# Speakers

## National Forum Series: Virtual Seminars

***The Pesticide Threat to Environmental Health***
***Advancing Holistic Solutions Aligned with Nature***
***The recordings of the sessions are posted on the website!***

**Session 2: December 4, 2025, 1:00 - 3:30 PM Eastern, including Q&A**

Carolina Panis, PhD

Associate Professor
Head of Laboratory of Tumor Biology
State University of Western Paraná

Francisco Beltrão, Brazil

Carolina Panis, PhD, is Associate Professor of Medicine at Western Paraná State University (UNIOESTE, Brazil) and Visiting Researcher at Harvard University and the University of Arizona. She holds postdoctoral fellowships in Oncology (INCA) and Pathology (UEL), focusing on breast cancer genomics, immunopathology, and chemoresistance. Her research investigates the impact of pesticide exposure on cancer aggressiveness and tumor immunopathology mechanisms. Dr. Panis coordinates the Tumor Biology Laboratory and the Micropollutant Residue Analysis Laboratory at UNIOESTE, and collaborates with leading institutions in Brazil and abroad.

Dr. Panis runs a laboratory that researches cancer biology, focusing on human breast cancer and hematological neoplasia. Most of the studies have investigated the role of oxidative stress and inflammation and the environmental risk factors that may determine disease prognosis, especially in rural women occupationally exposed to pesticides.  The introduction of a literature review by Dr. Panis and coauthor Bernardo Lemos, PhD, Pesticide exposure and increased breast cancer risk in women population studies, states, “Breast cancer (BC) is the most diagnosed cancer in women worldwide. Both genetic and nongenetic risk factors influence this multifactorial disease. In the last two decades, BC incidence has increased by approximately 0.5 % per year, but the reasons for this steady increase have remained unclear. Overall, BC remains a significant global public health challenge despite significant advances in disease diagnosis and treatment.” The study notes, “It is estimated that

genetic predispositions contribute to up to 10 % of BC cases, related to a specific group of well-documented heritable risk genes, including mutations in the BRCA1 and BRCA2 genes."

In their review, "Pesticide exposure and increased breast cancer risk in women population studies," released last year, Dr. Panis and coauthor write that a number of pesticides "can increase the risk of BC development through various mutagenic and nonmutagenic mechanisms and can act directly as carcinogens or indirectly as biochemical modifiers and hormonal deregulators. The underlying mechanisms include endocrine disruption; genotoxicity; epigenetic changes; enhanced cell migration, invasion, and. . ." more.

Dr. Panis received her PhD in Experimental Pathology from Londrina State University.

Rossella Cannarella, M.D., PhD

Department of Clinical and Experimental Medicine
University of Catania
Catania, Italy

Francisco Beltrão, Brazil

Rossella Cannarella, M.D., PhD, is an Endocrinology specialist and a European Academy of Andrology (EAA) certified Clinical Andrologist who has carried out her internship at the Division of Endocrinology, Metabolic Diseases and Nutrition, University of Catania (Italy), an EAA Training Center, directed by her research mentor, Prof. Aldo E Calogero. She received her international PhD in Translational Biomedicine from the University of Catania and a medical degree from the University of Massachusetts Chan Medical School in Worcester, Massachusetts.

Dr. Cannarella is the author of the just-released report *Chemical Pollution and Men's Health: A hidden crisis in Europe*. In the report, released by the Health and Environment Alliance (HEAL), she writes, "*Mounting scientific evidence links exposure to harmful environmental chemicals—such as endocrine disrupting chemicals (EDCs), persistent pollutants, and microplastics—to a range of serious male health outcomes, including prostate and testicular cancer, infertility, sexual dysfunction, hormonal imbalances, and impacts on descendants' health.*" Among the many findings of critical importance that are cited in the report, Dr. Cannarella identifies numerous pesticides as known EDCs and reproductive toxicants. She writes, *"Adult occupational exposure to pesticides (organophosphate and carbamate insecticides) is linked to declines in sperm concentration, poorer semen quality, and reduced testosterone levels. . .* [and] *Commonly used pesticides like glyphosate and organophosphates have been shown to disrupt the hypothalamic-pituitary-gonadal axis in animal models."*

