

Society for Risk Analysis Welcomes 2006 Council



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See message from President Frey on page 2.

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A Message from SRA President H. Christopher Frey

H. Christopher Frey took office as the new president of the Society for Risk Analysis (SRA) at the 2005 Annual Meeting in Orlando 4-8 December 2005. Following is his brief guide to SRA, particularly for the benefit of SRA's newest members.

Because our field is multidisciplinary, our Society touches upon many aspects of methodology, as well as many examples of practice. SRA is also increasingly an international organization, which is something I intend to emphasize during my year as president. Attendees of the 2005 Annual Meeting came from the Americas, Europe, Asia, Australia, and Africa. Although SRA started in North America, and has a strong North American focus, the long-term growth of the Society depends on how successfully we integrate into an international organization. The international scope of the organization is intertwined with our methodological and practical scope; for example, issues of risk governance and of disaster planning and response are common to all continents. There are areas of commonality, as well as areas of unique regional strengths and opportunities, that internationalization will bring to the Society.

As a member, you will probably find that your most practical resource is the Web site, www.sra.org. With some patience, you can find just about all of the information that I am describing here. The Council, the Communications Committee, the Webmaster, and others are identifying needs and making improvements on a regular basis, and over the next year several initiatives are planned for the Web site.

You have access to an excellent peer-reviewed archival scientific journal, *Risk Analysis*, that is the enduring footprint of the Society on the intellectual landscape of risk analysis. The quarterly RISK *newsletter* provides timely information on key events and opportunities within the Society. In addition, several sections and chapters, such as SRA-Europe, SRA-Japan, and SRA-Russia, publish journals.

The major events of the Society are the annual meeting, the Risk World Congress, workshops, and other conferences. The annual meeting is held each year in early December on a rotating basis—in the Washington, DC, area, at a west coast location, and at an east coast location. Participation in the planning process for the annual meeting is encouraged. The presidentelect is the chair of the Annual Meeting Committee. This year's president-elect is Kim Thompson (kimt@hsph.harvard.edu). Although the annual meeting is located in the United States, international participation is highly encouraged. In fact, international attendees may apply for travel support. There is also a travel support program specifically for students. Furthermore, many of the chapters and specialty groups offer travel support for students from specific locations or specialties.

The Risk World Congress is held every few years and is a truly international meeting. The next one is planned for June 2008 in Mexico. Robin Cantor (rcantor@navigantconsulting.com), an energetic past president, is in the process of organizing planning committees for this meeting and welcomes your involvement.

Workshops are held in conjunction with the annual meeting, but can be organized at other times and locations. Typically, workshops are short courses on specific methodological issues or practical applications of risk analysis. Many local chapters of SRA organize an annual workshop or conference, partly as a fundraiser and mainly to serve the needs of members locally. SRA also frequently cosponsors meetings of other organizations on related topics. The Conferences and Workshops Committee, chaired by Scott Ferson (scott@ramas.com), is a key resource for organizing events under the auspices of SRA.

Participation in a local chapter or a section is a way to continue your involvement with SRA throughout the year. The distinction between a chapter and a section is, in part, a technical aspect of the SRA bylaws-a chapter is typically at a local or, at most, a national scale, whereas a section is typically at a national or larger scale. A section may enclose the geographic area in which chapters also exist. A complete list of chapters and sections, and contact information for each, is available on the SRA Web site and on page 23 of this newsletter. Many of these geographic units of SRA have their own Web sites. All will welcome your interest and involvement at the local and regional level. The SRA Web site has guidelines on how to form new chapters. Essentially, a critical mass of persons adopts bylaws, elects an interim set of officers, and petitions the Society. If you have any questions about this process, please feel free to contact Sections and Chapters Committee Chair Rachel Davidson (rad24@cornell.edu) or me (frey@eos.ncsu.edu).

Specialty groups are organized along methodological themes. Currently, there are nine such groups: Biological Stressors, Decision Analysis and Risk, Dose Response, Ecological Risk Assessment, Economics and Benefits Analysis, Engineering, Exposure Assessment, Risk Communication, and Risk Science & Law. The SRA Web site and page 23 of this newsletter contain contact information for each of these groups and links to their Web sites. The procedure for forming a specialty group is analogous to that for forming a chapter. Adam Finkel (afinkel@princeton.edu) is the chair of the Specialty Group Committee.

Governance of the SRA is the primary responsibility of the Council, which is the Board of Directors of the organization. The Council is comprised of nine "councilors" and six "officers," including the president-elect, president, past president, secretary, treasurer, and either a treasurer-elect or past treasurer. Because of a bylaws change a few years ago, at all times there are two active treasurers, which has led to continuity and substantial improvement in the financial operations of the Society. The past president retains the title beyond the time frame of officially serving as an officer. In fact, being a president is a gift that keeps on giving, since the current past president (who is still on the Council) chairs the Publications Committee (which oversees the journal), the most recent retired past president chairs the Nominating Committee (which identifies candidates for council elections), and the past president who is two years out chairs the Awards Committee (solicits nominations and submits to the Council recommendations for recipient of the major awards of the Society). If you are asked to run for presidentelect, keep in mind that you are actually making a five-year commitment!

The SRA Council is supported by various standing and ad hoc committees. Most have been mentioned already. Others are Education (David Hassenzahl, david@hassenzahl.com), Finance (Pamela Williams, pwilliams@chemrisk.com), Membership (Rick Becker, rick_becker@americanchemistry.com), Public Policy (Jack Fowle, fowle.jack@epa.gov), Internationalization (Bert Hakkinen, pertti.hakkinen@jrc.it), and Communications (Rick Reiss, rreiss@sciences.com). All of these committees welcome the input and participation of SRA members. I will be writing more on several of these as the year progresses, since they are central to key initiatives that I would like to pursue as SRA president.

The Society provides various services to members. For example, the SRA Web site lists employment opportunities, provides access to the membership database to aid in networking, and provides links to events and resources. SRA has a speakers bureau, which is a resource for a chapter to invite a speaker from a selected list. There is also a procedure for requesting travel support for the SRA speaker via the speakers bureau. The application forms can be downloaded from the SRA Web site. Because of the current financial status of the Society, there are limited funds available to support new initiatives, and there is an application process for such funding. More information on this will be available on the Web site.

Everything I have described up to here is based on volunteers! The SRA Secretariat serves as the year-round Society headquarters and deals with the daily aspects of running a professional society. Logistical questions can be directed to the Secretariat at sra@burkinc.com.

In summary, SRA is a fairly complex organization, with several categories of organization units (geographic, thematic, governance, secretariat) and a variety of activities and initiatives. If you are a new member, you might wonder how you can get involved in SRA. My advice is to pick one or two of the units within SRA, such as a chapter, specialty group, or committee, and join. I have found participation in SRA at all of these levels to be rewarding, and I am sure you will too. If you have any questions, feel free to contact me (frey@eos.ncsu.edu), or the chair of any committee, chapter, section, or specialty group, or the Secretariat (contact lists on pages 22 and 23).

H. Christopher Frey SRA President

Call for Nominations for 2006 SRA Council

The Society for Risk Analysis Nominating Committee invites nominations for the following offices in the Society's elections for 2006:

President-elect Three Councilors

Active members may submit in writing to the Nominating Committee the name and proposed office for any qualified nominee. Additionally, any active member may submit a petition for nomination for inclusion on the next annual Ballot. Such petitions must include the written support of at least 25 other active members for the nominee to be listed on the Ballot.

Please submit nominations by **1 April 2006** to Stephanie Cross, Secretariat, Society for Risk Analysis, 1313 Dolley Madison Blvd., Suite 402, McLean, VA 22102; phone: 703-790-1745; fax: 703-790-2672; email: scross@burkinc.com.

Call for Nominations for 2006 SRA Awards

The Society for Risk Analysis (SRA) Awards Committee invites nominations for the following 2006 awards:

The **SRA Distinguished Achievement Award** honors any person for extraordinary achievement in science or public policy relating to risk analysis.

The SRA Outstanding Service Award honors SRA members for extraordinary service to the Society.

The **Outstanding Risk Practitioner Award** honors individuals who have made substantial contributions to the field of risk analysis through work in the public or private sectors. The 2006 award will be for the public sector.

The **Chauncey Starr Award** honors individuals age 40 and under who have made exceptional contributions to the field of risk analysis.

The **Fellow of the Society for Risk Analysis Award** recognizes and honors up to one percent of the Society's membership whose professional records are marked by significant contributions to any disciplines served by the Society and may be evidenced by one or more of the following: (1) Recognized, original research, application, or invention, (2) Technical, scientific, or policy analysis leadership in an enterprise of significant scope that involves risk analysis in a substantial way, (3) Superior teaching or contributions to improve education and to promote the use of risk analysis that are widely recognized by peers and students, or (4) Service to or constructive activity within the Society of such a quality, nature, or duration as to be a visible contributor to the advancement of the Society. Nominees for Fellow must have been SRA members for at least five years and must now be members in good standing.

Please submit nominations and a brief paragraph supporting each by **6 May 2006** to Stephanie Cross, SRA Secretariat, 1313 Dolley Madison Blvd., Suite 402, McLean, VA 22101; fax: 703-790-2672; email: scross@burkinc.com.

2005 Society for Risk Analysis Award Winners

Ortwin Renn Distinguished Achievement Award The Role of the Social Sciences in Risk Analysis

Distinguished Achievement Award Winner Ortwin Renn, speaking at the awards luncheon on 5 December, addressed the

main contributions of social science to risk assessment and risk management.

Renn advocated a risk assessment approach by which physical impacts of risk as well as social concerns and perceptions need to be scientifically explored. For society to make prudent choices about risks, it is not enough to consider only the results of physical risk assessment. In order to understand the concerns of the various stakeholders and public groups, information about both risk perceptions and the further implications of the direct consequences of a risk—including its social mobilization

potential (that is, how likely is it that the activity will give rise to social opposition or protest?)—is needed and should be collected by risk management agents. Based on such a wide range of information, risk managers can make more informed judgments and design the appropriate risk management options.

