

The 2011 Japan Earthquake and Tsunami SRA Member from Japan Shares His Views on the Event and Lessons Learned

Mary A. Walchuk

"In March 2011 we experienced a massive earthquake followed by one of the biggest tsunamis in our history and an accident involving nuclear power plants," reported Toru Watanabe, a Society for Risk Analysis (SRA) member who lives in Japan. Watanabe is an associate professor at the Department of Food, Life, and Environmental Sciences at Yamagata University in Japan, which is approximately 150 km west of the areas affected by the earthquake and tsunami. He specializes in quantitative analysis of health risks, primarily quantitative microbial risk assessment (QMRA). He is also a member of the Japan Society on Water Environment (JSWE) task force on water environment issues related to the event, which is beginning investigations on sanitary management in the affected area.

"Fortunately my home, family, and friends were not directly affected by the earthquake and tsunami," Watanabe said. "According to news reports, a lot of affected people are still in shelters and temporary houses or have moved to regions far from Fukushima, Tohoku, where the large tsunami hit and the damaged nuclear power plants exist. They are strongly concerned about whether or not they can come back to their hometowns, and those who were not directly affected currently have great concerns about radioactive contamination of foods."

Watanabe believes that public concern about cancer risk due to exposure to radiation may be one of the main results of the Fukushima nuclear power plant event and that the disaster will affect Japanese attitudes toward and investments in nuclear power in the future. "The concern of the general public in Japan about the damaged power plants is getting smaller and smaller," he said. "On the other hand, the radioactive contamination of soil, water, air, and foods, which may cause internal exposure, is still a big concern. Although I am not specialized in radiation-related health risk, I guess that normal people, other than nuclear plant workers, are not at a significant cancer risk, while the risk due to long-term exposure, including internal exposure through contaminated soil, dust, water, and foods, is uncertain.



A large ferry boat rests inland amidst destroyed houses after an earthquake and tsunami struck Japan on 11 March 2011. U.S. Marine Corps photo by Lance Cpl. Garry Welch/Released

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President's Message

Rachel Davidson

To all Society for Risk Analysis (SRA) members worldwide, greetings from sunny Delaware! On behalf of the Council, which has been working hard to keep the Society strong and growing, I'm pleased to report on some recent developments.

Website Redevelopment

Our major endeavor for the year continues to be

the overhaul of our website, and I am happy to say that the venture is proceeding smoothly. A detailed request for proposal was sent to potential bidders with a 15 July deadline for submission of proposals. Development will take place through the summer and fall. While this is a significant undertaking, we view it as a vital effort that will serve many goals, including elevating our public image, improving our ability to provide up-to-date information to our members and the general public, enhancing communication among the regional organizations, supporting specialty groups, developing a presence on social media, improving our web-based administrative systems, and facilitating future maintenance of the site. Although we still have work to do, I don't think it's premature to extend a huge thank you to Lisa Robinson, who is chairing this effort, and to our current webmaster, Jim Butler, who is overseeing the technical issues. Their effort and attention to detail has been fantastic and makes me confident that this project will be a huge success.

Journal News

I'm delighted to welcome two new associate editors to the journal's staff. Katherine McComas joins Michael Siegrist as an editor for the risk perception and communications area, and Sally Kane has taken over as book-review editor. We know they will do a wonderful job.

In response to member requests, we now offer a choice to opt out of receiving a paper copy of the journal. While there is no cost difference between the regular and electronic-only memberships, we hope this will help us to better serve those members who only read the journal online and would like to be more environmentally friendly.

New Initiatives

The Council has voted to fund three new projects through our New Initiatives Fund. The first is an effort to collect, organize, and distribute risk analysis course materials through our website. We hope this will be an important new value-added part of our revamped website. Education Committee Chair Michael Siegrist is leading the undertaking. If he contacts you in the coming months, I hope you will consider sharing your course materials. If we all participate, this new database of educational materials can become a great resource for the Society.

The second initiative is a pilot study intended to develop processes and tools to help regional organizations recruit and retain faculty and student members. Led by Peg Coleman, the initiative is a collaborative effort of seven U.S.-based regional organizations. Participants will develop briefing materials about risk analysis and SRA and organize campus visits to engage members and potential members.

In the final new initiative, Igor Linkov will under-

take efforts to identify subject areas that are not encompassed within SRA's current collection of specialty groups but that offer potentially important areas for development of the Society. He will also begin developing plans to pursue expansion into those areas.

If the inspiration strikes you, please consider submitting your own idea for how to improve the Society as a New Initiatives proposal. The proposal form is available online in the Finance Committee's policies and procedures document (see below), or just contact Treasurer Jeff Lewis (r.jeffrey.lewis@exxonmobil.com).

Financial Transparency

As part of the ongoing effort to improve transparency of the SRA administration, the Finance Committee has developed a <u>policies and procedures document</u> and posted it on the Members Only section of the website (see Members Only→SRA Documents→Finance Committee). It includes everything you might want to know about financial issues at SRA: the Finance Committee charter; policies and forms related to the New Initiatives Fund, general reimbursement requests, and travel reimbursement requests; and the Society's investment and reserve policies. The detailed annual budgets are now being posted in the same location as well. I thank current and past Treasurers Jeff Lewis, Jack Fowle, and Pamela Williams for their hard work putting this together.

Upcoming Events

The next annual meeting is set for 4-7 December 2011 in Charleston, South Carolina (<u>www.sra.org/</u><u>events_2011_meeting</u>). President-elect Ann Bostrom and the Planning Committee have a lot of great activities planned around the important and timely theme "Risk Analysis on the Coast."

The World Congress will be held 18-20 July 2012 at the Sydney Convention and Exhibition Center in the central business district of Sydney, Australia (<u>www.sra.org/worldcongress2012</u>). I'm told it's a fantastic venue, so please plan on joining us there.

In the meantime, there are regional and SRA-sponsored events too numerous to list here. Take a look on the web at <u>www.sra.org/events</u> for information about those.

I look forward to seeing everyone in December, if not before.



(Japan, continued from page 1)

I am sure that no one believes anymore in the safety of nuclear power plants. Our government and power companies will have to publish possible risks of any plant accidents together with (predicted) affected areas. Unless risk literacy is improved, we Japanese will not accept the construction of new plants and restart of plants currently stopped for routine inspection, even if we suffer from a shortage of the power supply."

"This catastrophic event taught me a number of important lessons on risk," Watanabe said. "One is the importance of improving 'risk literacy' with the public. Regrettably, the general public is not capable of understanding or accepting the results of



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Vehicles are crushed by a collapsed road at a car park in Yabuki, in southern Fukushima Prefecture, on 11 March 2011 after the earthquake in Japan. Photo by Darren Gubbins/AFP/Getty Images

probabilistic risk analysis. It is quite tough to improve risk literacy for the general public because most Japanese people are still seeking zero risk. The typical example is the nuclear power plants. I guess that a large number of nuclear power plants will be shut down in the near future in our country due to the extreme concern about the accident. In my work, I often use an acceptable risk, at which annual risk of infection of 1/10,000 is usually set, to determine standards for a pathogen in drinking water and recreational water. This acceptable risk was originally used in the United States. Although we have just followed it, few people know about this fact and others probably have no doubt that the risk of infection attributed to the water is zero. One possible, but hard, way to improve risk literacy may be for our government to release any risk information as correctly as possible and help the general public understand that risks always exist everywhere in their lives."