In 2022, Dr. Cannarella was appointed Research Fellow at the Glickman Urological & Kidney Institute, Cleveland Clinic Foundation, Cleveland, Ohio. She spent more than 15 years training in the field of endocrinology, male infertility, and human reproduction. During her residency in Endocrinology, she joined Summer Schools organized by the EAA leading Center in Testicular Histology (Zagreb, Croatia), where she gained knowledge on human testicular histopathology. She also joined and collaborated with colleagues of the University of Perugia (Italy), experts in culturing neonatal porcine Sertoli cells, where she developed research protocols aimed at understanding the impact of growth factors (i.e. insulin, IGF1, etc.) on the function of these cells. More recently, she has begun to focus on sperm epigenetics and transcriptome.

As a visiting scholar at the University of Massachusetts Medical School, she spent six months studying the role of sperm-derived transcripts on parthenotes gene expression in mice, a project for which she was awarded by the European Society of Human Reproduction and Embryology (ESHRE) in 2020. Dr. Cannarella has participated as a guest lecturer in over 50 national and international meetings on male infertility and human reproduction. She is a member of the Editorial Board of five peer-reviewed and indexed journals (*Frontiers in Endocrinology* - section Reproduction, *BMC Urology*, *International Journal of Molecular Science*, *Minerva Endocrinology*, *Asian Journal of Andrology*, *Endocrinology*, *Heliyon*). She has published 240 articles in indexed, peer-reviewed journals and has an h-index of 30 (Scopus, 27/12/2024). Dr. Cannarella's research interests include the role of Follicle-Stimulating Hormone (FSH) in the treatment of male infertility, the genetics of spermatogenic failure, the effects of growth factors on immature Sertoli cells, testicular function in childhood, and the role of sperm-derived transcripts in embryo development. Her clinical interests include the management of infertile male patients, varicocele, male accessory gland infection/inflammation, hypogonadism, gynecologic endocrinology, metabolic diseases, and general endocrinology.

Génon K. Jensen, M.D., PhD

Founder and Executive Director
Health and Environment Alliance (HEAL)

Brussels, Belgium

Génon Jensen, founder and executive director of Health and Environment Alliance (HEAL), in Brussels and operating throughout Europe, has been an official member of the World Health Organization's (WHO) European Environment and Health governance representing the health sector since 2000. In this role, she contributes to the WHO Chemicals and Health working group and is a member of the WHO Advisory Council on Noncommunicable Diseases (NCDs). With prostate cancer being the third most common cancer among men in the European Union (EU) and testicular cancer and infertility increasing, HEAL in just published the report *Chemical Pollution and Men's Health: A hidden crisis in Europe*. In the U.S., prostate cancer is the most common cancer in men (excluding skin

cancer) and the second most common cause of cancer death. The HEAL report cites mounting evidence that these debilitating and deadly diseases and trends in men are linked to exposure to pesticides, as well as phthalates, PFAS, and microplastics, with widespread contamination across all age groups.

With the release of the report, Ms. Jensen said, *"This report shows that the male reproductive system is particularly vulnerable to chemical exposures. The growing evidence on how hazardous chemicals contribute to rising cancer rates and infertility is truly worrying. With the upcoming REACH revision, EU policymakers have a unique opportunity to prevent disease, boost reproductive health and ensure the wellbeing of future generations."*

Ms. Jensen is a founding member of the Global Climate and Health Alliance (GCHA) and serves on its board. She has played a leadership role advocate for a more health protective EU and national policies on endocrine disrupting chemicals (EDCs) for the EDC-Free Europe campaign. Since 2010, she has also built up a working relationship and supported developing science for policy and advocacy materials with the International Federation of Gynaecologists and Obstrecians (FIGO) on environmental health topics through serving on the FIGO Committee on Climate Change and Toxic Environmental Exposures.

