

ILSI News

International Life Sciences Institute

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Questions? Feedback? We'd love to hear from you. Contact ILSI Communications Director Michael Shirreffs at: mshirreffs@ilsi.org

Annual Meeting Brings Network Together as One ILSI

ILSI's ability to bring the world together is exemplified by Annual Meeting. In January 2014, more than 300 people from 34 countries traveled to Bermuda – from as far away as Australia and Indonesia. These experts came together, as they do each year, to discuss current and emerging science and how ILSI can help extend the reach of that knowledge to improve human and environmental health and safety.

A majority say the ability to interact with scientists from around the world is the number #1 reason to attend the ILSI Annual Meeting.

This year there was added focus on a One ILSI strategic approach, which fosters programmatic coordination, cooperation, and collaboration among ILSI's 16 branches and the ILSI Research Foundation.

The One ILSI approach allows the organization to pull together resources on a global scale; human and financial resources that confront and resolve important health issues when needed. It is a way of doing business that values cooperation in identifying common concerns, designing and implementing programs, and disseminating new scientific information.

A special session at the 2014 Annual Meeting on One ILSI was organized to examine the range of important issues scientists and health professionals face today and to propose ways ILSI might address these in a coordinated way across geographies. Experts in four, over-arching topic areas – food and water safety; risk science and toxicology; nutrition; and sustainable agriculture – gave presentations describing the complex challenges the world faces. Following each presentation, ILSI professional staff provided an overview of what the organization is collectively doing now, and importantly, proposed ways to either enhance current activities or initial new ones.

The One ILSI approach operationalizes our motto: The whole of ILSI is greater than the sum of its parts.

Videos of these presentations are available via ILSI's dedicated You'Tube channel. You can watch and listen to the scope of the challenges and how we as an organization can respond:

ILSI Annual Meeting Videos Online

Four Thematic Areas Provide Focus

The One ILSI strategy encourages entities to work together to identify and then resolve outstanding scientific questions broadly encompassed within four thematic areas that capture the core of ILSI's work:

- · food and water safety
- toxicology and risk science
- nutrition, health and well-being
- sustainable agriculture and nutrition security

These focus areas provide structure to help raise awareness about ILSI and to better articulate the scientific fields to which we contribute. They also help elucidate new opportunities for driving scientific progress.

Read about ILSI's programs in these four areas online: ILSI Science & Research

Next year in Arizona 16 – 21 January 2015 More information will be announced soon!

ILSI Network Adds A Branch: Welcome Mesoamerica

ILSI has often responded to scientific need in a country or geographical region by forming a study or working group. Usually made up of industry and academic scientists, the study group assesses health and environmental issues of national or regional concern and gauges stakeholder interest within the scientific community, which includes all public and private sectors.

This is the process by which ILSI Taiwan – whose ILSI charter the Board of Trustees approved in January 2013 – was established. This year, the Board is pleased to announce the formation of another ILSI branch: ILSI Mesoamerica.

Following the familiar pattern, there has been interest in forming an ILSI branch in the Central American region for some time. Momentum gained in recent years, and the concept of an entity that addressed shared health concerns among Central American and Caribbean nations emerged. Located in Costa Rica, ILSI Mesoamerica will serve the scientific community in Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama, and several island nations.

This diverse area experiences many of the dual health problems associated with both inadequate nutrition and raising rates of obesity. Given the importance of agriculture throughout the region, ILSI Mesoamerica has identified risk assessment of pesticide residue and agricultural water safety to be critical concerns. ILSI Mesoamerica will also form working groups on health claims and food safety.

ILSI Mesoamerica currently has eight industry supporters and a variety of university and research center partners.

Please join us in welcoming ILSI Mesoamerica to the ILSI network!



Costa Rica is the world's third largest grower of pineapples. Throughout the Caribbean and North America, it is a symbol of hospitality and welcome.

Hitting the Ground Running

ILSI Mesoamerica's charter was approved on 18 January and by 20 February had organized its event. In cooperation with Universidad de Costa Rica and El Centro Nacional de Ciencia y Tecnología de Alimentos, ILSI Mesoamerica hosted a lecture by Professor Dr. Gerhard Eisenbrand, Kaiserslautern University, on dietary exposure to acrylamide.

In April, ILSI Mesoamerica and Universidad de Costa Rica are cosponsoring a session on risk perception at the XXVIII Latin American Food Science and Technology Seminar.

For more information on this event or about ILSI Mesoamerica in general, contact Gisela Kopper, Executive Director: gisela.kopper@gmail.com



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Mesoamerica

A New Center of Excellence

The Center for Safety Assessment of Food and Feed (CSAFF) is the newest of four centers of scientific excellence with the ILSI Research Foundation. Established in September 2013, CSAFF works to improve safety assessment of foods and feeds, especially by disseminating new knowledge in the field and building risk assessment capabilities at the national and regional level.