Such a concern assessment can meet several crucial functions:

• *Enlightenment:* providing knowledge and insights into mental, social, and cultural patterns of risk perception and behavioral responses among many publics

• *Instrumental knowledge:* investigating what is more likely to resonate with known risk-perception patterns

• *Context analysis:* Understanding the social and cultural conditions and forces in a given risk arena or situation

• *Alternative "frames" of problem: Plurality of meaning:* Exploring the range of mental frames that are associated with the risk or different risk management options

For managing and dealing with risks, Renn listed four additional functions:

• *Integration of knowledge:* helping to design strategies for including systematic, experience-based, and intuitive knowledge in risk assessments

• *Decision aid:* Assisting risk managers to sharpen their judgmental capacity by using decision-analytic tools

• *Social impact assessment:* Investigating the likely social and cultural consequences of regulatory actions and other management decisions

• *Catalytic function:* Assisting all affected parties to involve in an analytic-deliberative process of policy and decision

In particular, Renn addressed the functions of exploring alternative frames, integrating different forms of knowledge, and using social scientists as catalysts for participation and stakeholder involvement. Social scientists have the task, according to Renn, to design the participation processes in a way that the various actors are encouraged to contribute to the process in those areas in which they feel they are competent and can offer something to improve the quality of the final product. Referring to his classification of knowledge according to complexity, uncertainty, and ambiguity, Renn suggested four different styles of discourse: instrumental, epistemological, reflective, and participative.

At the end Renn summarized the main contributions of social science in four main points. Social science can help to produce:

- consensus on boundaries of legitimate knowledge,
- analytical power to classify different knowledge types,
- connectivity to the policy-making process, and
- external legitimisation.



Student Travel Award Winners Front row, left to right: Ignacio Agustin Arancibia Munoz, Tiffany DeFoe, Divya Sharma

Back row, left to right: Kevin Haninger, Ye Li, Raja Chowdhury Not pictured: Huei-An Chu, Matthew Dombroski, Lisa Phillips, Heather Rosoff, Jianhua Xu



Cindy Jardine 2006 meeting registration drawing winner



Best Paper Award William Burns "Predicting Public Response to a Terrorist Strike" (with Paul Slovic)



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Outstanding Service Award Stanley H. Levinson



Fellow William Farland



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Outstanding Practitioner Award Joseph V. Rodricks



Fellow Ragnar Löfstedt



Chauncey Starr Award Igor Linkov



Fellow Joyce Tait





International Travel Award Winners

Front row, left to right: Jenny O'Connor, Robyn Fairman, Cindy Jardine, Alka Bharat, Divya Sharma, Esperanza Lopez-Vazquez Back row, left to right: Boris Yatsalo, Ye Li, Stephen MacKenzie, Ellen Townsend, Scott Campbell, Lorena Perez-Floriano, Lan Xue, Hiroaki Itoh

In separate photo: An-Tsun Huang

Not pictured: Alverto Alemanno, Konstantyn Atoyev, Naum Borodyanskiy, Frederic Bouder, Nicolas Bronfman, Vladimir Didenko, Richard Foti, Alexandre J. Grebenkov, Ignacio Arancibia, Holly Longstaff, Felix Olorunfemi, Abou Bakr Ramadan, Vladimir Reshetin, Brooke Rogers, Massoud Saad, Ben Sheppard, Tao Tao, Javier Urbina-Soria, Potharaju Venkata, Sai Prabhakara Murty, Jamie Wardman

2005 SRA Annual Meeting Speakers

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Monday Plenary

25th Anniversary of SRA: Past, Present, and Future of SRA and Risk Analysis

Interdisciplinary Vision: 25 Years of Work in Progress

Kimberly Thompson, Massachusetts Institute of Technology and Harvard School of Public Health

We celebrated the SRA's 25th year at the annual meeting in Orlando, and I had the wonderful privilege of presenting infor-

mation about the SRA's history. I divided my talk into two parts, one looking back and one looking forward.

Looking back, it's been an exciting journey for the SRA, which started in 1979 when Robert B. Cumming at Oak Ridge National Laboratory wanted to start a journal that would publish interdisciplinary papers related to risk. This idea led to the launch of *Risk Analysis* and the creation of the SRA as the organization that would support the journal. Now approximately 2,000 members strong with members who represented over 43 countries during its first 25 years, the SRA boasts many suc-

cesses. The successes include *Risk Analysis*, which has published over 2,150 papers to date, and an organizational structure that now includes 23 chapters, 2 sections, and 9 specialty groups.

I also spoke about some of the challenges that the SRA faced in its history. You can read the full details of our first 25 years as a Society in the December issue of *Risk Analysis*, which includes the history that I wrote with former SRA Presidents Paul Deisler, Jr., and Dick Schwing.

With respect to looking ahead, I focused on making the case that this is an amazing time—a time that I call the Age of Risk



to use current examples to demonstrate the critical role for risk analysts in making better choices related to risks and providing important context to decisions. I hope that my talk motivated those who are interested in becoming more active in the SRA to find a way to get more involved (please contact me and let me know of your interest!) and that we will work together as an organization to make the next 25 years as impressive as our first 25 years.

A few people asked for additional information. For those interested in the history of the Mississippi, please read the excerpt called

"Atchafalaya" from John McPhee's book called *The Control of Nature*, which appears in *The New Yorker* magazine archive (http://www.newyorker.com/archive/content/ ?050912fr_archive01).

Those interested in the cartoons that I showed during my talk can see them in my book called *Risk in Perspective: Insight and Humor in the Age of Risk Management* (AORM, 2004).

My slides related to the history of the SRA appear on the SRA Web site and the write-up of the history is in the December 2005 issue of *Risk Analysis*, so please check it out!

From Risk Analysis to Risk Governance: New Challenges for the Risk Professionals in an Era of Post-Modern Confusion

Ortwin Renn, University of Stuttgart

A new integrated analytic framework for risk governance provides guidance for the development of comprehensive assessment and management strategies to cope with risks. The frame-

work integrates scientific, economic, social, and cultural aspects and includes the effective engagement of stakeholders. It was developed as part of the research activities of the International Risk Governance Council in Geneva (IRGC: White Paper on Risk Governance. Towards an Integrative Framework. Geneva 2005). The concept of risk governance comprises a broad picture of risk: not only does it include what has been termed "risk management" or "risk analysis," it also looks at how risk-related decision making unfolds when a range of actors is involved, requiring coordination and possibly rec-

onciliation between a profusion of roles, perspectives, goals, and activities. The framework offers two major innovations to the risk field: the inclusion of the societal context and a new categorisation of risk-related knowledge.

• Inclusion of the societal context: Besides the generic elements of risk assessment, risk management, and risk communication, the framework gives equal importance to contextual as-

> pects which either are directly integrated in a model risk process comprised of the above as well as additional elements or, otherwise, form the basic conditions for making any risk-related decision.

> • Categorisation of risk-related knowledge: The framework also proposes a categorisation of risk which is based on the different states of knowledge about each particular risk, distinguishing between "simple," "complex," "uncertain," and "ambiguous" risk problems. The characterisation of a particular risk depends on the degree of difficulty of establishing the causeeffect relationship between a risk agent and its po-

tential consequences, the reliability of this relationship and the degree of controversy with regard to both what a risk actually means for those affected and the values to be applied when judg-ing whether or not something needs to be done about it.

The framework's risk process, or risk-handling chain, breaks down into three main phases: "preassessment," "appraisal," and "management." A further phase, comprising the "characterization" and "evaluation" of risk, is placed between the appraisal and management phases. The risk process has "communication" as a companion to all phases of addressing and handling risk and is itself of a cyclical nature. There are also wider governance issues pertinent to the context of a risk and the overall risk process, thus acknowledging the many different pathways that different countries or, indeed, risk communities may pursue for dealing with risk. The discussion of these wider issues includes public participation, stakeholder involvement, and the formal (horizontal and vertical) structures within which it occurs.

Discussion

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Richard Canady, Office of Science and Technology Policy

Listening to Ortwin Renn's discussion of a risk governance framework and Kim Thompson's recounting the rec-

ognition of a need for the Society for Risk Analysis 25 years ago prompted the thought that there may be something of a similar import that we should be recognizing now that may cause us to rethink, retool, and reform what we do and who we are as a Society. Are we still the Society for Risk Analysis?

Twenty-five years is a long time. As Kim pointed out, we should be proud of the stability, growth, and vitality of SRA over that period. However, maybe we should also recognize that SRA has drifted, or perhaps the need that draws us together has drifted, to something different than it was 25

years ago. Discussions of how a risk assessment is used in risk management dominate some sessions at the annual meetings with sometimes vague awareness of the undercurrent of tradeoffs. Stakeholder issues, decision analysis, ethics, and legal issues also enter into the discussion. Advocating one position or another on whether the Society should enter into risk management analysis is not the issue I'm raising, rather, the issue is acknowledging and assessing impact of the fact that the Society already has entered into it. Is it time to think of taking a new

name and a vision that incorporates either what we have become or what we need to become?

Growing challenges that may prompt such revisioning include an increased need to make decisions when the safety assessment paradigm that has dominated regulatory decision making for so long does not work. Decision making without a bright line may require direct evaluation of tradeoffs in ways that have so far been obviated by the bright line. Do we want to move more directly and overtly into that trade-off realm where we now hope (and may scheme) risk analysis has influence? Better us than someone else. Huge potential data vol-

umes and new insight from 'omics may also pose challenges that shape what the Society is or should be. How does risk analysis merge with systems biology or medical decision making, or how does being able to identify and monitor individual susceptibilities change risk management? What will we say 25 years from now about how the Society dealt with challenges like these?

