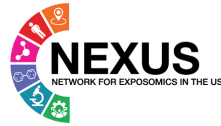


[View this email in your browser](#)



May Newsletter

Visit the NEXUS website and our social media for exposome news, blog post, events, publications, and much more!



Subscribe to the NEXUS Newsletter

Global Exposome Summit

Sitges, Spain



At the end of April, the global exposomics community gathered in Sitges, Spain, for the [Global Exposome Summit](#). Day one discussed operationalizing the exposome through policy, deployable exposome tools and infrastructures, and the [IHEN Interim roadmap focused on exposome research in Europe](#). Day two featured innovative exposome science, and day three focused on building the global exposome community. Overall, three days of plenary sessions, poster sessions, panel discussions, and networking opportunities fostered collaboration and innovation across the field. The meeting was hosted by the International Human Exposome Network ([IHEN](#)) and the [Global Exposome Forum](#), and organized by [ISGlobal](#). Thank you to all the participants, speakers, and the [Exposome Summit Organizing Committee!](#)

One stage, one community, one mission – A recap of the Global Exposome Summit
By: International Human Exposome Network (IHEN)



Read the article here

NEXUS Connections

NEXUS had the opportunity to discuss with meeting attendees about their work in exposomics along with their reflections on the field and the Global Exposome Summit.

Marc Chadeau- Hyam
Imperial College London



Sarah De Saeger
Ghent University



Adrian Covaci
University of Antwerp



Jeanette Stingone
Columbia University



Donghai Liang
Emory University



Alice Limonciel
Bruker



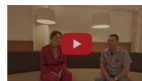
Roel Vermeulen
IHEN



Lea Maitre
ISGlobal



Jana Klanova
EIRENE RI



Beate Escher
Helmholtz Centre for Environmental Research



Thank you to everyone who participated in the NEXUS podcast recordings!

NEXUS Youtube Channel



The NEXUS Podcast

The Past, Present, and Future of Untargeted Mass Spectrometry with Dr. Dean Jones

In this episode, Gary W. Miller, PhD, Columbia University, is joined by Dean Jones, PhD, Emory University, to discuss the evolution of exposomics, advances in analytical methods, and perspectives on studying environmental exposures.

The objective of the NEXUS Podcast is to bring together stakeholders of the field of exposomics to foster dialogue around key topics, further the understanding, facilitate the advancement of the field of exposomics, and identify ways that exposomics can support other scientific fields.



[Listen on Spotify](#)

Spotlight

Dean Jones, PhD Emory University



[Learn more](#)

Dean P. Jones, Ph.D., is Professor of Medicine (Division of Pulmonary, Allergy and Critical Care Medicine), Director of the Clinical Biomarkers Laboratory, and Eminent Investigator of Emory University School of Medicine in Atlanta. He is actively engaged in HERCULES, an NIEHS-supported P30 Environmental Health Sciences Center focused on the Human Exposome. He led the development of human high-resolution exposome analysis platforms and is an internationally recognized expert in exposome analysis and clinical biomarkers of human disease. He received a B.S. in Chemistry from the University of Illinois, Urbana, in 1971 and a Ph.D in Biochemistry from Oregon Health Sciences Univ., Portland, in 1976.

He was a National Sciences Foundation Postdoctoral Fellow in Nutritional Biochemistry at Cornell University, Ithaca, and a Visiting Scientist in Molecular Toxicology at the Karolinska Institute, Stockholm prior to joining Emory in 1979.

In 1997-98, he was a Nobel Fellow at the Karolinska Institute, Stockholm. He has served in several leadership roles at Emory University, including Program Director of the PhD program in Nutrition Health Sciences, Core Laboratory Director of the Emory University General Clinical Research Center, Executive Committee of the Emory-Georgia Tech Predictive Health Institute, and has chaired several committees of Emory University and School of Medicine.

Dr Jones studies redox biology and medicine and has research programs in the areas of redox systems biology, clinical metabolomics and environmental health. His research uses a range of molecular and cell biology approaches, mass spectrometry-based proteomics, metabolomics, transcriptomics and transgenic mouse models designed to understand redox mechanisms. The clinical metabolomics program involves multiple collaborations and uses ultra-high resolution mass spectrometry to understand nutritional, environmental, genetic, and therapeutic aspects of disease. In recent years, his research has focused on mass spectrometry programs for affordable, high-throughput environmental chemical biomonitoring.