As do the other ILSI Research Foundation Centers, CSAFF works globally and partners with governments, universities and research institutes, NGOs, and the private sector. CSAFF also collaborates with ILSI's regional and country branches around the world.

CSAFF improves safety assessment of foods and feeds by disseminating new scientific knowledge and building capacity at the national and regional level.

CSAFF maintains the ILSI Crop Composition Database, a comprehensive public database on the natural compositional variability of select conventional crops formally curated by the ILSI International Food Biotechnology Committee. Data in this important tool are collected from material samples collected from controlled field trials conducted in multiple locations internationally. The samples are analyzed by validated methods with reference citations and, in most cases, under the guidelines of the United States Environmental Protection Agency's Good Laboratory Practices.

Learn more about CSAFF: Center for Safety Assessment of Food and Feed

Access the ILSI Crop Composition Database: ILSI CCDB

Diverse Scientific Program at Annual Meeting

In addition to the One ILSI session (see page 1), scientific sessions at the 2014 Annual Meeting were organized by ILSI North America and the ILSI Research Foundation. Concurrent sessions covered a range of topics.

PDF copies of the slides and, in most cases, videos of the presenters are available online:

2014 Annual Meeting Program

Faithful Research Reporting

Organized by the ILSI Research Foundation, speakers in this session tackled issues of outright bias as well as the more grey area of infidelity in research reporting, in which effects are exaggerated or significance is overstated but are not so egregious as to be considered misconduct. In addition to presenting the challenges, the speakers presented a range of actions to prevent or mitigate lessthan-faithful reporting of a study's findings and their meaning.

These included fostering an open data culture whereby much more raw data is publicly available than is currently, improving the peer-review process with training, certification, and increased transparency, and encouraging the peer-review of press releases.

Free Will or Fate

The first of ILSI North America's three scientific sessions speakers addressed neurobiological, psychobiological, and behavioral aspects of food choice and eating behavior, especially as it relates to overeating. The final speaker, Jason Riis, PhD, Harvard Business School, described ways to trigger a reflective thought system – one in which consumers are more likely to think of decision consequences – in food choice situations.

Precision Nutrition:

From Cell to Society This ILSI North America session explored ways to improve micronutrient status with novel approaches such as nutrigenomics (personalized nutrition that considers and the effects of foods on gene expression) and breeding techniques (conventional and transgenic) to improve a plant's micronutrient profile. Speakers also gave case studies on achieving folate recommendations and on difficulties consumers have in following the Dietary Guidelines for Americans.



Case Study on Arsenic

Experts in ILSI North America's third session provided a detailed case study on dietary exposure to arsenic. This included an introductory presentation by Sam Cohen, MD, PhD, Chair of the ILSI Board of Trustees, in which he gave an overview of arsenic toxicity.

Additional talks detailed the health risks associated with oral intake of arsenic for both children and adults and addressed risk-benefit of consuming certain foods at risk for arsenic contamination (e.g., rice, vegetables, fruits and juices). The final speaker discussed the US Food and Drug Administration's efforts to reduce dietary exposure of arsenic.

ILSI-India and CIMSANS Confront Climate Change

In November 2013, ILSI-India and the ILSI Research Foundation Center for Integrated Modeling of Climate Change and Nutrition Security (CIMSANS) organized an important conference on the effect of climate change on water resources and food production in South Asia. The event, cosponsored by the Government of India's Ministry of Earth Scientists, Ministry of Environment and Forest, and Indian Council of Agricultural Research, brought together experts from throughout India's scientific community and North American specialists in climate change.

60% of the crop area in India is rain-fed. This important conference had special focus on climate change and its impact on water resources vital to ensuring longterm nutrition security.

Presenters addressed two broad themes: climate change science and adaption to climate change. India is especially reliant on rain-fed water supplies so there was additional focus on climate change's impact on water resources, especially for agriculture and food manufacturing.

Conference participants not only shared important data but also made achievable recommendations for managing change. These recommendations, summarized in the Blueprint for Action section of the conference's final report, suggest new technologies; better management of existing systems; and long-range planning related to:

- · Ensuring adequate water resources
- Ensuring long-term nutrition security given stress on agricultural water resources
- Anticipating and alleviating impact of flood and drought
- Investing in research and development and capacity training
- Committing to international cooperation

The full report is available online: Conference on Climate Change "Climate change encompasses every sector of the economy and every section of society. The approach for mitigation and adaptation will require cooperation and integrated action on the part of the people and the authorities at all levels. The time to act is now."

Report from the International
 Conference on Climate Change and
 Implications for Water Resources and
 Nutrition Security

Conference Videos Online

ILSI-India's and CIMSANS' International Conference on Climate Change and Implications for Water Resources and Nutrition Security was recorded.

