

2024 Northland SOT Fall Meeting Agenda

8:15 AM–9:00 AM	Registration & Light Breakfast
9:00 AM–9:15 AM	Welcome
9:15 AM–9:40 AM	Dr. Kenneth Blumenfeld <i>Climate Changes in Our Region</i>
9:40 AM–10:00 AM	Ms. Kaija Benson <i>Climate and Health in Minnesota</i>
10:00 AM–10:45 AM	Dr. Christopher Migliaccio <i>Climate Change, Wildfires, and Understanding Unique Aspects of Smoke Toxicity</i>
10:45 AM–11:00 AM	Break
11:00 AM–11:45 AM	Dr. Caroline Moore <i>Decentralizing Ecosystem Toxicology</i>
11:45 AM–1:00 PM	Lunch
1:00 PM–1:45 PM	Dr. Jesse Berman <i>Drought and Health: The Understudied Extreme Weather Event</i>
1:45 PM–2:30 PM	Student Lightning Round
2:30 PM–2:40 PM	Merit Award & Business Meeting
2:40 PM–2:55 PM	Break
2:55 PM–3:35 PM	Dr. Stuart Lichtenberg <i>Chronic Wasting Disease, Ticks, and Climate Change: Noxious Synergisms</i>

Dr. Kenneth Blumenfeld***Climate Changes in Our Region***

Dr. Kenneth (“Kenny”) Blumenfeld is a climate scientist who grew up in Minnesota with a love for storms, blizzards, and being outside. He works for the Minnesota State Climatology Office (DNR), where he provides the state’s agencies, communities, and citizens with up-to-date scientific information about Minnesota’s changing and variable climate. Dr. Blumenfeld enjoys talking to Minnesotans about their weather, and often does it long after the workday is done.

Ms. Kaija Benson***Climate and Health in Minnesota***

Ms. Kaija Benson is a climate change communications coordinator in the Minnesota Climate & Health Program at the Minnesota Department of Health. She is an experienced storyteller who has developed strategic communications for nonprofits, local and state government agencies, and family foundation clients as both an independent consultant and as part of a small agency team that specialized in sustainability communications. Prior to that, she served as a public information officer at the Minnesota Department of Natural Resources and was a staff reporter at New York Magazine in New York. Kaija has an MA in journalism from New York University and a BA in cultural anthropology from the University of Vermont.

Dr. Christopher Migliaccio***Climate Change, Wildfires, and Understanding Unique Aspects of Smoke Toxicity***

Dr. Christopher Migliaccio is a Research Associate Professor at The University of Montana. He earned a PhD in Immunology at the University of California, Davis in 2000 and a PharmD at the University of Montana in 2016. At the University of Montana, he received postdoctoral training in the Center for Environmental Health Sciences in Immunotoxicology under the guidance of Dr. Andrij Holian. His research focuses on the effects of environmental exposures on respiratory immunity and function. Current and past work has included exposures to wildfire smoke, nanomaterials, diesel exhaust particles, silica, and asbestos. Recent studies have included long-term effects in a community exposed to wildfire smoke and a mouse model of the event and the resulting immunotoxicity. Dr. Migliaccio lives with his wife and dog in their (now empty nest) home in the Bitterroot Valley and enjoys hiking and exploring Montana.

Dr. Caroline Moore***Decentralizing Ecosystem Toxicology***

Dr. Caroline Moore is a Scientist with the San Diego Zoo Wildlife Alliance in Disease Investigations. Dr. Moore uses veterinary medicine, toxicology, molecular diagnostics, and epigenetics to better understand how environmental contaminants, such as heavy metals, pesticides, and harmful algal blooms, create roadblocks to wildlife conservation, and how to prevent them. She completed the UC Davis Veterinary Science Training Program in 2018, earning her DVM and PhD in Pharmacology and Toxicology, and then a T32 NIEHS postdoctoral fellowship at UCLA studying the multi- and trans-generational impact of cyanotoxins in 2019. She then transitioned to the Steel

Endowed Pathology Fellowship at the San Diego Zoo, where she became the Zoo's first toxicologist. Throughout her fellowship and into her Scientist position, she works with both local and global field teams to integrate toxicology and veterinary medicine into conservation research. Recently she has focused her attention on understanding the mercury burden in wildlife across biota in the Peruvian Amazon from gold mining, and how to bring toxicology and molecular testing to remote areas globally where major barriers exist to access such monitoring and surveillance. This work has expanded to local wildlife shelters where she is working to enhance clinical veterinary care in parallel with disease diagnostics and biomarkers of aging and health. She was recently awarded the Early Career Professional Award by the American College of Toxicology and is highly involved with American College of Toxicology, Society of Toxicology, and Society of Environmental Toxicology and Chemistry.

Dr. Jesse Berman

Drought and Health: The Understudied Extreme Weather Event

Dr. Jesse Berman is an Associate Professor in the Division of Environmental Health Sciences at the University of Minnesota School of Public Health. His interest lies in understanding the relationship between human health and complex environmental exposures. He evaluates how weather, climate, and air pollution influence population-level health, and how community-level and neighborhood characteristics can modify health disparities. Over the past ten years, he has led seminal research studies related to health effects of extreme drought exposure, performed health risk assessments with ozone, PM_{2.5}, and NO₂ air pollution, and evaluated the impact of extreme weather on vulnerable populations, including mortality risk among Veterans, associations with violent crime, and the unique exposure of 'thunderstorm asthma.' Recently, Dr. Berman has been partnering with the Veterans Health Administration to build a multi-million-person cohort to examine how individuals with existing respiratory disease are more susceptible to worsening air quality.

Dr. Stuart Lichtenberg

Chronic Wasting Disease, Ticks, and Climate Change: Noxious Synergisms

Dr. Stuart Siegfried Lichtenberg is an environmental toxicologist and biochemist with the Minnesota Center for Prion Research and Outreach. Dr. Lichtenberg completed his bachelor's and PhD degrees at the University of Kentucky in Agricultural Biotechnology and Soil Science, respectively, with Professor Jason Unrine. He subsequently completed a postdoc at the University of Wisconsin-Madison, under Professor Joel Pedersen. Since then, he has been building a research program at the University of Minnesota focused on the environmental implications of prion disease, while also delving into the biophysics and structural biology of infectious prions.