and honorary degrees from LeMoyne and Onondaga Community College.





**Roberta L. DeBiasi, MD, MS**

Chief of the Division of Pediatric Infectious Diseases  
Children's National Hospital

Roberta L. DeBiasi, MD, MS is Chief of the Division of Pediatric Infectious Diseases at Children's National Hospital in Washington, DC. She holds appointments as tenured Professor of Pediatrics and Microbiology, Immunology and Tropical Medicine at George Washington University School of Medicine as well as Principal Investigator in the Center for Translational Research within Children's Research Institute.

After graduating Phi Beta Kappa from Boston University, she received her Doctorate in Medicine at the University of Virginia School of Medicine and completed Pediatrics internship and residency at the University of California, Davis Medical Center. She completed her fellowship in Pediatric Infectious Diseases at the University of Colorado/Denver Children's Hospital and served on the faculty for ten years in Denver, prior to joining Children's National/GWU in 2005.

Dr. DeBiasi treats normal and immunocompromised children hospitalized with severe infections at Children's National Hospital. She is designated as a Top Doctor for Northern Virginia and by Washingtonian Magazine. She is Co-Lead of the CNHS Emerging and Highly Contagious Infectious Disease Task Force (including Ebola and COVID-19), the Acute Flaccid Myelitis Task Force, and the CNHS Congenital Infection Program (including Zika virus), interfacing with regional, national and international authorities in these roles.

Dr. DeBiasi's research expertise includes basic science as well as clinical/translational research. She serves as Principal Investigator projects and clinical trials focusing on severe and emerging viral infections, and Lyme Disease. Research awards have included the Infectious Diseases Society of America Young Investigator Award, as well as the John Horsley Prize from UVA She co-leads Zika-focused research in the US and South America in pregnant women and infants. She is the institutional lead of the Lyme Clinical Trials Network, and PI for a study focused on long term outcomes in children with all stages of Lyme Disease. She leads COVID-19 and MIS-C research at Children's National and is Principal Investigator for a 6-year comprehensive follow up study of children with COVID-19 and MIS-C in collaboration with the National Institutes of Health.

Dr. DeBiasi has authored over 100 original peer-reviewed research, review articles, and book chapters. She greatly enjoys teaching and mentoring graduate and medical students, residents, and fellows in the classroom, the hospital wards, and in research. She is also actively engaged in continuing medical education for community physicians, outreach to the community, and educating the public via media appearances on NPR radio, local and national newspaper and television.



**Monica E. Embers, Ph.D.**

Associate Professor Director, Vector-borne Disease Research  
 Tulane National Primate Research Center  
 members@tulane.edu

Monica E. Embers obtained her Ph.D. in the Department of Microbiology and Immunology at the Pennsylvania State University College of Medicine in Hershey, P.A., where she studied immune responses to Papillomaviruses. She made the transition to the study of bacterial pathogenesis when performing her postdoctoral research on the Lyme disease spirochete at the Tulane National Primate Research Center (TNPRC). Dr. Embers is currently an Associate Professor in the Division of Immunology and the Director of Vector-borne Disease Research at the Tulane National Primate Research Center. She also serves as the Director of the Education and Training Program at the TNPRC. Her research program regarding Lyme disease and its infectious cause *Borrelia burgdorferi* specializes in animal models. The research is centered around three major efforts: (1) identifying treatments that can eradicate *B. burgdorferi* infection; (2) detection of persistent Lyme disease spirochetes in human (autopsy) tissues; and (3) immunodiagnostic testing for *B. burgdorferi* infection and cure. By transmitting Lyme disease to mice and nonhuman primates by tick, and studying the natural course of infection, her group aims to attain a better understanding of the clinical quandaries of human Lyme disease, including effective diagnosis and treatment. Due to the many similarities between Bartonellosis and Lyme disease, her team has begun to develop research models for *Bartonella* infection. The goals of *Bartonella* research involve developing improved treatment strategies, understanding the pathophysiology of co-infection, and interrogating tick vector transmission of these pathogens.



**Brian Fallon, MD, MPH**

Director  
 Center for Neuroinflammatory Disorders and Behavioral Medicine and Lyme and Tick-Borne  
 Diseases Research Center  
 baf1@cumc.columbia.edu

Brian Fallon, MD directs the Lyme and Tick-Borne Diseases Research Center at the Columbia University Irving Medical Center in New York City. As a clinician and as a neuropsychiatrist, he has focused on the chronic aspects of Lyme disease, particularly as it affects mood, cognition, and the nervous system. His team at Columbia is currently leading a national clinical trials network to identify better treatments for people with Lyme and other tick-borne diseases.



