

Sigma Xi Partners with ResearchGATE Networking Resource

Sigma Xi has partnered with the online resource ResearchGATE (researchGATE.net) to provide a major new online networking opportunity for its members.

ResearchGATE is the leading professional online network for scientists. It is free and designed to meet researchers' needs. Founder Ijad Madisch, a virologist at Harvard Medical School, describes it as "Facebook for scientists."

He said that, in a little over two years, ResearchGATE has built a network of more than 400,000 researchers from 200 countries. More than 1,000 subgroups have been created for specific disciplines. And in excess of 60,000 research documents have been uploaded for sharing with others on the site.

A special sub-community for active, dues-paying Sigma Xi members has been created on the site. To access it, go to Members > Members Only at www.sigmaxi.org.

The Sigma Xi sub-community can relate to other sub-communities and groups based on various affinities: universities, private and governmental research institutions, disciplinary pursuits like chemistry, physics, biology, economics, and civil and electrical engineering, interdisciplinary pursuits like biochemistry, quantum computing and so on.

Sigma Xi has already established affiliations with four British university groups: Cambridge, East Anglia, University of London and Imperial College-London.

"The value of ResearchGATE is that it can help move a stalled research project forward in ways that haven't been available before," Madisch said.

Users can search abstracts and find experts or colleagues from all over the world. They can query powerful search engines to discover articles related to their research focus in indexes containing millions of publications from different sources. The site also has an

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From the President

Join Us at the Annual Meeting



The 2010 Sigma Xi Annual Meeting and International Research Conference in Raleigh, North Carolina, will feature a special symposium November 11-13 on *Food Safety and Security: Science and Policy*. The symposium will take a multi-faceted approach in addressing issues of major significance to human health and welfare, issues that continue to receive much media attention.

The Sigma Xi leadership viewed this topic to be of global, public importance and has assembled a stellar cast of speakers and stakeholders from across industry, government and academia. The meeting is deliberately organized to be broadly inclusive, with the goal of promoting intellectual as well as civic engagement while opening our doors to a wider audience.

Accordingly, this year, the Annual Meeting and International Research Conference will welcome not only Sigma Xi delegates and members, but also all interested parties—from the private and public sectors, both scientists and non-scientists. We have issued open invitations to the members of numerous other scientific organizations who have specializations or foci in areas of relevance to food safety and security. This approach, in part, reflects Sigma Xi's goal of expanding its reach and increasing its presence in the scientific arena.

This November, Sigma Xi continues its legacy of providing a venue for scientists, students, professionals and diverse stakeholders from industry, government and academia to actively engage in multi-level discussions of interdisciplinary science and policy issues from a global perspective. Lectures and discussions will range from updates on exciting new developments in public policy as well as research and industry challenges, to advances in technology that have national and international implications.

It is our hope that the organization and logistics of the meeting, as well as the stellar cast of speakers, will enable meaningful exchanges of ideas on ways to maintain, safeguard and improve the world's food supply for the sustainable future. It is also our hope that this expanded, three-day symposium will portend a new direction and new level of openness and inclusiveness on the part of Sigma Xi. We want to make science and interdisciplinary scientific dialogue integral components of our Annual Meeting.

This we hope will bring renewed interest and engagement among our members, past, present and future. I encourage all Sigma Xi members to attend and actively participate in this important discussion. The symposium is open to all, including members of the general public, and will run smoothly and concurrently with the business of the Society's governance.

For those who have little or no knowledge about food safety and security, this meeting represents an enormous opportunity to learn about this critical area of science, current trends, direction and innovation. The poster sessions will be open to all; members and non-members alike are invited to submit abstracts not only of relevance to food safety and security, but on a variety of general interdisciplinary science and engineering topics.

We invite you to join us in Raleigh, North Carolina, and make this one of the biggest and most successful Sigma Xi conferences in recent years. Read more about the program on page 519.

Joseph A. Whittaker

Sigma Xi Volunteers Needed for Spirit of Innovation Awards

We're looking for mentors and judges for the 2011 Spirit of Innovation Awards, a nationwide competition founded on the legacy of Apollo 12 Commander Pete Conrad. The program challenges teams of high school students to create innovative products using science, technology and entrepreneurship to solve 21st century problems.