Watanabe also said that it would probably be helpful if others, such as SRA members, could help

develop and provide useful tools to help the public correctly understand any risks analyzed. This would be useful in cases where the low risk literacy causes difficulty, for example, when information about a health risk, or analytical result, with uncertainty might mislead the public and cause unnecessary concern.

Watanabe said another lesson he learned is the urgent need for a new policy-making framework. "Sufficient measures against an earthquake and tsunami of this scale were not prepared in our country, mainly for costeffectiveness reasons, since events of this scale were predicted to occur only once in a thousand years," he explained. "On the other hand,

monumental stones and ancient documents in the affected area have always shown us how terrible the hazards of an earthquake/tsunami could be. It just resulted in a proverb— 'A natural disaster strikes when people lose their memory of the previous one.'"

"Simply predicting the probability of the occurrence of extremely rare events causing extremely severe damage alone does not suffice," Watanabe said. "I cannot easily answer the question of what would suffice, but I feel that the value of human lives, which is often evaluated monetarily, has been completely changed (increased) after this event."

"This event has reinforced my feeling of powerlessness against such a terrible natural disaster," Watanabe concluded. "I have recognized the importance of life, family, friends, and community. Since this event, I am even more determined to contribute my skills and knowledge to raise the importance of and strengthen the application of risk analysis for our safe and sustainable living in Japan."

An Invitation to Share Your Experiences and Views

How did the earthquake/tsunami disaster affect you and your work in risk analysis? What do you think were the most important lessons learned from the event? To share your experiences and views in the Fourth Quarter 2011 issue of the *Risk Newsletter*, send a paragraph or two to Editor Mary Walchuk (editormw@hickorytech.net) by 20 September 2011. We will print all that space and time allow.

In Memory of Stanley Kaplan 1931-2011

Dr. Stanley Kaplan passed away from Alzheimer's on 6 June 2011. He was 79 years old. Stan was born and raised in Brooklyn, New York. He was a founder, chief technical officer, and board chairman of Bayesian Systems, Inc., a Washington, DC, software company developing products based upon Bayes Theorem. Prior to "semi" retirement in 1995, he was vice president and chief scientist of PLG, Inc., of Newport Beach, California, a leading consulting firm in quantitative risk assessment. Stan was a major contributor to the theory and practice of quantitative risk assessment. He was a senior fellow and advisory scientist and one of the top theoreticians at the Westinghouse Bettis Atomic Power Laboratory during the early nuclear navy era.

Stan was a major force in formalizing, mathematizing, clarifying, simplifying, and quantifying the riskassessment process, beginning with risk analyses of nuclear plants and major construction projects. Other of his applications included risk assessments of portions of the space shuttle system; seismic, fire, and aircraft impact risk on nuclear plants; hazardous materials storage and transportation; a spent fuel pool; research reactors; offshore oil drilling (environmental risk); uranium mill tailings; underground oil storage; pipeline construction projects (surface and deep undersea); a coal mine; chemical plants; a dam; tarsands projects; a refinery demolition project; manufacturing processes; licensing of a new agricultural chemical; and regulatory actions relating to importation of animals, fruits, and meat products. He was instrumental in motivating and training the U.S. Department of Agriculture (along with other government agencies, U.S. and foreign) in the use of quantitative risk assessment and Bayesian methods. This usage has become the lingua franca and has spread to many countries in support of efforts to improve food safety and to reduce trade barriers in agricultural commodities.

Stan's contributions to the U.S. Naval Nuclear Propulsion Program while at the Bettis Lab include breakthroughs in a theoretical understanding of the xenon spatial instability problem, reactor space-time kinetics, and the development of the Kaplan synthesis methods in reactor physics. While at PLG, Inc., Stan was a major contributor to the methodology of nuclear safety quantitative risk analysis (QRA), as represented in the Zion, Indian Point, and Seabrook studies. He was the developer of the discrete probability distribution (DPD) method for probabilistic calculations and the two-stage Bayesian technique for data analysis and was co-developer with Dr. B. John Garrick of the "set of triplets" definition of risk. Other contributions while at PLG included originator of the matrix theory of event trees, the DPD approach to seismic risk analysis, and the "Expert Information" or "Evidence Based" approach to eliciting/combining knowledge from experts. He was the original architect of the RISKMAN[®] software package for interactive risk analysis, the PROODENCE code for analysis of construction project overruns, the SEIS code for seismic risk analysis, and the BARP Program for graphical Bayesian reliability analysis.

As an independent consultant, Stan developed Bayesian expert systems for medical diagnosis, nuclear plant control-room assistance, predictive maintenance of VORTAC electronic navigation equipment, automotive and truck diagnosis, diagnosis of venomous animal bites/stings, prediction of outcome of bidding contests, repair/rebuild decisions on jet engine parts, and others. He was one of the first American scientists to take interest in and contribute to the Russian science TRIZ, the Theory of the Solution of Inventive Problems. He believed this theory, and its subset, Anticipatory Failure Determination (AFD), can make a significant contribution to the practice of QRA and decision making.

Stan was well known for his clarity of thought in science and engineering and was intolerant of the overuse of technical and systems talk, believing that it too often covered up a real understanding of basic concepts. His passion for clarity was manifested in his very conversational style of writing technical papers.

Stan was a fellow of the Society for Risk Analysis and recipient of its 1996 Distinguished Achievement Award. He was the author of a number of the seminal papers in this field. He held a BS degree from the City College of New York and MS and PhD technical degrees from the University of Pittsburgh.

He was a senior postdoctoral research fellow of the National Institutes of Health at the University of Southern California and was a graduate of the Oak Ridge School of Reactor Technology. In February 1999, he was elected to the National Academy of Engineering.

In Memory of Lester B. Lave 1939-2011

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Lester B. Lave, one of the nation's leading economists, died at his home in Pittsburgh on 9 May 2011 after a four-month struggle with cancer. He was 71. Professor Lave spent most of his career at Carnegie Mellon University (CMU) applying tools developed in economics and risk analysis to problems that profoundly affect the lives of millions of people. Lave first came to international prominence in the 1970s when, together with his student Eugene Seskin, he used statistical methods to demonstrate that air pollution in American cities was causing a significant increase in death rates. While these results were vigorously contested by industry when they first appeared, the findings have been widely supported by subsequent research, and they served as a key early basis for Environmental Protection Agency regulations to improve air quality.

He had an outstanding ability to choose important problems, perform careful analysis, and present results that questioned conventional wisdom. A former president of the Society for Risk Analysis (1985-1986), much of Lave's research focused on the problems of balancing environmental and other risks with economic and other social objectives. Global climate change, dam safety, truck drivers who have diabetes, and the environmental effects of fuel additives were but a few of the topics addressed in research by Lave and his students.

In the 1990s Lave, and colleagues Chris Hendrickson and Francis McMichael, analyzed California's plans to require the adoption of electric cars that would use leadacid batteries. Their life-cycle analysis found that in recycling the batteries from such cars, more lead would be released into the environment than if the cars burned leaded gasoline. While vigorously disputed, these results were ultimately vindicated and helped California and the nation move toward better polices for clean cars.

Lave did his undergraduate work in economics at Reed College, where he graduated Phi Beta Kappa, and his PhD in economics at Harvard. He often collaborated in research on health care delivery with his wife Judith, also a Harvard-trained economist, who is a professor at the School of Public Health at the University of Pittsburgh. With Gil Omenn he did landmark work on testing of toxic chemicals. In 1982, in recognition of his many contributions to environmental and public health, Lave was elected to the Institute of Medicine (one of the arms of the National Academies). He served on, and chaired, numerous study committees of the National Academies/ National Research Council. Most recently he chaired the National Academies report "Real Prospects for Energy Efficiency in the United States," which demonstrated large opportunities for saving energy by improving buildings. At the time of his death he was chairing National Academies committee on whether and how to make motor fuels from biomass.