**Wes Kufel, PharmD, BCPS, AAHIVP**

Clinical Associate Professor  
SUNY Binghamton  
wkufel@binghamton.edu

Wes Kufel completed his Doctor of Pharmacy degree at SUNY Buffalo School of Pharmacy and Pharmaceutical Sciences followed by a PGY1 residency at SUNY Upstate University Hospital in Syracuse, NY, and a PGY2 Infectious Diseases residency at University of North Carolina Medical Center in Chapel Hill, NC. Currently, he is a Clinical Associate Professor in the Department of Pharmacy Practice at Binghamton University School of Pharmacy and Pharmaceutical Sciences in Binghamton, NY. He is also a Clinical Pharmacy Specialist in Infectious Diseases at SUNY Upstate University Hospital, and where he provides clinical services for the antimicrobial stewardship program and the infectious diseases consultation teams. He is also a Clinical Assistant Professor in the Department of Medicine at SUNY Upstate Medical University. His research and practice interests are in the area of antimicrobial stewardship and Lyme disease. He has published more than 50 peer-reviewed publications in the area of infectious diseases. He is also a board member of the CNY Lyme and Tick-Borne Disease Alliance.



**Brian Leydet, PhD, MPH**

Associate Professor  
SUNY College of Environmental Science and Forestry  
bfleydet@esf.edu

Prior to attending college Dr Leydet became a Paramedic and worked as an Ocean Front Lifeguard as well as with various ambulance services and hospitals in Virginia Beach, Va. He holds a Bachelors in Community Health Science from Old Dominion University Norfolk, VA, and a master's degree in Public Health from the University of North Florida, Jacksonville, FL.

Dr Leydet completed his doctoral studies at Louisiana State Universities' School of Veterinary Medicine, Baton Rouge, LA and postdoctoral work at the Trudeau Institute in Saranac Lake, NY and Southern Research in Birmingham, AL. Dr Leydet has spent 15 years studying ticks and the pathogens they transmit. His lab combines extensive fieldwork and laboratory methods to understand ecological drivers of tick-borne disease risk. More recently the lab has expanded its work into the effect the environment has on host health in the aquatic environment. Brian's wife, Karine, holds a PhD in evolutionary biology. They have a 6-year-old son, Lukas, and 2-year-old daughter, Léna. In the little spare time Dr Leydet has he enjoys surfing, snowboarding, fishing as well as trying new wines, beers, and whiskies.



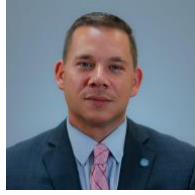
**Robert Lochhead, PhD**  
 Assistant Professor  
 Medical College of Wisconsin  
 rlochhead@mcw.edu

Robert Lochhead has dedicated his scientific career to studying how immune responses to *Borrelia burgdorferi* may lead to chronic inflammation, arthritis, and autoimmunity. He received his PhD training in the Janis Weis Lab at the University of Utah, where he developed several novel animal models to study the role of microRNAs in regulating immune responses to *Borrelia burgdorferi*. After graduation, he joined the Allen Steere Lab at Massachusetts General Hospital and Harvard Medical School, where he conducted translational research on human Lyme arthritis, with an emphasis on identifying bacterial and immune factors that contribute to arthritis and autoimmunity. In 2018, he started his own lab at the Medical College of Wisconsin, where he combines his expertise in mouse models and the human disease to determine the mechanisms of infection-induced autoimmunity. Current lab research focus is on the role of *B. burgdorferi* peptidoglycan and other bacterial products in driving persistent inflammation and autoimmunity, and on identifying both bacterial and autoimmune targets of CD4+ T cell responses in Lyme disease. Outside the lab, Dr. Lochhead enjoys singing with the Milwaukee Symphony Orchestra, gardening with his wife Colleen, and playing dinosaurs with his son Bobby. His research is funded by the National Institutes of Health and the Department of Defense.



**Ryan Maness, JD**  
 Board Member  
 CNY Lyme Alliance  
 ryanlmaness@gmail.com

Ryan Maness is a government relations and public policy professional based out of Arlington, Virginia. In 2017, after seeing that a tick had bitten him on his thigh, Ryan contacted his primary care doctor about how best to remove it and was told to pull it out and that no further medical treatment was necessary. Two weeks later, Ryan was in the hospital with a 105 degree fever and doctors struggled to diagnose the cause. Before finally getting a course of antibiotics, his immune system almost entirely shut down and he needed to stay in a negative pressure room. He fully recovered from his illness, but he has spent the intervening years attempting to ensure that what happened to him doesn't happen to others.