Fun Fact: Dean Jones is an avid artist. His published book, "Passion and Joy," features 32 original poems, 32 of his favorite personal photographs, 32 of his original scientific papers, and 32 original oil paintings.



[Read the full article](#)

Recent Publications in the Field of Exposomics

"Exposomics Crosses the Rubicon: Let the Building Begin" Published in Environmental Science & Technology



This month, NEXUS MPIs Gary Miller, PhD, Columbia University, Rima Habre, ScD, University of Southern California,



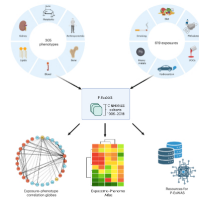
and Chirag Patel, PhD, Harvard University, published a viewpoint article in Environmental Science & Technology for the special issue for the 60th Anniversary of the Journal.

[Read the paper here](#)

The paper comments that “The recent advances in exposomics, including harmonization of mass spectrometry methods, increased application of geospatial sciences for reconstructing place-based environmental exposure histories, and improvements in privacy-preserving data systems and computational approaches, provide compelling evidence that exposomics has arrived—we have crossed the Rubicon.” Overall, this paper notes that the exposome combined with genomics is capable of generating actionable knowledge for disease prevention and improved public health.

“An atlas of exposome-phenome associations in health and disease risk”

Published in Nature Medicine



In March 2026, NEXUS MPI and Data Science Hub Co-lead Chirag Patel, PhD, Harvard Medical School, published the paper “An atlas of exposome-phenome associations in health and disease risk” in Nature Medicine with co-authors [John PA Ioannidis, MD, D.Sc., Stanford University](#) and [Arjun K Manrai, PhD, Harvard Medical School](#).

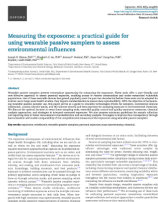
[Read the paper here](#)

Listen to Dr. Gary Miller’s reflections on the importance of this paper for the field of exposomics



“Measuring the exposome: a practical guide for using wearable passive samplers to assess environmental influences”

Published in Exposome Journal



Earlier this year, Krystal Politt, PhD, P.Eng. Co-Lead of the NEXUS ChemBio Analytical Science Hub at Yale University, co-authored a paper on wearable passive samplers alongside of fellow ChemBio Hub member, Jeremy Koelmel, PhD, and collaborators: Joseph Okeme, PhD, Elizabeth Lin, PhD, Anya Guo, Dong Gao, PhD.

[Read the paper here](#)

Wearable passive samplers are increasingly used within exposome research as accessible, cost-effective tools for personalising exposure measurement. Their lightweight, pump-free design supports deployment across the life course and extends exposure assessment to remote communities and under-researched vulnerable populations that conventional active samplers cannot easily reach. When paired with high-resolution mass spectrometry, these tools enable characterisation of chemical and biological stressors at an omics scale.

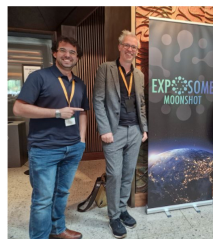
As adoption has grown, so have the practical questions researchers face when designing studies: which wearable design is most appropriate, how long samplers should be worn, what exposures can be reliably captured, how these tools should be calibrated and analysed, and which quality assurance measures matter most. This new paper, structured around frequently asked questions, provides a published repository of guidance addressing each of these areas.

The paper additionally proposes minimum reporting standards and standardised practices to support harmonisation across studies, a central goal of the NEXUS ChemBio Hub.

Aligning how the community calibrates, deploys, and reports measurements from wearable passive samplers will improve data comparability, enable secondary analysis of existing literature, and strengthen the contribution of these tools to large-scale exposome research.

“The Challenge of a Global System for Coordinating Exposomics: Aligning Regional Projects and Infrastructures”

Published in Environmental Science & Technology



In May, Roel Vermeulen, PhD, co-coordinator of the International Human Exposome Network (IHEN), and Caspar Safarlou, PhD, Utrecht University, published a viewpoint article in Environmental Science & Technology for the special issue for the 60th Anniversary of the Journal. Dr. Vermeulen writes, “The question is no longer whether exposomics is scientifically feasible, but whether we can organize it globally in a way that delivers meaningful and equitable impact on health, prevention, and policy.”