For the past 15 years, Lave has devoted much of his attention to two problems: green design and restructuring and improving the electricity system. He helped to found and served as director of Carnegie Mellon's Green Design Institute, which has focused on finding environmentally acceptable ways of manufacturing, using, disposing of, and recycling products. With colleagues Chris Hendrickson, Scott Matthews, and Mike Griffin, he helped to build an economy-wide approach (Economic Input-Output Life Cycle Analysis [EIO/LCA]) to "life cycle analysis." With colleagues Granger Morgan, Alex Farrell, and Jay Apt, he founded and built Carnegie Mellon's Electricity Industry Center, which today is the largest interdisciplinary group of its kind working on all aspects of the electric power industry. With Marija Ilic, he pioneered a course that brought together MBAs and engineers to study how best to improve the power system. A greatly loved teacher, he counted among his students chief executive officers of some of the nation's best-run companies.

With the exception of five years at the Brookings Institution in Washington, Lave spent his entire professional career at CMU, during which he published or contributed to 28 books and over 400 professional and other publications and supervised 40 PhD students and postdoctoral fellows. At Carnegie Mellon he held the rank of university professor and was the Harry B. and James H. Higgins Professor of Economics and Finance. He served for eight years as the head of the Department of Economics at CMU's business school. He held academic appointments at the Tepper School of Business, the Department of Engineering and Public Policy in the College of Engineering, and the H. John Heinz III School of Public Policy and Management.

Lave is survived by his wife Judith; their two children, Jonathan M. Lave of Washington, DC, and Tamara R. Lave of Miami; two grandchildren; and a sister, Carol Kaufman.

The family asks that in lieu of flowers contributions be made in his name to a charity such as the Pittsburgh Symphony Orchestra.

A virtual issue of the journal *Risk Analysis* has been created in tribute to Lave and can be found at <u>http://</u>onlinelibrary.wiley.com/journal/10.1111/%28ISSN%291539-6924/homepage/special_issue__lester_lave.htm.



"Risk Analysis on the Coast" SRA Annual Meeting 4-7 December 2011 Charleston, South Carolina

Save the date!

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Mark your calendar and join your colleagues and friends for the 2011 Society for Risk Analysis (SRA) Annual Meeting 4-7 December 2011 at the North Charleston Convention Center and the Embassy Suites North Charleston Hotel in Charleston, South Carolina. Strong submissions have produced an excellent program, with over 350 oral presentations, distinguished plenary speakers, and a stellar poster session. Whether your interests are in food safety or sea-level rise, nanomaterial toxicity or the aggregation of expert judgments in risk analyses, Deepwater Horizon or new developments in risk management and sustainability, the program offers something for you. Building on last year's successes, there will be professional development opportunities for young risk analysts and a career fair. It's not too late to submit if you missed the deadline! The SRA website will open again in August for poster submissions on late-breaking research.



The Battery in Charleston photo courtesy of Charleston Area Convention & Visitors Bureau

Meeting information and online forms—<u>www.sra.org/events_2011_meeting.php</u>

World Congress on Risk 2012 18-20 July 2012 Sydney, Australia



The Society for Risk Analysis (SRA) invites you to join us for the World Congress on Risk 2012: "Risk and Development in a Changing World," Wednesday, 18 July, to Friday, 20 July 2012, at the Sydney Convention and Exhibition Centre, Australia.

Go to <u>www.sra.org/worldcongress2012</u> for further details and to submit your Symposium Session proposal. The co-chairs of the World Congress 2012 are Professor Alison Cullen (University of Washington), Dr. Daniela Leonte (Australian Government Department of Health and Aging), and Professor Jonathan Wiener (Duke University).

Questions? Contact the SRA Secretariat at <u>ddrupa@burkinc.com</u>.

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Committees^{*}

Conferences and Workshops Committee

Margaret MacDonell, Chair

We welcome any Society for Risk Analysis (SRA) members who might be interested to join our Conferences and Workshops (C&W) Committee. We meet monthly or more often by teleconference and once in person at the annual meeting. The committee will welcome your ideas for events of all types, both at and separate from the annual meeting. For more information about the C&W Committee, please visit <u>www.sra.org/events</u> or contact Chair Margaret MacDonell (macdonell@anl.gov).

Subcommittee for Workshops at the Annual Meeting

Jacqueline Patterson and Jay Zhao, Co-Chairs

The Subcommittee for Workshops at the Annual Meeting (WAM) invites you to join fellow risk analysts on Sunday, 4 December 2011, to learn new skills or brush up on the old. The C&W Committee once again will provide annual meeting attendees with the opportunity to choose from over a dozen continuing-education workshops, covering a wide range of risk issues, tools, and approaches. Both full-day and half-day workshops will be offered on Sunday, and selected workshops may also be offered on Thursday, 8 December. More information about the workshop contents, presenters, and fees will be available with the meeting registration materials, which will be available online later this summer. Those who register early receive a discount, and once again in 2011, SRA will implement its well-received educational initiative to provide students with a deeply discounted price of \$50 per workshop.

Anticipated Workshop Topics for 2011 Annual Meeting

- Risk analysis: fundamental concepts, applications, and controversies
- Common petrochemical industry exposure tools used to support chemical safety report development for REACH
- Cumulative risk assessment: grouping and analyzing combined chemical, biological, physical, and socio-economic stressors
- Interactions between social stressors and environmental hazards: reality or perception
- Introduction to toxicology for risk assessors
- Benchmark dose modeling (BMD) analysis
- Comprehensive evaluation of toxicological information in chemical risk assessment—looking beyond the lowest point of departure
- Chemical-specific adjustment factors: application of data to reduce uncertainty in inter- and intraspecies extrapolation for chemical risk assessment
- Introduction to environmental and health aspects of nanotechnology
- Advancing mechanisms of gut interactions informing microbial risk assessment
- Alternative approaches for synthesizing studies for evidence-based decision making

- Eliciting judgments to inform decision making
- Enterprise and project risks from a systems perspective
- Risk, robustness, and info-gaps
- Get more from your models—use sensitivity analysis
- Probabilistic risk analysis with hardly any data
- Global climate change: defining a better process for risk communication and stakeholder participation

For more information about WAM or continuing education workshops at the annual meeting, please contact Jacqueline (<u>patterson@tera.org</u>) or Jay (<u>zhao.jay@epa.gov</u>).

Subcommittee for Non-Annual Meeting Events *Amber Jessup, Chair*

Away from the SRA annual meeting, the Subcommittee for Non-Annual Meeting Events (NAME) is able to approve SRA sponsorship, with advertisement on the SRA website and in the newsletter and use of the SRA logo, to professional and academic continuing education events around the calendar. See our materials available via the "Events" link at <u>www.sra.org</u>, including the instructions and proposal form for event sponsorship.

Upcoming 2011 SRA-Sponsored Events

- <u>Computational Systems Biology and Dose Response</u> <u>Modeling Workshop</u>; Research Triangle Park, North Carolina, 12-16 September 2011
- International Symposium and Workshop on Cultural <u>Property Risk Analysis</u>; Lisbon, Portugal, 14-16 September 2011
- Ecological Risk Assessment: Theory and Practice (course); Durham, North Carolina, 19-23 September 2011
- <u>2011 Risk Science Symposium: Uncertainty and Sus-</u> <u>tainable Innovation: New Perspectives on Emerging</u> <u>Challenges</u>; Ann Arbor, Michigan, 20-21 September 2011
- International Conference on Management Science and <u>Risk (MSR 2011);</u> Beijing, China, 17-19 September 2011

For more information about NAME or SRA-sponsored events beyond the annual meeting, please contact Amber (amber.jessup@hhs.gov).