**Ryan McMahon**  
County Executive  
Onondaga County

County Executive J. Ryan McMahon, II is the 4th County Executive. He assumed office on November 2nd, 2018.

Ryan started his career in public service as a Syracuse City Councilor in 2005 after being elected at the age of 25. He was reelected in 2007 for a second term and quickly earned a reputation as a bi-partisan problem solver.

In 2011, County Executive McMahon was elected to the Onondaga County Legislature and was subsequently elected Chairman of the County Legislature in 2012 by his fellow legislators becoming the youngest Chairman in County history. As Chairman, his primary focus was job creation and ensuring good fiscal discipline in the county. Under his leadership, property taxes were brought down to historic lows.

Upon becoming County Executive in 2018, Ryan has placed a focus on three main initiatives: poverty, infrastructure and economic development. A passionate supporter of small and local businesses, the County Executive firmly believes that the best way out of poverty is through a job and career. In his first term, County Executive McMahon has also led the way in securing huge economic successes for our community including JMA Wireless on the South Side of Syracuse, Amazon in the Town of Clay and most recently, the largest economic development project in the history of the United States with Micron.



**Anne Messenger**  
Board Chair  
Central New York Lyme and Tick-Borne Disease Alliance  
[anne@anne-messenger.com](mailto:anne@anne-messenger.com)

Anne Messenger is a recognized career strategist, executive coach and facilitator of leadership groups. Former president of Messenger Associates, a career management and human resource consulting firm, for nearly 20 years, Anne is an active Central New York community leader, board member and winner of numerous business awards. She is a Wellesley College graduate and a Lyme survivor.



**Kristopher Paolino, MD**

Director of Clinical Research

SUNY Institute for Global Health and Translational Sciences

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Dr. Paolino is currently the Director of Clinical Research, Institute for Global Health and Translational Sciences, an assistant professor at Upstate Medical University, a member of the Infectious Disease Society of America, and an American College of Physicians fellow. He leads or participates in all clinical research for the Institute and leads a team of clinical coordinators who assist in the execution of 10-20 clinical studies at any one time. Dr. Paolino's focus and passion are the prevention and treatment of infectious disease and clinical research affords him the opportunity to move the field forward. He has been a leader in the diagnosis and treatment of Lyme and Tick Borne diseases in Central New York since 2016. He has been the local principal investigator for Lyme related diagnostic and vaccine clinical trials, and has recently joined the Columbia University Clinical Trials Network for Lyme and Other Tick-Borne Diseases in an effort to further advance treatments for patients with Lyme and Tick-Borne disease related illnesses.



**Heidi S. Puc MD, FACP, ABIHM**  
 Founder and Physician Owner  
 Integrative Medicine of Central New York  
 info@imofcny.com

Dr. Heidi Puc is the Founder and Physician owner of Integrative Medicine of Central New York, PC (IM of CNY), in Chittenango, NY. Her educational training includes completion of a 7-year combined college and medical school training program, The Sophie Davis School of Biomedical Education at the City College of New York, leading to her MD degree from Mount Sinai School of Medicine in NYC. After an internship and residency in Internal Medicine at Cornell University Medical College Affiliated Hospitals in NYC, she completed a fellowship in Medical Oncology and Hematology at Memorial Sloan Kettering Cancer Center and then joined Hematology-Oncology Associates of Central New York (HOACNY), where she practiced for 20 years as a medical oncologist. During her practice at HOACNY, she became interested in integrative medicine, and pursued training in integrative medicine at The Scripps Clinic in California and became a Diplomate of the American Board of Integrative Holistic Medicine. She then completed a 2-year fellowship in Integrative Medicine in Dr. Andrew Weil's University of Arizona fellowship program. In 2015 she left HOACNY to join The Stram Center for Integrative Medicine, where she practiced integrative medicine with focus on integrative oncology and integrative management of Lyme disease and other tick-borne illnesses, after training through The International Lyme and Associated Diseases Society (ILADS) with preceptorship by Dr. Richard Horowitz. In 2018, she left The Stram Center to open her own integrative medicine practice, IM of CNY, where she treats patients with an integrative medicine approach, and a majority of her patients have tick-borne disease, cancer, or other chronic health conditions.