The 2011 competition will focus on products in aerospace, clean energy and cyber security. High school teams vie for more than \$80,000 in prize money and opportunities to pursue the commercialization of their products.

Teams and mentors can register online now to take advantage of the collaborative community. Product submissions are due by December 17.



Phase one competition judges review and score proposals for up to five teams each online during the months of December and January, providing approximately 10 hours of invaluable volunteer scientific expertise to the competition.

The Conrad Foundation, based in San Francisco, sponsors the competition. Sigma Xi serves as the official science advisor and will award winners a one-year Affiliate Circle Membership in recognition of their achievement.

"The Spirit of Innovation Awards bring the Sigma Xi philosophy to a new generation of innovators," said Jerome F. Baker, executive director of Sigma Xi. "With the help of the Conrad Foundation, we have the opportunity to support young scientists and connect them with the people and the resources they will need for success."

Winning teams also participate in the annual Innovation Summit held at NASA's Ames Research Center in Mountain View, California. For more information, visit www.conradawards.org.

ResearchGATE

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international job board with a listing of more than 950 career opportunities.

"It is not uncommon for a subscriber to post a deep and very technical question and have near immediate responses from all over the country and the world," said Paul C. Kettler, president of the Nordic Chapter of Sigma Xi, who helped implement the partnership.

He said that through this medium, scientists and engineers meet each other, establish collaborations, share research hypotheses and results, pose and answer questions, maintain dialogues and otherwise stay engaged and committed to the scientific enterprise.

"As we intensify our membership expansion program, we think our relationship with ResearchGATE will be a powerful recruiting tool," said Sigma Xi Executive Director Jerome F. Baker.

He continued, "In addition to receiving our award-winning magazine, *American Scientist*, among all the other benefits of membership, we now have at our disposal through ResearchGATE a network of some of the finest scientists and engineers in North America and throughout the world."

As with Facebook, users can adjust privacy settings on their ResearchGATE accounts, in deference to the need for researchers to be guarded about the information they share, either for competitive reasons or because they are subject to nondisclosure agreements.

David Wong Wins 2010 Bugliarello Prize

American Scientist magazine has awarded University of California, Los Angeles, investigator **David T. Wong** the 2010 George Bugliarello Prize for his article, "Salivary Diagnostics," in the January–February 2010 issue.



The Bugliarello Prize honors a superior interdisciplinary essay, review of research or analytical article published in *American Scientist*. It includes a prize of \$5,000.

Wong is a professor of oral pathology and associate dean of research at the School of Dentistry. He directs the UCLA Dental Research Institute and a center and laboratory related to his research interests in oral-fluid diagnosis and cancers of the head and neck.

In their comments, the judges noted that the article "was intriguing and offered a number of surprises." They found that of the candidate articles available from issues published in 2008 and 2009, "Salivary Diagnostics" offered the best balance of biology, technology and benefit to society.

The potential for the use of saliva as a diagnostic tool is tremendous and such tools are already making early diagnosis of several diseases easier, less-invasive and more affordable. Analysis of saliva using mass spectrometry is the primary tool of this area of research, and it reveals RNA and protein molecules that are telltale signs of disease.

In his *American Scientist* article, Wong described the molecular basis behind this emerging technology, reviewed some of the diseases currently diagnosable with it and delved into the future of research in this area.

ANNUAL MEETING & INTERNATIONAL RESEARCH CONFERENCE



FOOD SAFETY AND SECURITY SYMPOSIUM

NOVEMBER 11-14, 2010 · RALEIGH, NORTH CAROLINA USA

Annual Meeting Features Food Safety and Security Symposium

News headlines have raised public awareness of food safety issues, as *Salmonella* in eggs and *E. coli*-tainted produce have sickened hundreds. A recent study published by The Pew Charitable Trusts found that food-borne illnesses cost \$152 billion a year in the U.S. alone. It's estimated that 76 million Americans annually are sickened by the food they eat.

Meanwhile, the federal government has pledged to step up efforts to enhance food safety. Technology was brought to bear earlier this year when frequent-shopper cards were used at grocery stores for the first time to trace the source of a *Salmonella* outbreak.