Ms. Génon's published articles include: Global survey of dioxin- and thyroid hormone-like activities in consumer products and toys (Environmental International, 2023), Interventions to Reduce Exposure to Synthetic Phenols and Phthalates from Dietary Intake and Personal Care Products: a Scoping Review (Current Environmental Health reports, 2023), The COVID-19 pandemic and global environmental change: Emerging research needs (*Environment International*, January 2021), The role of civil society and organisations (*Oxford Textbook of Nature and Public Health*. The role of nature in improving the health of a population, 2018), How to Deliver the Most Important Public Health Treaty of the Century (*Annals of Global Health*, 2015), From extraction to renewal: a global campaign for healthy energy (*New Solutions: A Journal of Environmental and Occupational Health Policy*, 2015). Early-life prevention of non-communicable diseases (*The Lance*t, 2013), Revising the EU Strategy on endocrine disruptors: nearing a decisive moment (*Journal of Epidemiology & Community Health*, 2012).

Ms. Jensen is a co-author of several publications and advocacy resources, including 'Turning the Plastic Tide – The Chemicals in Plastic That Put Our Health At Risk' (2020) 'Testing for Toxics – How Chemicals in European Carpets are Harming Health and Hindering Circular Economy' (2018), 'Toxic Soup – Dioxins in Plastic Toys' (2018). Other reports, including "Halting the child brain drain: why we need to tackle global mercury contamination" (2006), "Cutting back on pesticides for healthier lives" (2007), "Acting NOW for better health: A 30% reduction target for EU climate policy" (2010), "The Unpaid Health Bill: How coal power plants make us sick" (2013), and "Health costs in the EU – How much is related to EDCs?" (2014). Ms. Jensen received a Master's degree in European Political and Administrative Studies at the College of Europe, Belgium, and a degree in journalism and international politics from George Washington University in Washington, DC.

Jabeen Taiba, PhD

Postdoctoral Research Associate
College of Public Health
University of Nebraska Medical Center

Omaha, Nebraska

Jabeen Taiba, PhD, is a postdoctoral research associate in the Water, Climate, and Health Program. In a study, "Exploring the Joint Association Between Agrichemical Mixtures and Pediatric Cancer," published earlier this year, Dr. Taiba and colleagues write: "Nebraska's age-adjusted incidence rates for childhood cancers are among the highest in the US. Previous studies indicated associations between agrichemical exposures (atrazine and nitrates) and pediatric cancer rate, assuming single pollutant exposure. We evaluated the joint association between the agricultural mixture and pediatric cancer. . . We observed a statistically significant positive association between the 32 agrichemicals and overall pediatric cancer and subtypes."

Dr. Taiba is formally trained as a multidisciplinary researcher and an epidemiologist and has prior experience in clinical research, public health practice settings, and using large datasets. Her research interests include understanding the impact of environmental exposures on the genome to protect human health. Her current research is primarily focused on understanding the effects of environmental mixtures on human health, specifically exploring relationships between pesticide mixtures and pediatric cancer, congenital anomalies, and other health outcomes. Through this work, Dr. Taiba aspires to contribute new evidence that can be translated into human disease prevention and strengthen science in public policy.

Dr. Taiba received her PhD from the Medical Sciences Interdepartmental Area (MSIA) program at the University of Nebraska Medical Center, after receiving an MPH from the University of Cincinnati, College of Medicine.

Emile Habimana, M.S.

Researcher, PhD Candidate
Department of Chemistry
Université de Montréal

Montréal, Québec, Canada

Emile Habimana is a doctoral candidate specializing in Environmental Analytical Chemistry at the Université de Montréal, Quebec, Canada. He holds a Master's of Science in Chemical Engineering Integrated Chemical and Environmental Technology from Hankyong National University in South Korea, a Bachelor of Science (BSc) Chemistry from the National University of Rwanda, and a background working in environmental management for the Ministry of Natural Resources in Kigali, Rwanda.