Discussion

Adam Finkel, Princeton University and UMDNJ School of Public Health

Kim, Ortwin, and Rick all suggest that SRA and the field of risk analysis may be at another crossroads in its history. I

agree—because I see obstacles rising up with ever greater speed, but also growing opportunities at the same time. I start from the premise that we should be proud of 25 years of having helped decision makers and the public think about risk, benefit, cost, uncertainty, and decision processes in more complete and empowering ways. I also think, however, that we should recognize that some of that very success (along with some of our failures) has disaffected some of the people we've hoped to reach.

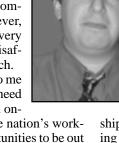
Among the reasons for optimism, it occurs to me that (1) there are fewer instances left where we need to help society play "catch up" on glaring and on-

going problems (except, I hasten to add, in the nation's workplaces)—rather, we now primarily have opportunities to be out in front of emerging hazards that the public knows could be addressed with the help of good analysis, (2) other fields may be poised to learn more from us—I note with cautious optimism the opportunity to bring the concepts of uncertainty and interindividual variability to the world of regulatory economics and the opportunity to bring probabilistic thinking to the world of clinical medicine (see the wonderful new book *The Patient from Hell* by Stephen Schneider for a plea for missionary work of this type), and (3) the developing world is poised to apply risk-based thinking while (as opposed to after) modern hazards are introduced and, of course, has unprecedented access to our tools via the Internet.

> On the flip side, I have cautioned my SRA colleagues *ad nauseam* that I see increased polarization among the critics of risk analysis, with the hoax

of rampant "conservatism" in risk assessment doing further damage to our work, even as the notion of replacing analysis with "pure precaution" continues to gather adherents who believe in precaution without analysis (which in my opinion is as precarious as analysis blind to precaution). To that dual challenge, I think we must add a more recent and more sweeping "war on analysis." When people can be marginalized by the political leader-

ship of this administration (or any administration) for professing membership in the "reality-based community," or when an analysis can be ignored because it emerged "from the bureaucracy," perhaps polishing the proverbial chrome on sophisticated tools of analysis may be truly naïve of us. In the wake of Hurricane Katrina, pundits correctly have wondered whether the public will lose faith in all government or in this government; for us, the analogous question has been and will be whether decision makers and the public will lose faith in risk assessment or in risk assessors. We can survive either of the latter outcomes, I argue, but not either of the former.



Tuesday Luncheon Hurricane Katrina and New Orleans

Laura Steinberg, Tulane University

Hurricane Katrina dealt a powerful blow to much of the Gulf Coast, but the combination of the hurricane and the levee fail-

ures created a particularly devastating situation for New Orleans. Although planners and engineers had long known that the levees protecting the city were designed only for a Category 3 hurricane, and that the natural hurricane protection offered by the coastal wetlands was eroding away, the city was woefully unprepared for the hurricane. The federal government was also overwhelmed, both in the immediate aftermath of the storm and in the longer clean-up and recovery phase.

New Orleans is now faced with a number of significant problems, including how to deal with the millions of tons of solid waste resulting first from

the storm, and then from the rebuilding process; where to place the trailers needed for the tens of thousands of residents returning to the city; how to assess the potential health effects from reoccupying the city, particularly the potential air pollution and contaminated soil issues; and how to decide how to

physically rebuild the city. The last issue is particularly salient in view of the fact that only approximately 25% of the residents have yet returned, and the total who *intend* to return is unknown.

Risk analysis has an important role to play in the ongoing efforts for New Orleans to recover and rebuild. Questions such as how much hurricane protection the city should have, the magnitude of the environmental risks faced by returning residents, and how this window of opportunity can be exploited to improve disaster planning in the United States are immediately relevant. The time for risk analysts to get involved is now, while the design

decisions are not yet made, the city is contemplating its recovery strategy, and the nation still remembers the devastation wrought by Katrina.

Wednesday Plenary **Global Opportunities for Risk Analysis: International Case Studies** The Past, Present, and Future of Risk Analysis in Russia

Sergey Kharchenko, Russian Academy of Public Administration, Russia

The interest towards risk analysis appeared in the Soviet Union after Chernobyl's disaster. The initiator of such research

in risk analysis was Academician Valery Legasov. Valery Legasov stressed the importance of these problems as far back as in 1980, but at that time he did not get any support for the development of his ideas. After Chernobyl's disaster the necessity of such researches became obvious for many people in Russia.

Now in Russia interest in risk analysis among researchers is increasing very rapidly. The conference last April in Moscow of the Russian Scientific Society for Risk Analysis on natural and technological safety attracted the participation of more than 50 Russian researchers. Risk analysis has a large sphere

of action in Russia, because there are a number of serious problems. Russian scholars and scientists are carrying out much im-

Lan Xue, Tsinghua University, China

The focus of this presentation is on the background and

current status of risk analysis in China. China is currently going through some major transformations, which include the transition from a planned economy to a market economy, from a rural and agricultural society to an urban and industrial society, from a relatively closed society to an open and dynamic society, and from a governance structure based on personal charisma and authority to one based on broad participation and rule of law.

These changes have brought tensions between man and nature, tensions between different regions, and tensions among different social strata. Risks as-

portant research in the following fields: biological, chemical, and physical mechanisms for maintaining safety; natural disaster pre-

vention; and elaboration of engineering means of protection and life-saving. However, much of this body of research results remains unknown to foreign readers, since publication has only occurred in Russianlanguage journals.

The development of risk analysis in Russia has been significantly aided by financial support from several American institutions: SRA, USAID (United States Agency for International Development), HIID (Harvard Institute for International Development), and the MacArthur Foundation. In particular, I express appreciation on behalf of myself and other risk analysis specialists from Russia for financial

support that has made it possible for us to participate in SRA Annual Meetings in the United States.

Risk Analysis in China: The Challenge of Transition

sociated with these tensions include natural disasters such as

flood and earthquakes, environmental and ecological problems, industrial accidents, public-health incidents, and social unrest. While China has accumulated vast experiences in managing these risks, SARS (severe acute respiratory syndrome) in 2003 also revealed some weaknesses of China's risk-management and emergency-response system.

First, institutional development in risk management has not kept up with the economic and social change. Second, the system was set up in a reactive mode. Third, there was a lack of a comprehensive risk assessment and analysis sys-



tem that could provide necessary information and policy options to mitigate or reduce the risks identified. Fourth, there are serious deficiencies in communication and coordination within the system.

The concept of "risk" has now been widely used in China in discussions related to environmental protection, project management, crisis management/disaster management, information security, financial and insurance industry, and investment analysis. Leading universities such as Tsinghua University have begun to develop educational and research programs around the concept. Academic exchanges and cooperation have been increasing between Chinese institutions and the international risk analysis community. At the same time, risk analysis has not been used as a general framework, nor has it been used as the methodology in dealing with uncertainties, except in some limited cases. Besides some individual champions and pockets of excellence in risk analysis, there has not been a community of scholars who adopt risk analysis framework as their "paradigm" in dealing with risks.

However, recent developments in China have offered historical opportunities for risk analysis to be used in China in an accelerated fashion: (1) a nationwide effort to build up China's crisis-management system after SARS, (2) changes in China's future development strategy in which addressing environmental and ecological problems is among the top priorities, and (3) the growth of China's public policy and management schools in universities which can provide a facilitating environment for related knowledge dissemination and application. China offers exciting opportunities for academic research as well as tremendous opportunities to make the lives of millions of people safer and better. The Chinese academic community is looking forward to working with the SRA community in the future.

Discussion

Keith Florig, Carnegie Mellon University

Professor Xue has eloquently described the vast economic, social, and institutional changes that have swept China in re-

cent decades, as well as the challenges and opportunities that these changes present for risk analysis and management. There are at least two compelling reasons that SRA ought to become more engaged in China's risk transition. One is the opportunity that China's unique risk landscape holds for advancing the science of risk analysis. China has natural disaster, health, safety, and environmental risks that are either more extreme than or different from those in many other nations. Cultural differences between China and the West create opportunities for studying intercultural differences in risk perception and group decision making. Finally,

China is increasingly open to experiments in public information disclosure and public dialogue.

The other motivation for SRA to become more involved in China is the gratification that would come from relieving China of the need to reinvent the wheel. By promoting the transfer to China of several decades worth of academic and practical knowledge about risk analysis, SRA can help China avoid many of the risk-management tangles encountered elsewhere. In the short term, SRA could advance this transfer by establishing contacts with existing Chinese profes-



sional societies with risk-related interests, maintaining a Web-posted bibliography constituting the 100 Greatest Hits of Risk Analysis, and adding a Chinese-language portal to the SRA Web site. In the long term, SRA could build a coalition of private-sector, nongovernment organizations, government, and foundation partners outside China with an interest in China's risk-management acumen. Such a coalition, if adequately funded, could establish and maintain a variety of transfer channels including training programs, conferences, and joint research programs.

For individual SRA members, becoming involved in China is easier than it might seem. Most Chinese scholars speak and read English and many have foreign training. Chinese scholars are often eager to collaborate with foreigners, especially when the research product will be published in an international journal. Many Chinese universities have facilities (and sometimes funds) to host visits from foreigners who are willing to offer lectures or teach a short course on risk-related topics.

Discussion

Warner North, NorthWorks, Inc., and Stanford University

It is an unexpected pleasure to be a discussant in this session, as a substitute for Dr. Valery Lesnykh. Dr. Lesnykh has made

extensive contributions to the Russian Scientific Society for Risk Analysis, which last year was recognized by the SRA as the Russian Chapter of the Society for Risk Analysis. Dr. Lesnykh has been one of the organizers of this new SRA chapter and serves as its liaison to SRA. Unfortunately, he was not able to come to this annual meeting as he had planned.