Regional Organizations

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SRA-Egypt www.sra-egypt.org

Shady Noureldin, President



It is really intriguing how Society for Risk Analysis-Egypt (SRA-Egypt) members provide ideas for developing the structure and the strategies for the Society. The recent meetings have come with new ideas. The following paragraphs summarize the main recent updates and discussion topics.

Administrative

The SRA-Egypt website has finally launched: www.sraegypt.org.

SRA-Egypt organization has been initially defined by announcing the following volunteering candidates as SRA-Egypt Officers: President Shady Noureldin, Vice President Ibrahim Eshra, Secretary General Yusuf Elhami, Treasurer Mahmoud Safwat, and Councilors Muhammad Madany and Muhammad AbdelRahman.

Specialized committees are proposed to enhance the activity of SRA-Egypt, initially the Program Committee and the Public Relations Committee. The Program Committee's main objective is to set the main plans to achieve the organization's mission and to fulfill its main aim, which is spreading risk analysis knowledge. Also, the Public Relations Committee is proposed to organize SRA-Egypt's relationship with other bodies and work in close coordination with the Program Committee to achieve its vision.

Monthly meetings shall be held to allow members to introduce their suggestions and ideas associated with SRA-



The first official meeting of SRA-Egypt, held 16 April 2011

Egypt's plans, for committees' general policies, and for general follow-up of SRA-Egypt's activities.

Experts' Vision towards Egypt's Recovery (Risk Analysis: Challenges and Solutions)

In regard to the recent events in Egypt and elsewhere in the Middle East, it is understandable that Egypt will be struggling with long-term economic challenges. The steps for rebuilding Egypt following the 25 January 2011 revolution are complicated and difficult.

The world counts on the courage of the Egyptian people and recognizes the scale of the political, social, and economic rebuilding work that lies ahead. Such change is both inspiring and daunting, especially to those small and intermediate Egyptian organizations.

It is believed that the time required for the recovery of Egypt's different sectors can be accelerated if a coordinated and multi-centric recovery program is implemented into action on a fast-track basis. It is important to envision this recovery program, through a risk managementframework, by drawing on the hard-to-obtain lessons from past national recovery experiences. Many international bodies stand ready to provide assistance to Egypt to advance its efforts in economic recovery.

In this regard, a proposal has been submitted by SRA-Egypt to the national SRA in the United States. The proposal counts on the SRA esteemed members who are believed to have uplifting experience and vision to grow the Egyptian economy stronger, safer, and more competitive

> going forward. SRA-Egypt officers propose organizing a two-to-three-day seminar to discuss Experts' Vision towards Egypt's Recovery (Risk Analysis: Challenges and Solutions).

> We hope that SRA will support this event by providing key speakers from the United States and Europe. The seminar's hosting expenses can be covered through an interested audience registration fee.

> In addition to the tremendous goal of this event, which is guiding Egypt's economy forward, this event shall be a great opportunity for promoting both SRA and SRA-Egypt.

> All members are encouraged to submit their ideas and proposals via shady@sra-egypt.org.

> The latest newsletters for SRA-Egypt are located at http://sra-egypt.org/?section=pages&nID=MzA.

SRA-Latin America www.srala.org

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Marcelo Wolansky, President



The Society for Risk Analysis-Latin America (SRA-LA) has been working on multiple activities during the 2010-2011 transition. We

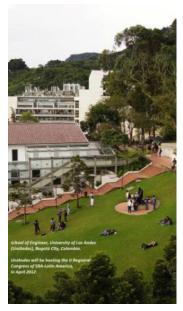
had our second election of officers last November; the II Executive Council started up formal electronic meetings last January. The 2011-2012 elected officers are President Marcelo Wolansky (Buenos Aires, Argentina), Presidentelect Sandra Demichelis (Buenos Aires, Argentina), Past President Esperanza López Vázquez (Morelos, México), Secretary Mabel Padlog (Guadalajara, México), Treasurer Hugo Murcia Agudelo (Manizales, Colombia), and Councilors Inés Navarro González (México City, México) and Elizabeth Nunes Alves (Sao Paulo, Brazil).

We are all actively engaged in succeeding in two major tasks. First, we need to increase our visibility in order to expand our membership. Second, we want to provide more benefits to our members regarding facilitation of opportuni-



Colombian landscapes, among the best attractions worldwide!

ties for education, exchange of pre- and postgraduate fellows, and collaborative research and qualified information. We are in the process of reorganizing our structure by creating specialty groups and committees with specific assignments. Regarding visibility, we have agreed to reciprocal promotion with some academic groups with Hispanic roots in the Americas. For instance, you may now find a link to SRA-LA in the Hispanic Organization of Toxicologists (Society of Toxicology [SOT]) at http:// www.toxicology.org/isot/sig/



<u>hot</u>. In addition, our president took advantage of the 2011 annual meeting of SOT in Washington, DC, to personally present a promotional poster for our group. More than 6,000 attendees from over the entire world met there, and we hope promotional activities like this will soon make a major contribution to our growth.

Time goes by fast . . . 2012 is around the corner, and we are happy to announce that our II Regional Meeting will be held in Bogotá City (Colombia) in April 2012. Bogotá has an unmissable mix of history, nature, climate, modern attractions, and all the Caribbean rhythm just a few steps away. We will provide more details on the scientific program, dates, and recommended hotel accommodations soon on our website (www.srala.org). Mark your calendar!

National Capital Area www.sra.org/ncac

Sally Kane, President

The National Capital Area Chapter (NCAC) of the Society for Risk Analysis (SRA) is proud to announce its full roster of officers: President Sally M. Kane (private consultant), Treasurer Sarah J. Ryker (Science and Technology Policy Institute), and Secretary Genya V. Dana (Woodrow Wilson International Center for Scholars and American Association for the Advancement of Science fellow at the Department of State beginning in September). We are also fortunate to have two experienced counselors providing advice and helping with programming: Richard Williams (George Mason University) and Tee Guidotti (Medical Advisory Services and chair of the SRA Risk Policy and Law Specialty Group). In March 2011, NCAC held an informative and wellattended event titled "The BP Oil Spill—What Have We Learned?" (hosted by George Washington University's Environmental Law Studies Program and co-sponsored by the American Bar Association Section on Energy, Environment and Resources and the SRA Economics and Benefits Analysis Specialty Group). We heard from three distinguished panelists: Priya Aiyar (most recently deputy chief counsel of the National Commission on the Deepwater Horizon Oil Spill and Offshore Drilling), Ragnar Löfstedt (professor of risk management at Harvard and the director of King's Centre of Risk Management, King's College London, United Kingdom), and Roger Kasperson (research

professor and distinguished scientist at Clark University). Speakers provided information on the Commission's conclusions and recommendations, mistakes made in risk communication, and the complexity of rebuilding social trust.

NCAC is currently composing a broad-based master plan for the next 18 months. We are in the midst of planning several future events (see below), open to SRA members and the larger community. We welcome additional ideas to add to the list.