Unfortunately, the public-health debate often neglects the science behind such outbreaks.

Join more than 20 prominent experts from academia, industry and government November 11-13 for a symposium on *Food Safety and Security: Science and Policy* during the 2010 Sigma Xi Annual Meeting and International Research Conference in Raleigh, North Carolina.

"The health and socio-economic impact of issues around food safety and security are enormous," said Sigma Xi President Joseph A. Whittaker. "As such, any reasonable attempt towards addressing the enormous complexities, challenges and opportunities involved will require multi-level and interdisciplinary approaches to find needed consensus."

He said the symposium will provide a forum for experts and key players to begin a dialogue that will ultimately inform, as well as raise the awareness of, policymakers and the general public about the implications and critical importance of these issues. As the multidisciplinary honor society of research scientists and

engineers, Sigma Xi is in a unique position to guide this discussion.

In an award-winning *American Scientist* article called "Safer Salads," from the November-December 2007 issue, the authors found that sanitation can break down during growth, harvest, washing, storage, transport or display of fruits and vegetables. They described new research into postharvest treatments that could minimize consumer risk in the near future.

Food security has emerged as the unprecedented challenge of feeding the world's growing population. This complex topic stands at the intersection of many disciplines. Challenges include the physical, biological and socio-economic constraints that limit food production and the ability of people to obtain a healthy diet. Chronic food insecurity often means famine and hunger.

Along with Sigma Xi, PHS Group, Inc., a management and technology firm based in Silver Spring, Maryland, is sponsoring a competition for student concept papers that present creative ideas addressing the critical issue of food security in Haiti. The authors of the top three papers will receive monetary prizes.

In addition, Sigma Xi is co-sponsoring with PHS Group, Inc. a call for white papers on food security and sustainability. The author(s) of the most compelling paper will be offered the opportunity to be paid consultant(s) in the implementation of a pilot program that will address the critical issue of food security in Hispaniola and the Caribbean Basin Countries.

Program details and registration are available online at www.sigmaxi.org. Twelve Continuing Education Credits are offered for American Registry of Professional Animal Scientists (ARPAS) members. •

FOOD SAFETY AND SECURITY: SCIENCE AND POLICY

A Sigma Xi Symposium
November 11-13, 2010
Raleigh Convention Center
Raleigh, North Carolina

Keynote Speakers

Gale A. Buchanan, Dean and Director Emeritus, College of Agricultural and Environmental Sciences, University of Georgia

Starnes E. Walker III, Director of Research, U.S. Department of Homeland Security

Daniel J. Gustafson, Director, Liaison Office for North America, Food and Agriculture Organization of the United Nations

John T. Hoffmann, Senior Research Fellow, National Center for Food Protection and Defense

Barbara Glenn, Vice President for Scientific and Regulatory Affairs, CropLife America

Panelists

Lisa Jo Lupo, Managing Editor, *QA Magazine*

Walter Ram, Vice President, Food Safety, The Guimarra Companies

Benjamin R. Warren, Director, Platform Food Safety and Microbiology, Research Quality and Innovation, ConAgra Foods, Inc.

Chamus Burnside, Food and Occupational Safety Manager, Food Lion

Hal King, Senior Manager, Chick-Fil-A Inc.

Brian Zomorodi, Vice President, Technology and Quality, Ready Pac Produce, Inc.

Jennifer Davis, Assistant Professor of Equine Medicine, N.C. State University

Lisa Weasel, Associate Professor of Biology, Portland State University

Sophia Kathariou, Professor of Food Science and Microbiology, N.C. State University

Fletcher Arritt III, Assistant Professor, Food, Bioprocessing and Nutrition Sciences, N.C. State University

Siddhartha Thakur, Assistant Professor, Population Health and Pathobiology, N.C. State University

Kathiravan Krishnamurthy, Research Assistant Professor/Engineer, National Center for Food Safety and Technology

Barbara VanRenterghem, Editor, *Food Safety Magazine*

J. Joseph Corby, Executive Director, Association of Food and Drug Officials

Gregory Pallaske, Director, Regulatory Compliance and Food Safety and Quality Assurance, U.S. Food Service

Donna F. Schaffner, Associate Director, Rutgers University Food Innovation Center