When I was elected to serve as SRA's president 15 years ago, I had no idea that one of the most satisfying aspects of my experience in SRA's leadership would be connecting to Russia. It was not on my agenda, but during my term in office Russians contacted SRA to express their interest in affiliation. I found an opportunity to travel to Moscow in 1992, and, beginning in that year, Russians began coming to our SRA

annual meetings. We have Dr. Sergey Kharchenko and Dean Nikolay Tikhomirov with us again this year. These men were kind enough to invite me to lecture at the Plekhanov Russian Academy of Economics in Moscow in 2001, and I have had additional opportunities to travel to Russia and meet with Russians interested in risk analysis.

I would like to encourage you, especially those from the United States, to consider what you could do. Travel to Russia, China, etc., has become easier and less expensive, many people in these countries are learning English, and you have good opportu-

(North, continued on page 10)

(*North*, *continued from page 9*)

nities to meet your international colleagues—for example, the upcoming Second World Congress on Risk. Once you have connected with colleagues from other countries, you can maintain these connections easily, via email correspondence and exchanging information on Web sites.

This year's winner of the Distinguished Achievement Award, Professor Ortwin Renn, has written a "White Paper" for the International Risk Governance Council. He has recently presented this paper in Beijing, as well as at this SRA annual meet-

Update on Second World Congress on Risk

During the 2005 SRA Annual Meeting in Orlando, we were able to have several meetings to advance planning for the Second World Congress (SWC) on Risk. A number of important decisions have been made and endorsed by the SRA Council. First, the Council approved the recommendation that the SWC be held in Mexico in early June 2008. Second, we began forming key planning committees which will be organizing over the near term to make the SWC happen in 2008.

At last year's planning meeting, we agreed that the general program format used at the first Congress will be repeated. This format allows for a plenary session to be followed by a limited number of breakout sessions in the morning. A larger number of concurrent sessions in each of two afternoon time periods will be selected from a general call for symposium proposals. The first Congress was organized around risk topics relevant to risk and governance. An option discussed for the SWC is to focus on "take-away" messages from large international meetings or efforts relevant to (a) the science and practice of risk analysis, (b) broadening the risk analysis community, or both.

Five committees have been formed to handle the critical functions for the SWC:

(1) **Program Committee**: This committee will have responsibility for the overall program design, for securing the plenary and luncheon keynote speakers, for selecting and securing speakers for the morning breakout sessions, and for selection of the afternoon symposia. The Program Committee will work closely with other committees to ensure the timely production of the Program Announcement, Prospectus for fundraising and cosponsors, and Final Program.

(2) Marketing and Outreach Committee: This committee will include and/or work with members of the Program Committee and the SRA Secretariat to develop a Prospectus, Program Announcement, Final Program, and Final Report for the SWC. This committee will also develop and implement marketing strategies and materials for outreach activities. This committee will work closely with other committees to ensure the production of materials for fundraising and recruitment of cosponsoring organizations.

SRA cosponsored the first Congress with SRA-Europe (SRA-E) and SRA-Japan (SRA-J) and the American Chemistry Council (ACC), American Physical Society (APS), German Commission on Harmonizing Risk Standards (GCHRS), German Foundation for Environment and Risk Management, International Association for Probabilistic Safety Assessment and Management (IAPSAM), International Council on Systems Engineering (INCOSE), International Union of Toxicology (IUTOX), National Science Foundation (NSF), Society of Environmental Toxiing. I regard it as excellent outreach to leaders in governments and international nongovernment organizations. I think our risk analysis community has the much as-yet unrealized potential to make contributions, once international decision makers and leaders are persuaded to ask for our help.

Professor Lan, Professor Kharchenko, Dean Tikhomirov, and others like them are educating the future leaderships in China, Russia, and other countries. We can support them in this process, and we can learn from them for educating our own students and colleagues.

Robin Cantor, Chair we were the Sec-UK Safety and Reliability Society (SARS), US Department of

cology and Chemistry (SETAC), Society of Toxicology (SOT), UK Safety and Reliability Society (SARS), US Department of Energy (US DOE), US Environmental Protection Agency (US EPA), US National Institute of Environmental Health Sciences (US NIEHS), and World Business Council on Sustainable Development (WBCSD).

(3) Fundraising and Finance Committee: This committee will have responsibility for seeking financial support from agencies, foundations, and the private sector for the SWC. This committee will also develop and track the budget for the SWC, set the conference fees, and work with other committees to allocate travel and support awards.

In addition to \$100K in conference fees, \$140K in financial support for the first Congress was provided by the NSF, US EPA, US DOE, NIEHS, the ACC, the German Association of Occupational Health, the German Insurance Foundation, and the German Foundation for Environment and Risk Management. As a result, there was substantial participation by young investigators and researchers and policy makers from developing countries. In all, funding received from these sponsors helped support the travel and conference costs for 40 conference speakers and planning-committee members and 28 attendees who were from developing countries or junior researchers.

(4) Publication Committee: This committee will be responsible for collecting and reviewing papers from the SWC to be published on the SRA Web site, in a journal or book format, or both. The committee will work closely with the Program Committee to coordinate publication planning with the conference program.

(5) Local Organizing Committee: This committee will work with the Secretariat to secure the conference facilities, make date and logistical decisions, collect information for participants about the local services and attractions, arrange for conference receptions, refreshments and meals, and schedule sessions into conference rooms. This committee will also handle local outreach to key officials and organizations to maximize the participation of risk decision makers and professionals in the region.

As you review this list of committees, please think about how you would like to get involved. You should also consider recommending other organizations that might be good candidates for our outreach and/or funding efforts. If you want to help with the committees (and haven't signed up yet), have questions or suggestions, or would like some background information on the First World Congress, please write to Robin Cantor (rcantor@navigantconsulting.com).

Report on the Policy Issues in Risk Roundtable "Meet With George Gray to Explore Opportunities for How Risk Analysis and Science Can Best Contribute to Government Decision Making"

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Jack Fowle, Chair, ad hoc Public Policy Committee

SRA's own George Gray, recently appointed by President George Bush to head the Environmental Protection Agency's (EPA) Office of Research and Development (ORD), spent a lively hour during the recent annual Society for Risk Analysis (SRA) meeting exploring with the members how the Society and EPA suggestion was that EPA explore the risks of genetically modified organisms (GMOs). Gray called on Bill Farland to summarize EPA's work on plant incorporated protectants (PIPs) (that is, allergenicity, gene exchange, and environmental effects).

Chuck Elkins, a former EPA official, reinforced Gray's call for

an increased dialog between EPA

and the scientific community, not-

ing that while EPA does a good job

of communicating scientific results

at professional meetings, it does

not communicate how it uses sci-

ence in decision making well. He

suggested that ORD could benefit from the experience of EPA program

offices, such as the air and pesticide programs, which have found

effective ways to increase the dia-

log about the use of science for de-

cision making without hurting the integrity of the federal decision-

might best work together to use risk analysis to best inform Agency decisions and to advance risk analysis as a professional discipline. His meeting with SRA members occurred just one month after Gray left the Harvard Center for Risk Analysis and joined EPA. On 1 November 2005, he was sworn in to serve as the Assistant Administrator for ORD, which is the 1,900-person, \$600 million science and technology arm of the EPA. Dr. Gray was confirmed, by unanimous consent, by the US Senate.

He and SRA members met at noon on 7 December for the "Policy Issues in Risk" roundtable sponsored

by SRA's ad hoc Public Policy Committee. Gray opened by saying that his attendance is a signal to SRA that the Society is important to him and to EPA. He acknowledged the EPA members in the audience, noting that he was pleased to find that they are active at all levels within the Society. He observed that SRA members have knowledge, data, and expertise directly related to the questions faced by EPA. He said that he hopes to facilitate an ongoing interaction between EPA and SRA members, and he looked to roundtable participants for feedback about how to do this.

Gray noted that he is also reaching out to other professional societies to seek their help. For instance, just two days before this roundtable, he addressed the Council of Scientific Society Presidents at its meeting in Washington, DC, to explore how the presidents of the various scientific professional societies might also help EPA. He said that he will be attending a number of scientific professional society annual meetings to engage them to help EPA.

One key message in Gray's opening remarks was that ORD is taking a leadership role in a variety of risk-related research areas. He stressed that certain upcoming areas, such as nanotechnology, expert elicitation, and the Report on the Environment, will pose risk assessment challenges where effective interactions between EPA and the SRA can be of particular help to the Agency.

Communication is always a challenge and Gray used the Agency's proposed revision to the definition of reference dose to highlight this point. Most non-EPA SRA members were not aware of the proposed changes, and he collected their input about the proposed changes.

Since he's only been on the job for one month, Gray asked SRA members "what would they do if they had his job?" One



Jack Fowle (left), George Gray, and Leslie Hushka discuss the "Policy Issues in Risk" roundtable.

Gray, and Leslie Hushka Risk" roundtable. making process. Gray agreed, noting while people recognize that EPA researchers do excellent science, they are often not happy with how science is used in decision making and EPA is frustrated to have worked hard to ensure good science only to end up with its decisions not being accepted as credible.

A regional EPA employee suggested that EPA work with other federal departments to harmonize methods and models across agencies so that risk assessments can be compared and used for more than one purpose. Gray agreed that the science should be used for more than one purpose. However, we don't want to be boxed in, because there are different congressional requirements for different agencies and harder questions are being asked of risk assessors so flexibility is needed. He also asked Bill Farland to share some of the harmonization efforts underway in the federal government.

Linda Teuschler of EPA suggested that EPA think about cumulative risk in terms of community health and not just in terms of the Food Quality Protection Act definition. Gray responded that ORD and EPA are well placed to think more broadly and that several efforts were underway to take a community-based approach to risk assessment.