- Risks of Nuclear Power Generation and Disposal of Waste. Host: Catholic University (Washington, DC) Columbus School of Law
- Current Status of U.S. Regulatory Reform and Implications for the Practice of Risk Analysis. Co-sponsor: the SRA Risk Policy and Law Specialty Group
- Emerging Risk Issues of Synthetic Biology. Host: George Washington University Environmental Law

Studies. Co-sponsor: Woodrow Wilson International Center for Scholars, Science and Technology Innovation Program

- Microbial Contamination of Food (What Have We Learned from One Scare to the Next?)
- Human and Ecological Risk Associated with the Chesapeake Bay. Co-sponsor: Society of Environmental Toxicology and Chemistry
- An annual summer seminar series beginning in 2012 in Washington, DC, with a goal of providing policy makers with a greater understanding of insights emanating from current and practical research in risk analysis. Cosponsor: national SRA

Our website (<u>www.sra.org/ncac</u>) is in the process of being updated. Please check over the summer to learn more about each item in this report.

New England www.sra-ne.org

Henry A. Roman, President

The Society for Risk Analysis-New England (SRA-NE) completed its 2010-2011 seminar series with meetings in February, April, and June.

The February seminar included discussions of efforts to improve cumulative risk assessment from a variety of perspectives. Dr. Tom Webster of the Boston University School of Public Health (BUSPH) spoke from the toxicological perspective on alternative approaches to characterizing the additivity of risk from exposure to multiple contaminants. Dr. Madeleine Scammell, also from BUSPH, presented work performed for the Blue Cross Blue Shield of Massachusetts Foundation that sought to identify a key set of indicators of community health. Finally, Dr. Valerie Zartarian of the Environmental Protection Agency (EPA) spoke about EPA's Community-Focused Exposure and Risk Screening Tool (C-FERST), a GIS web tool that helps communities to identify and prioritize local environmental issues, using the best available information and science.

The April seminar was our annual joint meeting with the Massachusetts Licensed Site Professional Association and

featured Paul Locke of the Massachusetts Department of Environmental Protection and Dr. Wendy Heiger-Bernays of Boston University kicking off spring with talks on assessing risks due to uptake of contaminants by plants in home gardens and also the management of gardeningrelated exposures in an urban community-garden setting.

The final seminar of the year was held on 21 June 2011 on the topic of tackling value of information (VOI) analysis for health and environmental policy analysis. VOI is a decision-analysis tool that can guide resource allocations and research agendas, and it can clarify when deferring a policy decision to gather better data may be warranted, despite the costs of delay. Conducting a formal VOI analysis may be easier said than done, however. Our speakers, Eric Ruder of Industrial Economics and Dr. Joshua Cohen of Tufts Medical Center, presented interesting examples of existing VOI applications as well as the significant challenges involved in carrying out these analyses. Dr. Cohen also discussed how one might consider incorporating elements of VOI into existing policy analyses, even when formal analysis may be impractical.

"Risk Analysis on the Coast" SRA Annual Meeting 4-7 December 2011 Charleston, South Carolina

Meeting information and online forms—<u>www.sra.org/events_2011_meeting.php</u>

SRA-Europe www.sraeurope.org

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Julie Barnett, Secretary

The 20th annual meeting of the Society for Risk Analysis -Europe (SRA-E) took place in Stuttgart, Germany, 6-8 June 2011 and was conducted alongside the conference of the iNTeg-Risk project. Based at the imposing Haus der Wirtschaft, over 300 participants were able to enjoy a wide range of interesting presentations.

The theme of the SRA-E conference was "Multi-Risk Analysis in a Global World" and this, along with the iNTeg -Risk theme of "Risk vs. Risk: Managing Emerging Risk-Benefit Tradeoffs in Complex Systems," in total provided participants with over 250 papers over the three days of the conference. The conference was truly an international affair, with participants representing 34 countries including the Republic of Korea, Canada, the United States, Japan, Australia, and China.

Undoubted highlights of the conference for SRA-E participants were the plenary presentations. Ellen Peters (Ohio State University, United States) opened the conference by providing a stimulating narrative of the many interesting results of her work around understanding how numeracy affects processing information about risk.

On the following day, participants greatly enjoyed the challenges posed in the presentations given by Terje Aven (University of Stavanger, Norway) and Charles Vlek (University of Groningen, Netherlands) focusing on core definitional issues around risk assessment and management, uncertain risk, and precaution. SRA-E participants also had the chance to hear presentations from distinguished contributors to the iNTeg-Risk conference including Gene Rosa (Washington State University, United States) and William Leiss (University of Ottawa, Canada).

The SRA-E student scholarship was awarded to Nicolai Bodemer (Max Planck Institute for Human Development,



The SRA-Europe Executive Committee congratulates Nicolai Bodemer, this year's winner of the Student Scholarship Award, left to right: Michael Siegrist, Lars Bodsberg, Margot Kuttschreuter, Nicolai Bodemer, Ann Enander, Julie Barnett, Sophie Gaultier-Galliard, and Roberto Bubbico.

Center for Adaptive Behavior and Cognition, Berlin, Germany) for his paper "Risk Communication During a Pandemic: The Benefit of Disclosing Uncertainty."

At a welcome reception sponsored by the Journal of Risk Research (Taylor & Francis Group), we had the opportunity to celebrate 20 years of SRA-E conferences with a cake specially designed to mark the occasion.



New SRA-E President Margot Kuttschreuter admires the cake baked to celebrate the 20th SRA-E conference in Stuttgart.

SRA-E greatly appreciated the efforts of EU-VRi, the European Virtual Institute for Integrated Risk Management, in organizing the joint conference. Margot Kuttschreuter did sterling work as the SRA-E committee representative on the Local Organizing Committee. We were also pleased to welcome Margot as the new president of SRA-E and Lars Bodsberg as president-elect.

At the business meeting, members were told about the impending change of status of SRA-E to becoming a legal entity in Europe. Further details of the implications of this will be on the website in due course.

It remains a privilege for the SRA-E Executive Committee to serve the risk community of Europe. In this vein we look forward to welcoming you to the 21st SRA-E conference to be held at ETH Zurich, Switzerland, 18-20 June 2012. As ever, you can find information on the SRA-E website (www.sraeurope.org).

Would you like to see information about your regional organization or specialty group in the *Risk Newsletter*? Send your reports to Editor Mary Walchuk, <u>editormw@hickorytech.net</u>. The deadline for the Fourth Quarter 2011 issue of *Risk Newsletter* is 20 September 2011.

Specialty Groups

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Security and Defense Specialty Group *Bob Ross, Chair*

Greetings, there is some big news to report for the Security and Defense Specialty Group (SDSG). SDSG will have a very strong showing at the upcoming SRA annual meeting in Charleston. There will be nine oral panel sessions sponsored by SDSG (one-tenth of the total), and there will be another five or six jointly sponsored by SDSG with the Decision Analysis and Risk (DAR), Risk Communications, Ecological Risk Assessment, and Engineering and Infrastructure (E&I) specialty groups. We will also be pooling our resources and having an evening reception jointly sponsored with DAR and E&I.

Whether described as multidisciplinary or interdisciplinary, this notion of "jointness" is important. In her instructions to the program committee, Ann Bostrom, our Society's president-elect, asked the committee to look for opportunities to stress the importance of SRA's multidisciplinary character. It wasn't hard to do. While working on the program for this year's meeting, I was struck by how interdisciplinary so many of the proposed presentations and structured symposia were. And special thanks to Steve Bennett for his assistance in assembling the SDSG track.