[Read the paper here](#)

Exposomics in the Scientific Community

Dr. Randolph Singh presents at the “Climate Change and Emerging Contaminants: Risks and Responses in Asia and Beyond” conference at the University at Buffalo

In April, NEXUS [ChemBio Analytical Sciences Hub](#) investigator Randolph Singh, PhD, Columbia University, spoke at the University at Buffalo international conference "Climate Change and Emerging Contaminants: Risks and Responses in Asia and Beyond" to examine how climate change and emerging contaminants impact health in Asia for Global Health Day.

Dr. Singh is the deputy director of the [Center for Innovative Exposomics](#) and spoke about how the Center is using exposomics to understand human disease, and highlighted how the same approach can be used to better understand diseases that are projected to worsen, in terms of prevalence, due to the impacts of climate change. In addition, he discussed a key finding from the NEXUS ChemBio Hub survey, noting the underrepresentation of Asian researchers in the field of exposomics, and emphasized the substantial opportunities for advancement and increased engagement across Asia. Among many other speakers, a plenary address was given by David Balshaw, PhD, director of extramural research and training at the National Institute of Environmental Health Sciences, who discussed the overall advancement on environmental exposome and strategic plans for future years.

This meeting provided a great opportunity to discuss climate threats to global health.

[Learn more](#)

NEXUS MPI Gary Miller, PhD, interviewed on the The LIVING Room Podcast, A WNDR Lab Production



Gary Miller discusses exposomics in an upcoming podcast episode of The LIVING Room Podcast, A WNDR Lab Production.

[Watch the episode trailer](#)

Upcoming Events

NEXUS Community Events

Bordeaux Exposome Symposium

June 17–19, 2026 | Bordeaux, France



The Bordeaux Symposium hosted and organized by Mount Sinai Icahn School of Medicine Institute for Exposomic Research will convene leading scientists and trainees dedicated to advancing the integration of environmental exposures into research on Alzheimer's Disease and Related Dementias (AD/ADRD). Drawing on a global network of researchers with complementary expertise in exposomics, data science, and neurodegenerative disease, the meeting provides a powerful foundation for discovery.

[Learn more](#)

Exposome Boot Camp

July 30-31, 2026 | New York, New York



The Exposome Boot Camp is a two-day intensive boot camp of seminars and hands-on analytical sessions to provide an overview of concepts, techniques, and data analysis methods used in studies of the exposome. This boot camp integrates the principle concepts of exposomics and the untargeted approaches of measuring endogenous and exogenous chemical exposures on an omic scale as we step through the tools and techniques currently available to analyze the exposome. Led by a team of expert scientists in the rapidly growing field of exposomics, the boot camp will integrate seminar lectures with hands-on computer lab sessions to put concepts into practice. Emphasis will be given to leveraging existing resources from ongoing studies and initiating new investigations. The afternoon lab sessions will provide an opportunity to work hands-on with real data. Participants will learn and practice data handling, cleaning, and basic analysis of exposomics data.

[Register here](#)

ISES 2026 Annual Meeting

October 4- 8, 2026 | Vancouver, Canada



Join the global exposure science community for the ISES 2026 Annual Meeting. Researchers, practitioners, and leaders from across sectors will come together and share new findings, spark collaboration, and translate science into real-world impact.

[Learn more](#)

Urban Transitions 2026

November 10- 12, 2026 | Sitges, Spain



Urban Transitions 2026 aims to promote healthy urban development by bringing together different disciplines working within cities. Meet world leading experts on housing, urban and transport planning, architecture, environmental exposure assessment, environmental epidemiology, physical activity, climate change, public health, circular economy and governance to discuss current challenges and solutions.

Deadline for submission of abstracts: 8 May 2026

[Learn more](#)

[The NEXUS Calendar](#)

**We want to feature your
exposome-related events on
the NEXUS website and
social media!**

Visit Our Blog to Read More!

[Event Form](#)

[NEXUS Blog](#)

We are proud to have funding support from the following

National Institute of Environmental Health Sciences ([NIEHS](#))
National Institute on Aging ([NIA](#))
National Institute of Neurological Disorders and Stroke ([NINDS](#))
National Cancer Institute ([NCI](#))
National Institute of Arthritis and Musculoskeletal and Skin Diseases ([NIAMS](#))
Office of Research on Women's Health ([ORWH](#))

More information can be found on [NIH RePORTER](#).



Want to change how you receive these emails?
You can [update your preferences](#) or [unsubscribe](#)