Leslie Hushka of Exxon-Mobil asked how EPA teased out its contribution to improving human health and the environment, and how SRA can help. Dr. Gray responded that teasing out EPA's contributions to improving human health is harder than it is to evaluate the ecological impacts of Agency actions. Identifying metrics to identify key stressors and to measure change are important research areas for EPA and the SRA. Evaluating the value of research is especially important.

A state SRA member asked for continued support of EPA's Integrated Risk Information System (IRIS). Gray noted that efforts are underway to make IRIS more responsive and inclusive. He asked the SRA members for suggestions for improving IRIS.

What Do We Do?

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

What is your job title?

SRA

Xue: My primary job title is professor and Executive Associate Dean of the School of Public Policy and Management at Tsinghua University in Beijing, China. I am also the director of the Center for Crisis Management Research in the school and the director of China Institute of Science and Technology Policy in Tsinghua University.

How is risk analysis a part of your job?

Xue: Part of my research work involves doing applied policy work in crisis management with my colleagues and students in the Center for Crisis Management Research. I also teach crisis management in our regular graduate programs and executive training programs designed for civil servants in both the central and local government agencies. In addition, I am often invited to give talks on crisis management at conferences and training programs outside Tsinghua University.

How did you decide to pursue this line of research?

Xue: Well, when I was a graduate student

in engineering and public policy (EPP) at Carnegie Mellon, we all had to take a research methods class in which risk analysis was a major part. At that time, I wanted to avoid risks (and keep safe). So my PhD work had nothing to do with risk analysis. But, somehow, I just could not get rid of risks around me. When I was teaching at George Washington University in the early 1990s, a colleague in the department, Professor Jack Harrald, started a research center related to risk. In fact, it really had almost everything in it. It was a center on Risk, Crisis, and Disaster Management. Around late 2000, several years after I returned to China to teach in Tsinghua University, I began to do some work along this line myself. This was partly due to the increasing risks China had to deal with as the result of the transitions. The exposure I had from EPP turned out to be quite useful for me to get started, although our initial work was more focused on the institutional aspects.

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

Xue: Our work was greatly influenced by two major events. The first one is 9/11 in 2001. Suddenly, everybody is talking about crisis management and our work in this area became handy since very few people were doing work along this line at the time. We organized a seminar around this topic not long after the event and it was very well attended by people from both government and academia.

The second event is SARS (severe acute respiratory syndrome) in the spring of 2003. Some colleagues and I organized a research team and began to do some analysis from the perspective of crisis management when most people were still treating it like a regular public health event. We produced over 30 issues of policy briefs for the central and local governments during this period, which people found very useful. It happened that I was scheduled in late April to give a lecture to China's top leadership, which was a practice started by the new leaders beginning in late 2002. The event was chaired by Mr. Hu Jintao,

the party secretary and the president. The audience included not only members of the Political Bureau of the Party, but also all the ministers of the government, vice chairmen of the People's Congress, and other officials of the establishment. While the main topic I was asked to speak on was science and technology policy, I talked briefly about our work in crisis management and brought some preprint copies of a book we were working on. The book, titled *Crisis Management: The Challenge of Transition*, which was published in May 2003, was the only one on the market.

One of the things we argued in the book was that, in order to deal with different risks brought about by the transition, China needed a new institutional framework. This idea was implemented

after SARS was finally over in late 2003. China's State Council's general office took the lead in developing national and local contingency plans, drafting a law on emergency management, and setting up new government offices dedicated to risk management. My colleagues and I in Tsinghua were heavily involved in these activities since we were recognized as a leading research center in this area. We were somewhat overwhelmed by all the requests but were happy that our work produced a tangible outcome.

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

Xue: China is going through major transitions which will be one of the most significant events of our time when people look back years later. Such changes brought about many new challenges that only exist at this particular time in history. As a policy researcher, it is a lifetime opportunity to be an eyewitness of this great change and to contribute to it in some small way. So every bit of what I do is interesting and exciting! In particular, I have really enjoyed the opportunities to be able to participate in the development of some important government policies. While the sense of responsibility can be overwhelming, it also makes you feel very proud of what you do. The policies are not just stuff being put on the shelf, they are having real impacts! In addition, I am also happy to see that public administration as a field has been growing rapidly in China, not only in terms of the educational institutions embracing it, but also the breadth of intellectual substance under the rubric. The field of public administration can serve as a good platform for the risk analysis community to make a contribution to China's transition. (SRA)



SRA-Europe

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Announcing the 15th Annual SRA-E Conference Innovation and Technical Progress: Benefit Without Risk?

Markus A. Grutsch (Information Officer) and Branko Kontic (Local Organizer of SRA-E)

The 15th Society for Risk Analysis-Europe (SRA-E) Conference will be held in Ljubljana, Slovenia, 11-13 September 2006. The title of the conference is posed as a question: Innovation and Technical Progress: Benefit Without Risk? The title, indeed, is both provocative and encouraging. On the one side, provocative in terms of drawing the participants' attention to benefits and risk of innovation and technical progress and on the other side encouraging in terms of finding answers to this question by sharing and combining experiences from the practice and findings from research.

The 15th annual conference provides a platform for promoting and sharing knowledge of risk assessment, risk management, and risk communication among international experts and practitioners. As the conference will highlight industrial risks, an additional and specific aim is creating a forum on the most actual and common risk topics among industry and authorities. This will be accomplished by inviting the conference's participants to roundtable discussions and encouraging them to exchange their understandings on specific needs and obstacles for achieving safe industrial operation. Other conference topics will mainly deal with the following aspects: Social contexts and responses to risk, Challenges associated with risks in public health, Creating a risk-reducing culture: How much governance and regulation contributes to the goals?, Natural hazards and associated risks, Industrial hazards and associated risks, and Risk communication and perception: Building trust among scientists, governments, and the public.

As a special topic we will address industrial risk and safety. The key interest will be interrelations between risks and safety; the demonstration of safety: Methods, tools, indicators; uncertainty and trust, proofs; economic and financial aspects of SMS (Safety Management Systems); spatial planning and land use; and practical aspects of ALARP. This topic will be dealt with in the form of a roundtable discussion.

Participants wishing to contribute a presentation or paper are invited to prepare an abstract in English, not exceeding 300 words. Papers can be submitted by email only to srae.2006@ijs.si.

More information is available at http://sra-e-2006.ijs.si.



Annual Research Conference and Internationalization

Jun Sekizawa, President, SRA-Japan

SRA

The 2005 Annual Research Conference of SRA-Japan was successfully held on 12-14 November 2005, at the Convention Center, Osaka University, with 82 papers presented (a proceedings of 422 pages published in Japanese) and was attended by 250 participants.

Subjects in 18 oral sessions plus one poster session covered the fields, for example, assessment/management of chemical and environmental risks, risk informatics, risk perception and communication, insurance/finance risk, economic analysis, disaster risk, and infectious disease risk.

A special open-to-the-public session on the topic of Present Situation and Issues Surrounding Asbestos was held with 67 participants on the first night. For details, please go to the following Web site (in English): http://rio.env.eng.osaka-u.ac.jp/ risk/risk2005/english/index_eng.htm.

As a part of the 2005 SRA-Japan Annual Meeting, SRA-Japan and Osaka University jointly organized a special session called "The Importance of Capacity Building for Risk Management." The faculties of four risk management-related programs, including Osaka University's ERMT (Environmental Risk Management Training Program), Yokohama National University, Ochanomizu University, and Tokyo University of Agriculture and Technology, participated in this session.

The wrapping-up of the discussion concluded that (1) even though each program focuses on different types of risk and intended audience, they share a common framework in risk management education and capacity building, (2) the promotion of cooperation, alliance, and experience sharing among the programs is important in order to enhance the capacity building for risk management, (3) the common challenges among the programs are to produce the graduates who can meet the social needs regarding risk management and to assure a workplace for all of those who graduate from these programs.

SRA-Japan has responded to a call by Dr. Pertti J. Hakkinen on the subject of SRA internationalization which was discussed during the last SRA annual meeting. SRA-Japan has been cooperatively organizing risk-related research meetings every third year starting from 1998 in Beijing, followed by the meetings in Kobe in 2001 and in Seoul in 2004. We are thinking to work together to promote risk research and related activities, such as pertinent training in the East Asian area, through mutual understanding and seeking potential collaboration in managing natural hazards and social risk which may be common to us, and potentially to be able to learn from each other even though situations are different.

We also submitted a report on 22 November responding to the call for a section report by Dr. Baruch Fischhoff, then SRA president, which was titled "A New Relationship between Society for Risk Analysis, Japan and the Society for Risk Analysis. For more information on this report and my discussion about SRA-Japan with the SRA Council at its meeting in December, please contact me at sekizawa@ias.tokushima-u.ac.jp.

Please note that I would like to stress that we wish to further promote a better relationship and closer collaboration between SRA and SRA-Japan in the future and also between us and SRA-Europe and others, too.

Committees

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Annual Meeting Committee

Kimberly Thompson, Chair

SRA

As incoming president-elect, I'm very pleased to chair the Annual Meeting Committee and I look forward to working with a strong group to plan what I hope will be one of the best SRA meetings ever. This year we are exploring ways to improve the meeting and the program. The committee will soon review the comments that attendees made at the Orlando meeting, and we invite any additional comments. It's not too late to help improve the meeting for next year, so please send an email message to me (kimt@hsph.harvard.edu) with any comments, ideas, and suggestions.

Based on some of the comments made during the Orlando meeting, we will actively work to stimulate more interdisciplinary symposia and to ensure that session chairs are prepared for their responsibilities at the next meeting.

Please check the Web site early in 2006 for information about the meeting and start to plan ahead. This year we will vigorously enforce the abstract submission guidelines, so please start thinking now about presentations that you'd like to make and symposia that you'd like to organize. I look forward to seeing you all 3-6 December 2006 in Baltimore!