This year's SDSG track has been organized to provide what I hope will be a reasonably well-structured examination of issues affecting risk management in the homelandsecurity and defense realms. This will start with a session looking at efforts to build a vigorous risk-management culture and capability in the Department of Homeland Security and, by extension, across the larger national homelandsecurity enterprise. This will be followed by a string of sessions looking at some of the analytical and managerial challenges in security and defense risk management, including the "Adaptive Adversary" issue and the applicability of Complex Adaptive Systems theory to homeland security. Other issues that will be addressed include cybersecurity, hurricane risk assessment, food security, response to events which create large medical surge demand, and more.

All in all, we believe this is a great showing for a new specialty group and I strongly encourage anyone interested in security and defense risk-management issues to attend the Charleston meeting. It promises to be a great show.

Other News

The National Academies/National Research Council reviewed Department of Homeland Security (DHS) risk assessment methodologies. The report (<u>http://www.nap.edu/</u> <u>catalog.php?record_id=12972</u>) raises a number of the analytical issues that will be discussed in Charleston.

GAO, the Government Accountability Office, has issued a report on strengthening DHS and Department of Health and Human Services coordination for chemical, biological, radiological, and nuclear risk assessments. The full report is available at <u>http://www.gao.gov/new.items/d11606.pdf</u>.

Economics and Benefits Analysis Specialty Group www.sra.org/ebasg

Amber Jessup, Chair

The Economics and Benefits Analysis Specialty Group (EBASG) is busy preparing for the 2011 Society for Risk Analysis (SRA) Annual Meeting this December in Charleston, South Carolina. There will be a full schedule of symposia of interest to EBASG members, continuing education opportunities in pre-conference workshops, and chances to network with other EBASG members at the business meeting and mixer. We look forward to seeing you there. Now is also a good time to start thinking about increasing your involvement in EBASG. We will be sending out a call for nominations for next year's Executive Committee soon, so please consider if you would be interested in running for office.

In other news, the June issue of *Risk Analysis* includes Part 1 of our Special Series on Risk Regulation and is now available online at <u>http://onlinelibrary.wiley.com/</u> doi/10.1111/risk.2011.31.issue-6/issuetoc. The series includes articles by participants in the SRA/Resources for the Future "New Ideas for Risk Regulation" conference and by others working on related topics. In addition to an introduction, the articles include two that address the institutional and legal framework for regulatory decision making and three that address the impacts of regulations on the distribution of wealth and health. SRA members can gain free access to these articles by logging in to the "Members Only" section of the SRA website (<u>http://birenheide.com/</u> <u>sra/membersonly/index.php3</u>), then clicking on "Access the SRA Journal."

- Introduction to Part 1 of the Special Series on Risk Regulation (Lisa A. Robinson)
- The Role of Analysis on the 17 Most Political Acres on the Face of the Earth (Donald R. Arbuckle)
- Defragmenting the Regulatory Process (Stuart Shapiro)
- Incorporating Equity in Regulatory and Benefit-Cost Analysis Using Risk-Based Preferences (Scott Farrow)
- Maximizing Health Benefits and Minimizing Inequality: Incorporating Local-Scale Data in the Design and Evaluation of Air Quality Policies (Neal Fann, Henry A. Roman, Charles M. Fulcher, Mikael A. Gentile, Bryan J. Hubbell, Karen Wesson, and Jonathan I. Levy)
- Six Distributional Effects of Environmental Policy (Don Fullerton)

The second part of the *Risk Analysis* Special Series on Risk Regulation is scheduled for publication later this year, and will include additional articles that consider the interface between risk assessment, economic analysis, and risk regulation. Several of these latter articles are now available in the "Early View" section of the *Risk Analysis* website (http://onlinelibrary.wiley.com/journal/10.1111/(ISSN) 1539-6924/earlyview).

Dose Response Specialty Group www.sra.org/drsg

Lynne Haber, Chair

The theme for the Dose Response Specialty Group (DRSG) 2011 teleseminar series is "Tox21/NexGen: Dose-Response and In vitro to In vivo Extrapolation."

The lead-off presentation was by Weihsueh Chiu of the U.S. Environmental Protection Agency (EPA), on "NexGen Risk Assessments: Challenges and Opportunities for Dose-Response Assessment." Barbara Wetmore of the Hamner Institutes for Health Sciences gave a presentation in June on "Integration of Dosimetry, Human Exposure and High-Throughput Screening Data in the Toxicity Assessment of Environmental Chemicals." The third seminar in the series will be a presentation by Richard Judson of EPA on "Estimating Toxicity-Related Biological Pathway Altering Doses for High-Throughput Chemical Risk Assessment." The presentation will be in either August or September—check the YahooGroups website for details.

The teleseminar series will culminate in a symposium at the annual meeting, where leading scientists will comment on the issues discussed in the teleseminars. Monthly teleconferences and the quarterly teleseminars are open to all and are announced via YahooGroups.com. To join, go to http://groups.yahoo.com/group/DRSG/.

The DRSG will have an active presence at the SRA annual meeting, with 13 dose-response-related sessions, including four DRSG-sponsored symposia and five additional symposia of interest, as well as a number of posters and a mixer jointly sponsored with the Exposure Assessment Specialty Group.

-News and Announcements

Mixtures and Cumulative Risk Assessment

The Standing Committee on the Use of Emerging Science for Environmental Health Decisions at the National Academies will be holding a workshop on mixtures and cumulative risk assessment approaches 27-28 July 2011. The focus will be on how new tools from biotechnology, computation, and exposure science can greatly accelerate the pace with which we can conclude whether environmental agents are likely to interact in some way, such as sharing a common mechanistic pathway, and are present together in the environment, such that they should be evaluated together in risk assessment. The workshop will include discussions on research needs and suggest approaches to incorporating novel data streams in risk assessment. More information about the workshop can be found on the Emerging Science for Environmental Health Decisions website. The workshop is free and open to the public.

"Risk and Resilience: Exploring the Relationship"

"Risk and Resilience: Exploring the Relationship" is available from the Homeland Security Studies and Analysis Institute (HSI), Department of Homeland Security. Homeland security risk analysis has been a central element of policy and planning to make the nation safer. In both government and nongovernment realms, however, the concept of resilience has steadily emerged as another key element of homeland security. Yet risk and resilience have tended to be treated as independent elements of homeland security, with little if any linkages between them.

Given this situation, the HSI undertook an exploration of the relationship between risk and resilience, based on the hypothesis that there is indeed such a relationship. The analytic approach was designed to discover the nature of the relationship between these concepts and to demonstrate the potential utility of these findings to homeland-security policy makers and planners.

Results of the team's research and analysis include producing a set of consolidated definitions for resilience for the infrastructure, organizations, communities, and ecosystems domains; formulating a series of resilience features that apply to a broad range of systems across the four domains; developing a model that generates a resilience profile for visually characterizing a given system's performance against a specified adverse event; establishing a qualitative framework for correlating risk and resilience; and devising a proof-of-concept method for quantitatively relating risk and resilience.

More generally, the team concluded that the relationship between risk and resilience could be taken one step further by forging their respective policies, precepts, and programs into an integrated homeland-security strategy. Such a strategy could exploit the synergies between risk and resilience, which generally speaking are inversely reinforcing, while preserving their unique elements and fundamental purposes.

New Blog on Regulation and Risk at U-Penn

The Penn Program on Regulation has rolled out a new website called RegBlog (<u>http://www.regblog.org</u>), which features news, research reports, and opinion pieces on regulatory issues. Recent topics covered have included the Obama executive order on regulation, constitutional litigation over health care, responses to the *E. coli* outbreak in Europe, and the effect of federal budget cuts on agency efforts to increase transparency and right-to-know.