Mr. Habimana’s research, working with Professor Sébastien Sauvé, PhD, focuses on the development of advanced analytical methodologies for profiling and quantifying emerging contaminants within environmental matrices, as well as evaluating the risks they pose to both ecosystems and human health. He is the lead author on a recently published article in *Frontiers in Environmental Chemistry*, which identifies 414 contaminants of emerging concern (CECs) in soils, untreated and treated sewage sludge (biosolids), compost, and dust, across 151 peer-reviewed studies released between 2018 and 2023—emphasizing the range of potential exposure pathways across various products that include classes of pesticides like neonicotinoid insecticides and triazine herbicides such as atrazine. In addition to pesticides, his work specifically investigates the occurrence, fate, and transport of emerging contaminants, identifying pharmaceuticals and personal care products (PPCPs), hormones, industrial chemicals, per- and polyfluoroalkyl substances (PFAS), plastic-related compounds, and their transformation products in complex systems, such as sewage sludge, biosolids, composts, and soils.

Mr. Habimana is the principal developer of an innovative, high-throughput multiresidue test that has facilitated simultaneous quantification of over 70 contaminants, encompassing a diverse range of chemicals, including pesticides. His pioneering research has resulted in the first quantitative report of significant transformation products, such as desnitro-imidacloprid (DN-IMI)—more toxic than its parent neonicotinoid insecticide imidacloprid—in biosolids, underscoring their potential to cause contamination in areas of the environment previously unrecognized. With methodological development and application to real-world samples, Mr. Habimana 's research provides essential data for understanding contaminant profiles that can now inform protective regulatory decisions and management strategies going forward.

Jay Feldman, Moderator

Executive Director and Co-Founder
Beyond Pesticides

Washington, DC

Jay is a founder and executive director of the national environmental and public health membership group Beyond Pesticides, which has a 40-year history of working with communities nationwide on toxics and organic policies and practices, addressing agricultural, lawn, and landscape management practices that maintain ecological balance, enhance biodiversity, and eliminate toxic chemical use. Jay has successfully fought to remove from the market hazardous pesticides and helped draft pivotal local, state, and federal organic laws, including the *Agricultural Productivity Act*, which established sustainable agriculture programs at USDA, and the *Organic Foods Production Act*, which created the USDA organic certified food label. In 2010, he was appointed by the Obama Administration to a 5-year appointment to the National Organic Standards Board, a stakeholder board that advises on organic and determines allowable materials, where he served as chair of the Crops Committee. He is a recipient of Rodale Institute's Organic Pioneer Award in 2021. He has written extensively, testified in the U.S. Congress and state and local legislatures, been published in major newspapers, and appeared on national and local news networks and talk shows, while editing Beyond Pesticides' quarterly journal *Pesticides and You* and the Daily News Blog. Jay is a past chair and board member of Earth Share, a network of more than 500 members organization that brings together individuals, workplaces, and communities to protect the planet's health. He currently serves on the executive committee of the National Organic Coalition. Prior to his founding of Beyond Pesticides in 1981, he served as the health programs director of Rural America, an advocacy group for rural areas and small towns. Jay has a Masters in urban and regional planning with a focus on health policy from Virginia Polytechnic Institute and State University, and a B.A. from Grinnell College (IA).

## Session 1: October 29, 2025, 1:00 - 3:30 PM Eastern, including Q&A

Danilo Russo, PhD

Professor of Ecology
University of Naples Federico II

Naples, Italy

Danilo Russo, PhD, is a full professor of ecology, an international leader in bat research, and coauthor of *A Natural History of Bat Foraging: Evolution, Physiology, Ecology, Behavior, and Conservation*. In *A Call to Protect Common Species: Bats as a Case Study* (*Conservation Letters, A Journal of the Society of Conservation Biology, 2025*), he writes the following: “The ongoing biodiversity crisis highlights the need for targeted conservation efforts, yet the focus often remains on rare and endangered species. This overlooks the vital role of common species, which are the ecological backbone of ecosystems, supporting the stability and functioning of biodiversity. We argue that common species, especially their population dynamics and potential tipping points, are too often neglected and that their conservation is urgent. We illustrate this issue using bats (Chiroptera) as a model. This diverse mammalian order features key ecosystem service providers, including insectivores, pollinators, and seed dispersers. Bats are sensitive to anthropogenic pressures, and many species, including common ones, face population declines and the impact of ecosystem disruption. Research and conservation must urgently be expanded to include common species. Through case studies, we demonstrate how common bat species are indicators of environmental changes and the urgent need to monitor their populations. We provide recommendations for improving research, enhancing conservation policies, and adopting a more inclusive framework acknowledging the indispensable role of common species in ecosystem services and biodiversity.”