International Task Force

Pertti (Bert) Hakkinen, SRA Council and European Commission

The results of the recent SRA member survey indicate a strong interest in increasing SRA's presence globally. SRA's latest chapter, Taiwan, was approved by the SRA Council in Orlando. The non-US chapters now include Australia, Saint-Laurent (Eastern Canada), Kiev (Ukraine), London (UK), Russia, and Taiwan, while the sections include Europe and Japan. Representatives from the Europe and Japan sections, and the new chapter in Taiwan, were able to meet with SRA Council members in Orlando, and further face-to-face and other interactions are planned during 2006. The annual meeting's Internationalization Roundtable was attended by about 30 people and was cochaired by Robin Cantor, Pertti (Bert) Hakkinen, and Sergey Kharchenko. The roundtable topics included an overview of SRA's internationalization efforts (for example, the rationale behind seeking internationalization, the current chapters and sections, information on how to form a new chapter or section, and SRA's speakers bureau), the plans for the next World Congress on Risk, SRA's possible international role in providing training and certification (or some form of "registration" or professional recognition of expertise beyond membership in SRA and its chapters/sections), and SRA's existing and possible international collaborations (for example, with other professional societies and organizations). The attendees provided extensive suggestions and other comments during the roundtable (for example, establishing a core body of literature in risk analysis and possibly developing training workshops to be offered as global Webcasts) and have been contacted for further feedback and involvement. The Orlando meeting also included a plenary session on "Global Opportunities for Risk Analysis: International Case Studies," moderated by SRA President Chris Frey, with presentations by Sergey Kharchenko and Lan Xue. The plenary session discussants were Keith Florig

and Warner North. Finally, noteworthy relative to SRA's internationalization over the years is that the Thompson, Deisler, Jr., and Schwing "Interdisciplinary Vision: The First 25 Years of the Society for Risk Analysis (SRA), 1980–2005" article published in *Risk Analysis* (Volume 25, Issue number 6) provides an overview of the development of SRA's US and non-US chapters and the establishment of the Europe and Japan sections.

If you are interested in the internationalization of SRA, please feel free to contact me (Pertti Hakkinen, European Commission, perti.hakkinen@jrc.it). To learn more about the World Congress on Risk, see page 11 and contact Robin Cantor (rcantor@navigantconsulting.com). If you are interested in training, certification, and related topics, contact SRA President Chris Frey (frey@eos.ncsu.edu).

Finance Committee

Pamela Williams, Chair, SRA Treasurer, Tony Cox, Treasurer-elect, Leslie Hushka, Past Treasurer

Available Funds to Support New Initiatives

We are pleased to announce that the Society is now well on its way to becoming financially secure and expects to have some limited funds available to support new programs or initiatives in the coming years. Specifically, we have recently formalized an Investment and Reserve Policy that sets aside money in a long-term fund to protect against financial downturns or other emergencies and in a short-term fund to finance new (or ongoing) programs and initiatives. The Policy also contains an annual spending cap in order to ensure that adequate resources are available each year.

Any member of SRA can submit a proposal for a new program or initiative (although we recommend that individuals work with a councilor, program chair, treasurer, or the Secretariat on their proposals and budgets). To assist in this process, and to ensure greater consistency and transparency among different proposals, we have adopted the following criteria for evaluating all new proposals:

• Enhancing member value—Does the proposed project/activity increase membership satisfaction or provide new or enhanced services? Does it address a previously expressed membership need/interest documented in an objective or detailed fashion (for example, member suggestions, surveys, etc.)? Does the proposal potentially overlap with others or any existing program (either potential redundancy or synergism)?

• Serving the membership—Does the proposed project/activity equally benefit all professional segments of the membership (for example, academia, government, and industry)? Does it potentially favor or advantage any particular member type, group, or discipline (for example, students)? Does the proposal potentially affect any other SRA unit (for example, international or regional chapters), either positively or negatively?

• Utilizing resources—Is the proposed project/activity intended to be a short-term or permanent SRA activity? Does it involve financial resources or SRA staff time? How are proposal costs estimated? Will it be self-supporting after the specified time frame? What are the start-up costs/activities, including estimates of SRA staff time? If SRA staff will implement the program, are there any proposed criteria to evaluate the program?

• Evaluating programs—How would you describe the proposed project/activity goals and objectives? Are there quantifiable or qualitative performance measures to evaluate its success? How will any necessary data to evaluate its success be collected? When should it be evaluated?

• Overseeing the program—How will the proposed program/ activity be overseen within SRA (for example, SRA committee) to ensure the program is meeting objectives and budget throughout the year? How would reporting on the program's progress or challenges be accomplished (for example, included in or similar to committee reports)? Would there be ongoing or final project reports? Are there any components of the project/ activity that may not be consistent with SRA bylaws, policies, practices, and tax-exempt status requirements?

More details about the process and deadline for submitting proposals and cost estimates can be found on the SRA Web site. We look forward to hearing about your new ideas and initiatives and working with you to develop and implement excellent programs in 2006.

Communications Committee

Richard Reiss, Chair

I am excited to join the SRA Council and succeed Dr. Kim Thompson of Harvard as chair of the Communications Committee. Under Kim's leadership, the committee has greatly improved the SRA Web site and conducted a very useful member survey, the results of which you can now find posted on the Members Only page of the SRA Web site. Please take the time to update your contact information from the Members Only page the next time you visit the site.

We have some exciting new challenges this year. For example, we are planning additional Web site enhancements, including creating an expert database for members to opt into that will help SRA members find experts. We also plan to create a separate experts database for SRA members to opt into that will be accessible to nonmembers, including members of the press, attorneys, and others. We are also in the process of getting all of the historical contents of *Risk Analysis* scanned so that members will have electronic access to all of the papers with a searchable index. The Web site will also soon provide a resource to help provide some information about risk education opportunities and to help those who are interested find out about local chapters from more standardized pages that we plan to create to support the local chapters.

Recognizing the high value and importance of *Risk Analysis*, we are launching a campaign to publicize newsworthy articles in *Risk Analysis* by issuing press releases. As we build our list of members of the media with an interest in risk analysis, we would appreciate and welcome any suggestions that you might offer. Finally, we are planning to update and print copies of the SRA brochure to provide a handy material with which to recruit new members. We request that if you have any suggestions for meetings where we might distribute the SRA brochures, then please let us know. If you are interested in joining the committee or helping out in other ways, please take this opportunity to get involved by contacting me at rreiss@sciences.com.



Member News

Harvey Clewell and Melvin Andersen

CIIT Scientists Harvey Clewell and Melvin Andersen are coeditors of a new work on PBPK modeling. The book, *Physiologically Based Pharmacokinetic Modeling: Science and Applications*, has just been published by John Wiley & Sons. Other editors are Dr. Micaela Reddy, Roche Palo Alto LLC, and Dr. Raymond Yang, Colorado State University.

This book describes the development of PBPK models and modeling technology to study the toxicity of various chemicals. It provides background on the fundamentals of PBPK modeling and how this discipline has been used to understand the physical, chemical, and biological properties that determine the absorption, distribution, metabolism, elimination, and target tissue interactions of both exogenous and endogenous chemicals. Early applications of PBPK modeling with volatile anesthetics and chemotherapeutic compounds provided the advances necessary for applications to a much broader range of chemicals with environmental and occupational significance. In the past 20 years there have been applications of PBPK modeling with many important classes of chemicals, including metals, inorganic chemicals, pesticides, persistent organic pollutants, and drugs. These PBPK models have unraveled doseresponse behaviors on the basis of dose to target tissues in the body and have revolutionized low dose and interspecies extrapolations required for risk assessments.

Additional details and ordering information can be found at http://www.josseybass.com/WileyCDA/WileyTitle/productCd-0471478148.html.

David J. Kent

Keller and Heckman is pleased to announce the addition of David J. Kent as a staff scientist at the firm's Washington, DC, office. David brings nearly 25 years of consulting experience in the area of chemical regulation for domestic and international clients. He also has professional experience in product registration, environmental toxicology, and ecological risk assessment for chemicals, pesticides, and consumer products. David is a leader in the assessment of high production volume chemicals. He has substantial expertise in compiling and evaluating data in order to evaluate potential risk issues from newly emerged chemicals of concern, while ensuring product lines are protected from unreliable information.

David is completing a PhD in environmental science and policy at George Mason University. He has an MS in environmental science from Rutgers University and a BA in biology from the University of Bridgeport. David has authored or coauthored over 35 scientific publications and presentations for peer-reviewed journals and international conferences. He is actively involved in regional, national, and international scientific organizations, most recently as cochair of the Program Committee for the 26th Annual SETAC meeting held recently in Baltimore. He is also a past copresident of the National Capital Area Chapter of the Society for Risk Analysis.

David's new contact information is Keller and Heckman LLP, 1001 G Street, NW, Washington, DC 20001; kent@khlaw.com; phone: 202-434-4221; fax: 202-434-4646.

Specialty Groups

Biological Stressors Specialty Group http://members.tripod.com/Cristina704/Foodrisk

Mark Powell, Past Secretary

SRA

The Biological Stressors Specialty Group held its annual business meeting on 6 December at the 2005 SRA Annual Meeting in Orlando, Florida. Twenty-two members were in attendance. The results of the 2005 voting for officers were announced, with Sherri Dennis, US Food and Drug Administration Center for Food Safety and Applied Nutrition, elected to serve as vicechair during 2006 and chair during 2007. Former Chair Ewen Todd, Michigan State University, passed the baton to Felicia Wu, University of Pittsburgh, who will serve as chair during 2006. Michael McElvaine, US Department of Agriculture, volunteered to serve as secretary during 2006-2007, and his offer was accepted unanimously by voice vote. The attendees also formally adopted the proposed Specialty Group Bylaws unanimously by voice vote. As of November 2005, the Specialty Group's current account balance was \$4,443.83.