Many of the daily news items are produced by graduate and law students from across the University of Pennsylvania, but RegBlog also includes analysis and opinion pieces by leading practitioners and scholars. Recent guest posts have included those by Professor Ted Ruger on the preemption of vaccine litigation, Professors Richard Schmalensee and Robert Stavins on the large positive net benefits of the Environmental Protection Agency Clean Air Transport rule, and Professor Daniel Farber on the Supreme Court's recent climate change decision. John D. Graham and Sally Katzen, both former U.S. regulatory "czars," have contributed posts about recent regulatory reform legislation that would codify benefit-cost analysis requirements.

You are invited to send along a short original piece of your own, in the 500-1,000 word range, to be considered for posting on RegBlog, which is already attracting a wide, international readership. RegBlog welcomes submissions on any and all issues related to regulation.

To find out more about RegBlog, visit <u>RegBlog.org</u> or email <u>regblog@law.upenn.edu</u> with any questions. You can also sign up at the website to be part of the Penn Program on Regulation's mailing list and to receive a weekly RegBlog newsletter.

FREE Offer from HERA Journal!

The benefits and drawbacks of following a different riskmanagement paradigm are explored in the current (July/ August) issue of *Human and Ecological Risk Assessment* (*HERA*). The journal features a new article by Society for Risk Analysis member Adam Finkel titled "Solution-Focused Risk Assessment: A Proposal for the Fusion of Environmental Analysis and Action." Finkel advocates a modified role for risk assessment: the comparative analysis of specific technological and other solutions to environmental, health, and safety dilemmas, rather than the free-form dissection of "problems." *HERA* invited five distinguished experts—Terry Davies, Bernie Goldstein, Bruce Hope, Gil Omenn, and Dennis Paustenbach—to publish commentaries on Finkel's proposal, and the current issue also contains an editorial on the collection by *HERA* Managing Editor Barry Johnson.

Taylor & Francis is pleased to make all seven documents in this collection available to read and download for free on the *HERA* journal website beginning 1 August 2011. Go to <u>www.tandf.co.uk/journals/bher</u> and look for the link titled "FREE Access to Solution-Focused Risk Assessment article collection." The article, editorial, and all commentaries will be available for free until 31 October 2011.



-Risk Analysis Journal

Michael Greenberg, Editor in Chief; Karen Lowrie, Managing Editor

We are pleased to announce the hiring of two editors for *Risk Analysis*. Joining our staff as associate editor for the risk perception and communication area is Katherine McComas, who is an associate professor of communication at Cornell University and has served on SRA's Communications Committee since 2008. Sally Kane, an independent consultant and newly elected president of SRA's National Capital Area Chapter, will be our first book review editor. In this new role, Sally will expand our current book review offerings and she welcomes your ideas.

We launched our first-ever virtual issue on Wiley's Online Library site for *Risk Analysis* earlier this year, on "<u>Advances in Terrorism Risk Analysis</u>." We hope you've looked at it, and we'd like to hear what you think about it. We encourage you to let colleagues know about the special issue, as the articles contained in the issue will be free to non-SRA members until the end of the year.

A second virtual issue, which became available this summer, is a <u>tribute to the late Lester Lave</u>, complete with an introduction by Michael Greenberg, reflections about Lester from his colleagues, and the 17 papers he published in *Risk Analysis*. Again, these articles will be free for several months to the general public, so please tell your colleagues about it. A similar virtual issue tribute to the late Stan Kaplan is underway.

This spring we collected nominations from members on the 10 greatest accomplishments of *Risk Analysis* in the past 30 years, and we now have the list finalized. In an upcoming issue, the editorial staff will write about the accomplishments, followed with a series of essays on each topic. We thank you for your participation and support of this initiative.

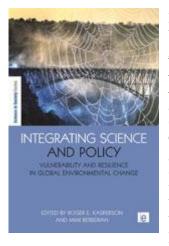




Member News

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Roger E. Kasperson and Mimi Berberian



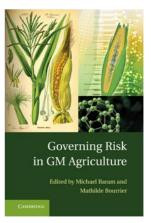
Roger Kasperson and Mimi Berberian are editors of the book <u>Integrating Science and</u> <u>Policy: Vulnerability and Resilience in Global Environmental</u> <u>Change</u>. As progress towards a greater knowledge in sustainability science continues, the question of how better to integrate scientific progress with actual decisions made by practitioners remains paramount. This book aims to help close the gap between science and practice. Based on a two-year collabora-

tive project between Harvard and Clark Universities, the book takes as its focus the vulnerability and resilience of people around the world to the effects of environmental change, a mature area of research in which one might expect the gap between science and policy/practice to have been extensively bridged. The book presents analysis of past studies, interviews conducted with the producers and users of scientific knowledge, and case studies performed by leading scholars across a spectrum of international settings and political systems. Crucially, the authors identify new directions and tools for closing the gap between science and policy across a range of situations and societies. The result is an illuminating collection of studies and analyses that suggest to researchers, students, practitioners, and policy makers alike how best to ensure that highquality environmental research informs good environmental policy and practice.

Kasperson is a research professor at Clark University and a visiting scholar at START in Washington, DC. He is a member of the U.S. National Academy of Sciences and the American Academy of Arts and Sciences. He is a fellow of the American Association for the Advancement of Science and the Society for Risk Analysis. He has served on numerous committees of the U.S. National Research Council. He is a former executive director of the Stockholm Environment Institute.

Mimi Berberian is a senior staff associate at the George Perkins Marsh Institute at Clark University. She has participated with researchers in various studies of natural and technological hazards, risk assessment and risk management, and global environmental change. She has a long experience in editing and has facilitated the preparation of numerous research results for publication as journal articles and books. Among those published are "Equity Issues in Radioactive Waste Management," "Climate Impact Assessment," and "Social Contours of Risk."

Michael Baram and Mathilde Bourrier



Michael Baram (Boston University School of Law) and Mathilde Bourrier (University of Geneva) are editors of the book *Governing Risk in GM Agriculture*. This book addresses the issues and methods involved in governing risks posed by genetically modified (GM) agriculture. It examines the evolution of policies intended to ensure the safety of GM crops and food products in the United States and Europe and the regulatory approaches

and other social controls employed to protect human health, the environment, conventional farming and foods, and the interests and rights of consumers.

Discussion encompasses the cultural, political, and economic forces that shape the design and application of the methods of risk governance, as well as other contextual features such as the influence of multinational companies seeking acceptance of their GM ventures. This discussion also examines the influence of the dynamic public discourse fostered by progressive concepts of risk governance and the approaches taken to meet its demands for transparency, public participation, and appropriate consideration of public perceptions and values despite conflicting views of experts.

Michael Kamrin

Michael Kamrin, professor emeritus of the Center for Integrative Toxicology at Michigan State University, has written a short risk primer for the public titled *Is It Safe? Evaluating Chemical Risk.* This has been published by the Toxicology Education Foundation (TEF) and complements the video of the same name that is available on the <u>TEF</u> <u>website</u>.

The primer provides the reader with the tools to address two questions: "How Do You Know What the Risk Is?" and "How Do You Evaluate a Media Report About Risk?"

For further information and to obtain copies of this publication, contact Kathleen Spitzer at tefhq@toxedfoundation.org.

If you have written a book, received a job promotion or award, or participated in an event that you would like other Society for Risk Analysis members to know about, send a paragraph or two (150-200 words) and a photo to Mary Walchuk, *Risk Newsletter* editor, at <u>editormw@hickorytech.net</u>.



What Do We Do?

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— a quarterly look at the incredibly diverse field of risk analysis —

Toru Watanabe

What is your job title?