Dr. Russo's interests include habitat selection, resource partitioning, sensory ecology, social behavior, evolutionary biology, biogeography, and invasion ecology. Much of his research focuses on bats, but he also works on a range of other model organisms to answer the specific questions he is interested in. In 2019–2023, he chaired the Scientific Committee of the UNEP/EUROBATS Agreement (i.e., the Agreement on the Conservation of Populations of European Bats). Dr. Danilo Russo has served as Editor-in-Chief of the top-ranking zoological journal *Mammal Review*. He was also the main proposer and Chair of the Management Committee of the EU COST Action CLIMBATS (CA18107). Professor Russo has published over 200 scientific articles in internationally respected journals, including *Nature Communications*, *Current Biology*, *Ecology Letters*, and *Biological Reviews*. He has conducted fieldwork in diverse regions and environments across the globe, from African rainforests to Israeli deserts and European beech forests. He is currently an Honorary Professor at the Museum für Naturkunde (Berlin, Germany) and at the University of Bristol (UK). Dr. Russo obtained his PhD in Zoology from the University of Bristol in 2002.

Jo Ann Baumgartner

Executive Director
Wild Farm Alliance

Watsonville, CA

Jo Ann Baumgartner is the executive director of the Wild Farm Alliance (WFA) and coauthor of the recently released *Protecting Birds in Agricultural Landscapes: Reduce risks to beneficial birds on the farm* (2025), and many publications on the intersection between biodiversity conservation and agriculture, including beneficial birds, the conservation mandates within the National Organic Program regulations, and the co-management of food safety and conservation.

Wild Farm Alliance focuses on farmland flyways, farmland wildways, and farmland waterways, advising farmers on the installation of nest boxes, perches, and other habitat features that support beneficial birds that provide pest control services. WFA helps farmers with the planting of hedgerows, habitat patches, and corridors that facilitate movement of beneficial species and links wild areas with farmland. The organization also supports the restoration of riparian buffers and protecting waterways across farms, improving water quality, reducing erosion, and protecting aquatic and terrestrial species. By publishing guides, offering webinars, creating short videos, hosting field days, and offering technical support, WFA enables farmers and land stewards to adopt wild farming practices. Before joining WFA, Ms. Baumgartner addressed crop, livestock, and fiber issues, was senior research editor for a book of California's rare wildlife species, and was an organic farmer for over a decade. For her Master's research in the Environmental Studies Department at San Jose State University, she studied bird predation of insects in apple orchards. Her undergraduate degree is in Soil and Water Science from UC Davis. Ms. Baumgartner is based in Watsonville, California, and has been with WFA since the organization was founded in 2001.

Sam Earnshaw

Author and Expert in Hedgerow and
Farmscape Installation and Management

Watsonville, CA

Sam Earnshaw is the author of *Hedgerows and Farmscaping for California Agriculture: A Resource Guide for Farmers* (2018), which is an acclaimed tool in the protection of ecological balance and increased farm productivity. (The guide is available on the Community Alliance with Family Farmers (CAFF) website.) Since 1996, Mr. Earnshaw has planted hedgerows, windbreaks, grassed waterways, and riparian plantings on over 100 farms. He continues to work on the design and installation of conservation plantings and is a Technical Service Provider with the Natural Resource Conservation Service (NRCS). Hedgerows and grassed waterways are increasingly being planted on farms and can have multiple functions, serving as: habitat for beneficial insects, pollinators and other wildlife; erosion protection and weed control; waterway stabilization; windbreaks; non-point source water pollution and groundwater pollution reduction; a surface water infiltration tool; a buffer from pesticide drift, noise, odors, and dust; living fences and boundary lines; biodiversity enhancement; and an aesthetic resource. Many hedgerow plants attract native bees and other pollinators, and some, such as citrus or other fruit trees and herbal plants, have economic returns. As with any planting, problems and issues can be dealt with through management practices.