Videos of individual presentations – 31 in all – are available on the CIMSANS website: International Conference on Climate Change



Risk Communication and Risk Perception at ILSI Brasil

ILSI Brasil Annual Meeting 2 – 4 April Águas de São Pedro

The focus of the 2014 ILSI Brasil Annual Meeting is on "Risk Communication and Risk Perception." The goal for the meeting is to provide a forum for an exchange of experiences among scientists from government, industry, academia, and consumer protection agencies. Any one interested in learning, analyzing, and sharing observations on risk communication and its importance within the crises management process is encouraged to attend.

The program is divided in 3 panels.

The first will present international points of view. Lynn Frewer, PhD, Newcastle University, UK, provide a European perspective on risk communication; Margaret Karembu, PhD, ISAAA *Afri*Center, Kenya, will share her experience in communicating risk/benefit related to biotechnology in an African context; David Schmidt, International Food Information Council, USA, will share his knowledge on food safety communication. In the second panel, representatives from government, consumer protection agencies, and industry associations will talk about their roles in ensuring consumer safety and promoting consumer well-being. The importance of communication will be discussed in relation to food recalls and food labeling.

The third and final panel will focus on risk perception. Richard Canady, PhD, ILSI Research Foundation, will share learnings from the foundation's ongoing risk of risk perception activities while Mauro Fisberg, MD, PhD, UNIFESP, will provide a medical doctor's point of view on risk perception and risk communication. Professor Alessandro Lima, E-Life, will discuss the role of social media risk perception, communication, and management.

Registration for the ILSI Brasil meeting is open now:

ILSI Brasil Annual Meeting

Calendar at-a-Glance

This is just a short listing of the many scientific events in which ILSI is participating. Visit our online calendar for more:

ILSI Events Calendar

ILSI North America at Society of Toxicology Annual Meeting 23 - 27 March 2014 Phoenix, AZ, USA Session Information

ILSI North America at EB2014: Fortification and Health – Opportunities & Challenges 26 April 2014 San Diego, CA, USA Program Information

ILSI Europe Session at IAFP 2014 7 - 9 May 2014 Budapest, Hungary Program Information

National Nutrient Databank Conference 12 - 17 May 2014 Portland, OR, USA Watch for Information to Come

ILSI Europe Satellite Workshop at Eurotox 2014 7 - 10 September 2014 Edinburgh, Scotland Program Information

2015 ILSI Annual Meeting

16 - 21 January 2015 Chandler, AZ, US More information will be announced soon!

Other Annual Meetings

ILSI Europe 2014 Annual Symposium: "From Basic Research to Everyday Nutrition and Health" 20 – 21 March Brussels, Belgium Program ILSI Southeast Asia Region Annual Meeting and Scientific Symposium 10 – 11 April Singapore (more information coming soon)

ILSI HESI 2014 Annual Meeting: 25th Anniversary Program 10 – 11 June 2014 Washington, DC, USA Registration and Draft Program

New Publications

ILSI Europe

Impact of Diet Composition on Blood Glucose Regulation WR Russell et al. *Critical Reviews in* Food Science and Nutrition, 2013 (Published Online).

This comprehensive review summarizes the results from human dietary interventions exploring the impact of dietary components on blood glucose levels. The major macronutrients are included; carbohydrate, protein and fat, micronutrient vitamins and minerals, non-nutrient phytochemicals and additional foods including low-calorie sweeteners, vinegar and alcohol. Based on the evidence presented in this review, it is clear that dietary components have significant and clinically relevant effects on blood glucose modulation.

This article is available on via the journal (subscription or purchased required): Blood Glucose Regulation

Benefit-Risk Analysis for Foods (BRAFO): Executive Project Summary

S Vidry et al. European Journal of Nutrition & Food Safety 2013;3(4):146-153.

BRAFO, Benefit-Risk Analysis for Foods, was a European Commission project funded within Framework Six as a Specific Support Action and coordinated by ILSI Europe. BRAFO developed a tiered methodology for assessing the benefits and risks of foods and food components, utilizing a quantitative, common scale for health assessment in higher tiers. A methodology group reviewed and assembled the methodologies available developing a guidance document that describes a tiered ('stepwise') approach for performing a risk and benefit assessment of foods. In parallel, three

expert groups on natural foods, dietary interventions and heat processing applied the tiered approach to several case studies. Finally a consensus group reported on the implications of the experience gained during the development of the project for the further improvement.

A PDF of the Executive Project Summary can be downloaded: BRAFO

ILSI North America

Fortification: new findings and implications J Dwyer et al Nutrition Reviews Published online, January 2014

This article reviews the current landscape regarding food fortification in the United States and the content is based on a workshop sponsored by the North American Branch of the International Life Sciences Institute. This article discusses and evaluates the value of fortification, the success of current fortification efforts, and the future role of fortification in preventing or reversing nutrient inadequacies.