There was a wide-ranging discussion about potential topics for symposia proposals for the SRA 2006 Annual Meeting, including risk assessment for food allergens, attribution-based risk assessment, avian influenza, international comparisons of food safety risk management schemes, animal health risk assessment topics, and topics associated with the Asian Far East. Cosponsorship of symposia with other specialty groups was encouraged. There was also a discussion about potential ways of allocating the current account balance, including supplementing the SRA travel award for best student paper in the Biological Stressors Specialty Group and inviting a high-profile presenter from outside the Society.

Dose Response Specialty Group www.sra.org/drsg

Justin Teeguarden, Chair

With four sponsored sessions, our annual mixer, and recognition of outstanding student research through our student



Tiffany Defoe, 2005 student research award winner

award program, the 2005 SRA Annual Meeting was a period of high activity for the Dose Response Specialty Group (DRSG). Tiffany Defoe, Carnegie Mellon University student in engineering and public policy, won the student award with her leading research on methods for exposure-response analysis in populations with unidentified sensitive subgroups; she left our mixer with new contacts who will watch her career with the expectation of more leading research and the typical spoils-\$500 for travel, reimbursement for registration, and a plaque. Once again, congratulations to Tiffany. Bringing

recognition to leading scientists in our field is one of the most important tools DRSG uses to meet our charge of advancing the field of dose-response assessment. In response to interest within the executive committee to broaden the scope of our awards program to include practitioners, consideration is being given to expanding our award program to include best application of dose response.

Our teleseminar series starts in March. Teleseminars will be presented 2 March, 6 June, and 5 September-the first Tuesday of these months has been our tradition. Members and nonmembers with an interest in hot topics in dose response, such as probabilistic risk assessment, nanomaterials, and risk assessment methods for mixed mode of action compounds, those with genotoxic and nongenotoxic components, should stay tuned. The teleseminars will be announced via email to those on our email list. Those of you interested in receiving these emails can add your name to the list through our Yahoo group site (http://groups.yahoo.com/group/DRSG). Directions can be found on our SRA specialty group site under "Membership/ how to join." Participation in last year's seminars was very strong, crossing many organizations (Environmental Protection Agency, government laboratories, academic institutions, and private companies), attracting large audiences, and inciting sometimes passionate discussions. We expect the same this year. Of course, if you have good ideas for teleseminars, please email them to Dale Hattis (dhattis@aol.com).

Specialty group members expressed deep gratitude to exiting chair Ralph Kodell and outgoing officers Gary Foureman (past chair), Mike Zager (vice chair), and Greg Blumenthal (trustee at large) for their outstanding leadership and service to this 135member-strong specialty group. Incoming Chair Justin Teeguarden was welcomed during the mixer and expressed only that he hoped to follow in the fine style of Ralph Kodell. The other incoming officers were Chair-elect Dale Hattis, Vice Chair Paul Feder, and Trustee at Large Patty Toccalino. Peter McClure continues as a trustee and Sara Henry continues as secretary/ treasurer.

Engineering (and Infrastructure) Specialty Group

James Lambert, Chair

Thanks to all of you who contributed engineering and engineering-related papers to the 2005 SRA Annual Meeting—nearly 20 percent of the papers associated with the meeting had significant engineering and infrastructure content. The topics of these papers covered a range including homeland security, energy, environmental protection and pollution prevention, nanotechnologies, transportation, military applications, disaster preparedness and response, regulatory analyses, water and wastewater, soil, air, analytical methods, and others.

We extend sincere gratitude to Dr. Ali Mosleh, University of Maryland, who, after numerous years of committed and effective service, is the outgoing chair of our specialty group. As incoming chair, I request that you please send me any ideas and suggestions and for your assistance in making the group better serve your needs. Please contact me at lambert@virginia.edu or telephone 434-982-2072 with your suggestions to sustain and improve our specialty group within the Society. We are presently compiling a specialty group member database so that we can stimulate more interactions within the group throughout the year, help identify potential reviewers of engineering papers for the journal, begin to formulate symposia for the next annual meeting, and develop engineering and infrastructurerelated SRA workshops. 17

from the SRA Council, but in anticipation of this approval it is noted in the title above. The change was supported unanimously by our group members at a recent annual meeting and it reflects the emphasis of content of engineering-related papers at the annual meeting and in *Risk Analysis*. If you're interested in this group, please take this opportunity to get more involved.

Ecological Risk Assessment Specialty Group www.neptuneandco.com/sra-erasg

Randy Ryti, Chair, Todd Bridges, Chair-elect, and Igor Linkov, Past Chair

The Ecological Risk Assessment Specialty Group (ERASG) had a diverse set of papers at the 2005 SRA Annual Meeting in Orlando, Florida. Topics included invasive species, Florida ecosystems, and climate change. At our business meeting we discussed plans for the next annual meeting, recognized our student merit paper winner, and solicited nominees for ERASG leadership.

Some of the topics considered for the next annual meeting included weight of evidence and its applications in ecological risk assessment, landscape scale ecological risk, regional risk assessment, and methods for evaluating uncertainty. Many of these topics are interdisciplinary and should include experts in risk communication and decision analysis, among others.

Our ERASG student research merit paper was awarded to Ms. Amanda Pfingst of Western Washington University in Bellingham, Washington. Amanda's paper, with coauthors Chen and Landis, was titled "Relative Risk Assessment of the Androscoggin River Watershed in Maine and New Hampshire."

Lastly, but certainly not least, Professor Wayne Landis has agreed to be the chair-elect of ERASG. Landis is the director of the Institute of Environmental Toxicology at Western Washington University and also chair of the Department of Environmental Sciences, Huxley College of the Environment, Western Washington University. Landis has been active in SRA for a number of years and we are pleased that he will be involved in the future leadership of ERASG.

If you have a contribution relevant to the ERASG column in the SRA quarterly newsletter or have some information that you would like to post on the ERASG Web site please send this information to Todd Bridges (Todd.S.Bridges@erdc.usace.army.mil).

Decision Analysis and Risk Specialty Group

Igor Linkov, Chair, and Greg Kiker, Treasurer

Summary

The newly formed Decision Analysis and Risk Specialty Group (DARSG) will provide leadership and play an active role in advancing the use of decision analysis and risk assessment tools in policy and practice, and it will also facilitate knowledge development and idea exchange.

Activities Sponsored at the SRAAnnual Meeting in Orlando

The 2005 SRA Annual Meeting in Orlando featured several symposia and sessions sponsored by the group. DARSG sponsored a continuing education workshop on Sunday. This fullday workshop, attended by 16 students, explored strategic risk communication with decision analysis as an advanced approach to formulating and implementing effective risk communications methods for integrated risk management. The profit generated by the workshop will provide a foundation for future DARSG activities, including best paper awards. DARSG-sponsored symposia included "Multi-Criteria Decision Analysis, Risk Assessment, and Homeland Security Applications" and "Environmental Security in Harbors and Coastal Areas: Management Using Comparative Risk Assessment and Multi-Criteria Decision Analysis." DARSG also had its first business meeting.

Formalization of Group Officer Elections

To maintain continuity of leadership in the specialty group, a sequence of chair-elect, chair, and past chair has been started. Group chairs and secretary-treasurers will serve a term of one year, beginning at the end of the annual business meeting that follows the election and continuing through the next annual business meeting. During his/her tenure, the chair will organize group activities in close collaboration with the past chair and chair-elect. Secretary-treasurers will maintain a record of actions of the DARSG's officers and the meeting (working as appropriate with the SRA Secretariat), maintain the financial records of the DARSG, and communicate relevant information to the DARSG membership.

Sponsored Activities

• NATO/DoD Workshop on "Uncertainty and Decision Analysis for Environmental Security and Non-Chemical Stressors," (Fall 2006)

• NATO Workshop "Risk Management Tools for Port Environmental Security, Critical Infrastructure, and Sustainability" (16-19 March 2006, Venice, Italy, www.risktrace.com/ports)

• NATO Study Institute "Integrated Water Resources Management in the Middle East" (February 2006, Israel, www.natowater.org)

• Second SRA Workshop "Probabilistic Risk Assessment: Current Developments and Applications for Environmental Assessment and Management" (Boston [tentative])

Mailing List/Sponsorship

If you are interested in DARSG activities and events or would like to share your ideas, please send an email to Linkov@CambridgeEnvironmental.com. DARSG is looking for corporate sponsors. If you or your company would like to sponsor DARSG in general or specific DARSG activities (such as student fellowships, workshops, etc.), please contact us.

Would you like a printed copy or an electronic copy of your RISK *newsletter*? See page 21 for important newsletter notice!

Regulatory Risk Review

EPA Resists SAB Calls to Detail Agency's Risk Reform Agenda

Steve Gibb, Editor, Risk Policy Report

Environmental Protection Agency (EPA) officials are resisting a request from the Science Advisory Board (SAB) to lay out the agency's risk-reform agenda as part of an upcoming review, saying they will instead limit the information provided to the SAB and gear the process toward addressing environmentalists' concerns that more public input is required to balance the effort.

The agency is considering the reforms as part of a two-year-old effort to reevaluate its risk-assessment approaches in response to industry comments. But environmentalists allege the process to date has limited public input and favors industry priorities. They fear the reforms will lead to weakened risk and regulatory standards by ignoring cumulative risks posed to communities and stricter standards to protect susceptible subpopulations.

To address their concerns, EPA agreed to hold an SAB consultation on its risk reforms after agency officials rejected an earlier request by environmentalists to convene a formal public advisory committee to guide the process. The reforms will be based on a March 2004 agency staff paper: An Examination of Risk Assessment Principles and Practices, a series of scientific workshops, and ultimately the approval of peer reviewers who will have to concur with any proposed adjustments to EPA practices.