In 1992, Mr. Earnshaw began working as Lighthouse Farm coordinator for CAFF, sponsoring monthly meetings and field tours for farmers, sharing techniques in biologically based farming techniques. His work with local California growers in Watsonville, Santa Cruz, Salinas, and Hollister through this program led to CAFF's leadership in land use and water issues on the Central Coast. In the mid-1980’s, he and his wife, Jo Ann Baumgartner, started their farm in Santa Cruz, California (Neptune Farms) and marketed organic vegetables and cut flowers to retail stores, farmers' markets, and wholesalers. Mr. Earnshaw has a degree from University of California Berkeley (1974) with studies in forestry.

Tony Able

Chair
Southeast Beaver Alliance

Decatur, Georgia

Tony Able has a dedicated career championing clean water and healthy ecosystems. He retired in 2022 after 35 years of distinguished service with the U.S. Environmental Protection Agency (EPA). During his tenure, he specialized in natural stream and wetland restoration, contributing his expertise to a wide range of environmental issues, including watershed management, groundwater remediation, hazardous waste cleanup, non-point source pollution, wetlands protection, and water quality management. Mr. Able's work with the Southeast Beaver Alliance focuses on how beavers can serve as critical partners in the restoration of streams and wetlands to promote environmental health. As part of his outreach, he leads educational tours at Legacy Park in Decatur, Georgia, which provide opportunities to see beaver ecology in action. Mr. Able also provides education about innovative techniques, such as fencing and flow devices, that allow humans to manage flooding and damage to infrastructure effectively, thereby decreasing human-beaver conflict concerns.

He is deeply involved in a variety of conservation efforts, currently serving on the Board of Directors of the Southeastern Trust for Parks and Land, where he helps to conserve natural landscapes and build public parks that benefit local communities and ecosystems.  He is also a dedicated volunteer with Trees Atlanta, where he plants native trees to support local biodiversity and ecosystem restoration. Mr. Able holds a Bachelor of Science in Geology from Georgia Southwestern University and a Master of Science in Geography from Western Kentucky University. His lifelong commitment to environmental stewardship continues to drive his work and volunteer efforts, making a lasting impact on the natural world and the communities he serves.

Jay Feldman, Moderator

Executive Director and Co-Founder
Beyond Pesticides

Washington, DC

Jay is a founder and executive director of the national environmental and public health membership group Beyond Pesticides, which has a 40-year history of working with communities nationwide on toxics and organic policies and practices, addressing agricultural, lawn, and landscape management practices that maintain ecological balance, enhance biodiversity, and eliminate toxic chemical use. Jay has successfully fought to remove from the market hazardous pesticides and helped draft pivotal local, state, and federal organic laws, including the *Agricultural Productivity Act*, which established sustainable agriculture programs at USDA, and the *Organic Foods Production Act*, which created the USDA organic certified food label. In 2010, he was appointed by the Obama Administration to a 5-year appointment to the National Organic Standards Board, a stakeholder board that advises on organic and determines allowable materials, where he served as chair of the Crops Committee. He is a recipient of Rodale Institute's Organic Pioneer Award in 2021. He has written extensively, testified in the U.S. Congress and state and local legislatures, been published in major newspapers, and appeared on national and local news networks and talk shows, while editing Beyond Pesticides' quarterly journal *Pesticides and You* and the Daily News Blog. Jay is a past chair and board member of Earth Share, a network of more than 500 members organization that brings together individuals, workplaces, and communities to protect the planet's health. He currently serves on the executive committee of the National Organic Coalition. Prior to his founding of Beyond Pesticides in 1981, he served as the health programs director of Rural America, an advocacy group for rural areas and small towns. Jay has a Masters in urban and regional planning with a focus on health policy from Virginia Polytechnic Institute and State University, and a B.A. from Grinnell College (IA).