A PDF of the article is available for download: Fortification Findings

Fortified Foods Are Major Contributors to Nutrient Intakes in Diets of US Children and Adolescents

L Berner et al. Journal of the Academy of Nutrition & Dietetics, Published online January 2014

Even in an era of obesity and dietary excess, numerous shortfall micronutrients have been identified in the diets of US children and adolescents. To help tailor strategies for meeting recommendations, it is important to know what foods contribute greatly to micronutrient intakes. Data are lacking on specific contributions made by added nutrients.

A PDF of the article is available for download: Fortified Foods

ILSI Research Foundation

Multi-Walled Carbon Nanotubes in Polymer Matrices - Phase 2.5 Report —Comparison of Existing Studies of Release Measurement for MWCNT-Polymer Composites An ILSI Research Foundation Monograph

Get the monograph describing Phase 2.5 of the NanoRelease project online now! Carbon Nanotubes

Surrogate species selection for assessing potential adverse environmental impacts of genetically engineered insect-resistant plants on non-target organisms Keri Carstens, et al. *GM Crops and Food: Biotechnology in Agriculture and the Food Chain* 5:1, 1–5; January/ February/March 2014

Most regulatory authorities require that developers of genetically engineered insect-resistant crops evaluate the potential for these crops to have adverse impacts on valued non-target organisms (NTOs), i.e., organisms not intended to be controlled by the trait. Because in many cases, impacts to NTOs are assessed using surrogate species, this article explores why it is critical that the data derived from surrogates accurately predict any adverse impacts likely to be observed from the use of the crop in the agricultural context.

This article is available online from the journal: Surrogate Species

Thank You to Our Dedicated Board of Trustees



ILSI Board of Trustees

The individuals who serve on the ILSI Board of Trustees bring a range of expertise, experience, and perspective to their work defining and achieving ILSI's scientific goals. Their collaboration exemplifies ILSI belief that leaders from public and private institutions can and do successfully work together to improve the science that makes the world a healthier and safer place.

These individuals are unpaid volunteers who take their scientific and fiduciary responsibilities to the organization seriously. We thank them for the generous gift of time and energy. At the 2014 Annual Meeting in January, ILSI elected these new trustees:

- Michael Doyle, PhD University of Georgia
- Catherine Field, PhD
 University of Alberta
- John O'Brien, PhD Nestlé
- Ken Wallace, PhD University of Minnesota Medical Center

ILSI also thanked these members whose terms ended in 2013:

- Jay Goodman, PhD Michigan State University
- Janet King, PhD University of California, Davis
- Gert Meijer, PhD Nestlé

A Special Good-bye to John Milner

ILSI said a special good-bye to John Milner, who died unexpectedly on 31 December 2013. Dr. Milner volunteered his time to ILSI for over 25 years, serving as science advisor, Board trustee, and chair of the ILSI Publications Committee.

Dr. Milner was a strong believer in ILSI's mission to bring scientists from different sectors to work together to contribute to a better world. He had recently written: "...I believe [ILSI's] societal benefits will accrue by open and candid communications about issues with all thoughts and opinions respected and addressed."

Dr. Milner was candid and outspoken, and used his razor-sharp wit to push ILSI to set and achieve higher goals.

Please join us in honoring his memory.

Staff Recognitions

Every year at Annual Meeting, ILSI recognizes individuals for outstanding achievements and commitment.

The professionals who staff ILSI are critical to the organization's success.

This year, **Alison Kretzer, MS RD**, ILSI North America, was recognized for her leadership of public-private partnership among ILSI, the US Department of Agriculture, and the Agricultural Technology Innovation Partnership Foundation. These three organizations are working together on the "Branded Food Products Database for Public Health" – a database that will enhance the National Nutrient Database by making comprehensive food composition data from the food industry available to government, industry, the scientific community and the general public.

Yuying Wang, PhD, ILSI Focal Point in China, was recognized for his extensive work on behalf of children in China. Yuying and his team provided the scientific support for NutriGo Project, a program that helps improve the nutritional status children under 24 months old in rural China and for his ongoing contributions to the database on the nutrition status of children under 5 years old in China, which will be completed in 2014.

The ILSI Assembly of Members gave **Boon Yee Yeong**, ILSI Southeast Asia Region, a special thank you for her tireless work on behalf the organization. Boon Yee is the longest serving executive director of any branch – 20 years – and is responsible for making the ILSI Southeast Asia Region the powerhouse it is today.

Alex Malaspina, ILSI's founder, sent words of congratulations to Boon Yee. He summed it up nicely by saying "Boon Yee always takes challenges with great enthusiasm and great vigor. I cannot recall any instance in which [she] hesitated to tackle a new problem or opportunity."