I am an associate professor at the Department of Food, Life and Environmental Sciences at Yamagata University, Japan. I specialize in quantitative analysis of health risks, primarily quantitative microbial risk assessment (QMRA), on various usages of contaminated water, originally in the field of civil engineering and currently in the field of agriculture.

How is risk analysis a part of your job?

I lead the laboratory of water environment engineering. Our mission is to bring forward innovative approaches for sustainable water use in agriculture and rural societies, where risk analysis is one of the essential components. For example, one of our key research areas is development of a system to reuse treated wastewater in rice production, which can help produce high-quality rice while removing excess nutrients from treated wastewater. Reuse of treated wastewater in food production inevitably raises concern about potential health risks due to a variety of contaminants originating from wastewater. Reuse of treated wastewater in food production can be realized only when safety is proven by rigorous risk analysis.

In addition, I have 10 years of experience in risk analysis of waterborne infectious diseases in Southeast Asian countries, which I consider as my lifetime work. Currently I am involved in development of water-reuse technology in Thailand and in mitigation of flood-related health risks in Vietnam, as a member responsible for health risk assessment.

How did you decide to pursue this career?

Upon my graduation, my supervisor offered me the position of instructor in the laboratory where I completed my postgraduate study in risk analysis. Since I found the area of risk analysis very stimulating and exciting, I decided to continue pursuing my career in this area.

What got you to where you are in the field of risk analysis today?

When I began to work at my university, QMRA in relation to water use was still a new field in Japan, and I found its potential needs in the field of water environment engineering and public health. The sense of need has since led me to where I am now.



What is the most interesting/exciting part of your job?

In terms of research, risk trade-off as well as analysis of a single risk is of my biggest interest. For instance, reuse of treated wastewater in rice production might contaminate the rice and thus pose health risks to consumers, while it would help reduce the risk of water shortage. If the health risk would not be accepted by consumers, then we would also use it alternatively for a purpose

other than food production, such as biofuel production, which contributes to mitigation of energy risk.

Teaching young students about risk analysis, with a mission to assist them in learning the concept and technique of risk analysis, is another exciting part of my work.

What would you recommend to those entering the field of risk analysis interested in a job like yours?

Risk analysis is a technique to enable us to see undesirable things to which others are blind. I believe there is a high demand for the useful technique and its experts since it is applicable to a broad range of academic and business fields.

If you would like to work as a university faculty member, I recommend finding an opportunity to study and work under the supervision of the pioneer(s) in the field of your interest.

In my case, I had the great pleasure and privilege of working with Professor Charles Haas at Drexel University, who was one of the pioneers in the development of QMRA in the world. I learned from Dr. Haas not only technical knowledge that I could have never gained from literature, but also the philosophy of contributing one's life to working as a university professor.

How has membership/involvement in the Society for Risk Analysis (SRA) helped you in your work?

The community of experts and researchers in risk analysis and particularly in QMRA is still small in Japan. The SRA meeting therefore offers valuable opportunities for me to communicate and exchange ideas with pioneers and leading researchers in risk analysis from all over the world. The journal *Risk Analysis* is definitely the best source of information on the current global trend in risk analysis research and examples of application of risk analysis in various areas.

What Do You Do?

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Are you a member of the Society for Risk Analysis who would like to be featured in the "What Do We Do?" column of the *Risk Newsletter*? Send a photo (casual or formal, your choice) and the answers to the following questions to Mary Walchuk, *Risk Newsletter* editor, at <u>editormw@hickorytech.net</u>. We will be choosing one submission for each issue of the newsletter.

- What is your job title?
- How is risk analysis a part of your job?
- How did you decide to pursue this career?
- What got you to where you are in the field of risk analysis today?
- What is the most interesting/exciting part of your job?
- What would you recommend to those entering the field of risk analysis interested in a job like yours?
- How has membership/involvement in the Society for Risk Analysis (SRA) helped you in your work?

SRA Advertisements

The Clorox Company

Job Title: Regulatory Compliance Specialist Area of Interest: Research & Development Location: Pleasanton, California

Job Description:

As a Regulatory Compliance Specialist (Scientist II) you will be part of a team that is responsible for a variety of product -related regulatory compliance activities, working across all of our business units. You will have responsibility for driving regulatory and compliance projects and deliverables as an individual and also as part of a multi-functional commercialization or regulatory compliance team. Regulatory Compliance plays a unique role in:

- Ensuring compliance for our products from product concept through finished product.
- External influencing and engagement through relevant trade associations, industry groups, or initiatives.
- Registration and/or compliance program strategies and/or submissions.

Required Qualifications:

- Minimum BS or MS Chemistry, Natural or Life Sciences, Public Administration (possibly Political Science)
- 3-5 years of related experience
- Demonstrated leadership, communication, and interpersonal skills in a collaborative team environment
- Demonstrated precision and accuracy when managing information and strong organizational skills
- Ability to work independently while managing and successfully completing multiple projects/tasks in a timely manner
- Demonstrated project-planning skills
- Familiar with a TSCA compliance program and preferably familiar with a variety of other compliance programs under FIFRA, EPA, CPSC
- Utilize regulatory/compliance and product knowledge to successfully translate product needs to a comprehensive plan of action
- Apply regulatory/compliance knowledge from inside and outside sources to deliver superior business solutions
- Provide independent technical leadership both internal and external to Clorox
- Actively follow current industry and regulatory trends and activities to determine impact or possible impact to Clorox
- Drive execution of registration and compliance activities
- Communicate effectively within multi-functional team and build strong partnerships with functions such as Product Development, Packaging, Global Stewardship & Innovation, Process, Sales & Corporate QA

Desired Qualifications:

- Regulatory experience in a highly regulated industry
- 3-5 years consumer-products experience
- Experience representing regulatory compliance in a cross-functional team setting

If interested, contact Scott Braithwaite (scott.braithwaite@clorox.com)



Risk Newsletter is published by the Society for Risk Analysis

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SRA website: www.sra.org

Deadline for Risk Newsletter Submissions

Send information for the **Fourth Quarter 2011** SRA *Risk Newsletter*, which will be on the SRA website mid -October, to Mary Walchuk, *Risk Newsletter* Editor (115 Westwood Dr., Mankato, MN 56001; phone: 507-625-6142; email: editormw@hickorytech.net) no later than **20 September 2011**.

Future Society for Risk Analysis Annual Meetings

4-7 December 2011-Charleston, South Carolina
9-12 December 2012-San Francisco, California
8-11 December 2013-Baltimore, Maryland

The Society for Risk Analysis (SRA) is an interdisciplinary professional society devoted to risk assessment, risk management, and risk communication.

SRA was founded in 1981 by a group of individuals representing many different disciplines who recognized the need for an interdisciplinary society, with international scope, to address emerging issues in risk analysis, management, and policy. Through its meetings and publications, it fosters a dialogue on health, ecological, and engineering risks and natural hazards and their socioeconomic dimensions. SRA is committed to research and education in risk-related fields and to the recruitment of students into those fields. It is governed by bylaws and is directed by a 15-member elected Council.

The Society has helped develop the field of risk analysis and has improved its credibility and viability as well.

Members of SRA include professionals from a wide range of institutions, including federal, state, and local governments, small and large industries, private and public academic institutions, not-for-profit organizations, law firms, and consulting groups. Those professionals include statisticians, engineers, safety officers, policy analysts, economists, lawyers, environmental and occupational health scientists, natural and physical scientists, environmental scientists, public administrators, and social, behavioral, and decision scientists.

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