She is a board-certified medical oncologist and hematologist, Fellow of the American College of Physicians, Diplomate of the American Board of Integrative Holistic Medicine, active member of ILADS, and member of various organizations including American Society of Clinical Oncology, American Society of Hematology, Society for Integrative Oncology, American College of Physicians, and Alpha Omega Alpha Honor Medical Society. She also has several energy medicine certifications, including Reiki Levels I and II, Basic Pranic healing, and Seichim Master certification. She is trained in the use of mistletoe and homeopathic therapies to assist patients with cancer, tick borne diseases and inflammatory conditions.

She is proud of her accomplishment in creating IM of CNY, in which she brings to her community a unique approach to healing. She feels honored to be on the forefront of a paradigm shift in medicine where both practitioner and patient partner in a patient's care, and in which the practitioner can treat with varied modalities to heal. The mission of IM of CNY is to provide a whole health approach that bridges conventional and natural practices, empowering patients to tap into their own innate healing ability. She is also proud to have been one of the founding board members of the CNY Lyme and Tick-Borne Disease Alliance and recognizes the importance of bringing attention and education to the CNY community about tick borne diseases in the context of both ILADS as well as CDC guidelines.



**Royale Scuderi**

Executive Director

CNY Lyme & Tick-Borne Disease Alliance

rscuderi@cnylymealliance.org

Royale Scuderi is an innovative organizational leader with extensive experience in senior strategic roles helping businesses and nonprofits thrive. In 2010, Royale began a devastating battle with tick-borne disease. With no apparent rash, she endured a long journey of misdiagnosis and health decline before eventually being diagnosed with late stage disseminated Lyme disease and Babesiosis. As a consequence of her late diagnosis, she was unable to work for several years and her family was buried under a crushing \$60,000 debt. Many years after treatment she still struggles with PTLDS and has dedicated her career to ensuring others do not share her fate.



**Adam Seigers, MD**

Physician

South Lewis Health System

aseigers@lcgh.net

Francis Seigers, MD

Lewis County Health System

Board Certified Internal Medicine



**Jaime Soule RN, LMT, PTA**

jaimesoule@gmail.com

I grew up in Syracuse, NY. I attended Crouse Hospital School of Nursing and obtained my Registered Nursing degree in 1997. I returned to school for Massage Therapy and also Physical Therapy Assistant when living in South Carolina. In 2012 I removed a tick crawling on my leg riding my bike on a trail in the woods in Hilton Head, SC. I had no bulls eye rash or any signs of feeling sick. In the summer of 2014, I had 3 syncopal events and developed sudden and debilitating symptoms of anxiety and obsessive compulsive disorder out of the blue. I also began to develop many other physical symptoms as well. Thus began a long and very expensive (out of pocket) journey of cardiac and neurology workups and numerous medical tests and misdiagnoses along the way. I continue to battle both physical and mental symptoms to this day that have prevented me from returning to work as well as a good quality of life.





**Saravanan Thangamani, PhD**  
 Director  
 SUNY Center for Vector-Borne Diseases  
 Vector Biocontainment Laboratories  
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Dr. Saravanan Thangamani is Professor in the Department of Microbiology and Immunology at the SUNY Upstate Medical University. He is also the Director of SUNY Center for Vector-Borne Diseases, and Vector Biocontainment Laboratories. He is an **international recognized expert in tick-borne diseases caused by Powassan virus, Heartland virus, and *Borrelia burgdorferi***. His research attempts to: (1) understand the environmental factors contributing to the emergence and reemergence of tick-borne diseases in New York; (2) develop anti-tick vaccines; (3) develop novel transmission control methods, including the development of transmission blocking vaccines for tick-borne diseases; (4) vector determinants of Powassan virus transmission; (5) effect of co-infections on the clinical outcome of Lyme disease.



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Virgie Townsend (she/they) is the director of public relations at Strategic Communications, a PR agency in Syracuse. Previously, she led her own strategic marketing and communications consulting practice, focusing on the education and life sciences sectors. As a writer, she is the author of the short fiction chapbook *Because We Were Christian Girls* (Black Lawrence Press, 2022). Her reporting and essays have been featured in *The New York Times*, *The Washington Post*, *Harper's Bazaar*, *VICE*, and *The Sun* magazine. In the summer of 2022, she was hospitalized with neurologic Lyme disease.



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Ms. White joined the New York State Department of Health as an epidemiologist in 1999. She has spent the last 16 years working in vector-borne disease surveillance and research. Ms. White currently serves as the Director of the Vector-borne Disease Unit within the Bureau of Communicable Disease Control where she coordinates human and vector surveillance and research activities related to tick- and mosquito-borne diseases. Ms. White's research interests include exploring novel methods of vector-borne disease surveillance and prevention and developing alternative surveillance methodologies for vector-borne diseases.

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