At a 14 December meeting, SAB Chairman M. Granger Morgan of Carnegie Mellon University requested specific information on EPA's reform plans for the purposes of the consultation. "We need to see what the agency is proposing to do to give a substantive response to their priorities," Morgan said. SAB panelist Jim Bus of Dow Chemical also asked what the agency's scientific response to the staff paper has been.

EPA sources say the agency views the SAB consultation as an opportunity to advance the dialogue on the topic but not necessarily as a forum for setting out a broad reform agenda. "We will work with the SAB staff in terms of what we will provide in terms of presentation materials, but I don't foresee a formal document" on EPA's reform plans being developed, one agency source says.

Instead, EPA officials say the consultation will provide an opportunity to engage a broader public on the scope of the review and the activities EPA has pursued. In addition, they plan to seek information on whether the agency is being responsive to the public comments on the staff paper. According to a presentation to SAB by EPA's William Sette, the question the agency seeks SAB input on is, "In light of the comments received, the activities to date, and the concerns involved, how can EPA best work with the SAB to advance this dialogue?"

An EPA source says there would also be value in focusing the consultation with SAB on topics that have not been addressed in workshops to date, such as cumulative risk and susceptible subpopulations, to "provide environmental groups and others with a forum to comment on a general level about the effort." In addition, how to get EPA managers more familiar with the value of probabilistic techniques for decision making could be an important topic to address, the source says. Such methods generate a distribution of values as opposed to relying on a single point estimate in risk efforts, making for more accurate—but also more difficult to interpret—safety limits for chemical exposures.

EPA also presented a summary of the range of public comments the agency received, many of which urged the agency to adopt of number of technical improvements. The comments also called on EPA to revisit the levels of health protectiveness the agency employs and alleged that EPA overstates environmental threats in setting risk and regulatory standards.

Environmentalists say they hope to broaden the scope of EPA's reforms by urging more emphasis on cumulative risk, susceptible subpopulations, and community-based risk assessment in comments during the upcoming SAB consultation. SAB meetings allow the public to make brief comments on issues before the board.

"Picking only those issues that industry cares about such as probabilistic techniques will weaken risk assessments. Our hope is the SAB will help provide a forum for balanced reforms given the multitude of judgments that have to be made in risk assessment," according to one activist.

Another environmentalist says that community-focused risk assessment needs to be more of a priority in addition to broader public input: "Community members have a lot of information about exposure routes and other aspects that are relevant to agency risk assessors. Church leaders, activists, and others can also serve as important conduits for health and risk information in the communities they live in and EPA's narrow focus on technical adjustments ignores" these strengths.

(SRA)

Chapter News

Northern California Chapter http://www.sra.org/ncc

Mark Stelljes, Past President

The Northern California Chapter held an afternoon symposium titled "Reflections of Proposition 65" on 12 October in Oakland. This is the regulation requiring public notice of all products used in California establishments that contain chemicals that are either carcinogenic or reproductively toxic and is largely a "right-to-know" law. Speakers included Dr. Carl Cranor of University of California, Riverside, who was on the original advisory board that developed the wording for the proposition, Lauren Zeise of CalEPA, who manages the process of placing chemicals on the list, and Ed Weil, from the California Attorney General's office, who spoke on cases presented to the state regarding compliance with the regulation. Breakout groups and discussion sessions were held as part of the meeting, which attracted about 25 people on quite short notice. Next year we have three symposia planned, including one on toxic torts and one on emergency preparedness in response to potential terrorism or natural catastrophic events. In March we are holding a seminar on the potential bird flu pandemic. If anyone is interested in attending or contributing to this event, please contact Dr. Mark Stelljes at mstelljes@slrcorp.com.



We recently held our elections for this year's officers. Kay Johnson of Tetra Tech is our new president-elect (as well as a longtime active member of the local chapter) and Ed Morales moves from past president to treasurer. Dr. Raymond Neutra of the California Department of Health Services will fill this space this year as incoming chapter president. It has been challenging but rewarding serving as the local chapter president. Our membership continues to grow and now stands at about 80 local professionals. Bringing new people into the mix is the best way to keep the Society fresh and infused with new ideas, and I hope this trend continues in our local area as well as nationally.

Upstate New York Chapter http://esc.syrres.com/sraupstateny/

Tim Negley, President-elect

The Upstate New York Chapter of SRA was very active during the fall quarter. In addition to electing new officers and councilors for 2006, the chapter also sponsored a one-day symposium at Cornell University.

The meeting attracted 35 participants from the upstate New York region, with oral and poster presentations focused on natural and intentional disaster preparedness/response and microbial risk assessment.

Dr. Rachel Davidson of Cornell University was the lead speaker for the symposium. Davidson spoke on equity models in regional natural disaster management, using hurricanes Katrina and Rita as case studies. In addition to active participation in the local chapter, Davidson also serves in the national SRA as councilor and chair of the Sections and Chapters Committee.

Matthew Hidek, a doctoral student at Syracuse University, discussed the current federal counterterrorism planning focus for homeland security with its roots in vulnerability assessments historically applied to military installations and force protection. Hidek highlighted the need for a more holistic framework for civilian counterterrorism planning that integrates inputs from additional disciplines (including urban planning, urban ecology, and social sciences), as well as inputs from the federal, state, and local authorities and stakeholders who participate in homeland security planning.

Dr. Pat Meinhardt, executive director of Arnot Medical Services, provided an overview of a physician preparedness program she developed for responding to acts of water terrorism. Meinhardt also walked the participants through an exercise in decision making in real time as information developed in a hypothetical water-contamination scenario.

The symposium agenda also included a business meeting to generate ideas for expanding membership, encouraging more active participation, and planning future events and symposia. The officers thank the oral and poster presenters for their stimulating contributions, Heather Clark (chapter secretary) for organizing the symposium, Cornell University Veterinary School for providing the meeting facilities, and Syracuse Research Corporation for sponsoring the event.

Membership in the Upstate New York Chapter is not restricted to upstate residents. New members with interests in any aspect of risk and research that can be applied in upstate New York are welcome. The chapter provides free memberships to students.

Taiwan Chapter

Kuen-Yuh Wu, Secretary General

The members of the Taiwan Chapter of the Society for Risk Analysis (TCSRA) were very excited to learn that TCSRA has been officially chaptered and announced during the 2005 SRA Annual Meeting. TCSRA was initiated by Dr. Winston Dang, the incumbent Senator in Taiwan and the former senior scientist and team leader, specializing in risk assessment and management, at the US Environmental Protection Agency. More than 30 scientists and professionals who are interested in risk analysis also support the founding of TCSRA. They believe with its establishment it can not only promote the advancement of research and education on risk analysis in Taiwan but also provide all professionals from diverse fields opportunities to exchange information, ideas, and methodologies for risk analysis and risk problem solving. In addition, it can be beneficial for human and environmental risk analysis and the governmental decision-making process.

Many of the TCSRA members are associated with research institutes or universities and have backgrounds in environmental health sciences and some in social sciences. Their research activities are primarily related to exposure assessment, toxicology, environmental risk and food safety, exposure factor database in Taiwan, risk-based recommended exposure limits in workplaces, health and ecological risk assessment for pesticides, and application of statistics in risk assessment. The study of risk altitudes and perception of nanomaterials is also under investigation by a group of professionals. With members from various fields, TCSRA has great potential to expand its interdisciplinary activities for risk analysis.

The first official TCSRA conference is scheduled to be held in 15 June 2006. The Preparation Committee is planning to invite international scholars and guests to attend the first annual event. In the future, TCSRA intends to organize workshops and seminars and encourage Taiwan to work with other international groups.

TCSRA Officers are President Dr. Winston Dang (Incumbent Senator in Taiwan and the former senior scientist and team leader at US EPA), President-elect Dr. Chang-Chuan Chan (Professor of Occupational Medicine and Industrial Hygiene, College of Public Health, National Taiwan University), Secretary General Dr. Kuen-Yuh Wu (Assistant Investigator, Division of Environmental Health and Occupational Medicine, National Health Research Institute), and Treasurer Dr. Hui-Tsung Hsu (Professor of Risk Management, College of Public Health, China Medical University).

Update your SRA membership information on the Members Only page of the Society Web site www.sra.org

News and Announcements

Journal of Risk Research Best Student Risk Communication Paper Competition 2006

SRA

We are pleased to announce the *Journal of Risk Research* Best Student Risk Communication Paper Competition 2006. This prize, generously sponsored by Pfizer Global Research and Development, is for the best student paper in risk communication submitted to the *Journal of Risk Research* in the calendar year up to 1 November 2006. The prize, worth \$2,000, will be awarded by the chair of the Pfizer prize award committee, Ragnar Löfstedt, at the December SRA Risk Communication Specialty Group's business meeting. For more information please contact Ragnar Löfstedt at Ragnar.Lofstedt@kcl.ac.uk.

New Perspectives on Risk Communication: Uncertainty in a Complex Society

Despite a flourish of initial optimism among researchers and policy makers, and a multitude of practical risk-communication programmes over the past 30 years, there is now growing recognition, particularly among academics, that research in the risk-communication field has stagnated. The lack of development can be attributed to a number of reasons. For example, communication tends to be understood in a narrow technical sense (such as a linear Shannon-Weaver model of transmission of a message from sender to receiver) and the production of meanings and the use of communication in social action and interaction have often been neglected. Proponents of risk communication have thus typically taken a normative and idealistic stance regarding communicative action and rationality, exhibiting the tendency to favour "cook book" advice which purportedly makes communication more effective and leads to greater trust, more consensus, and less conflict. Yet risk communication is a feature of a modern complex society, and the interdependency between risk communication and social complexity that needs to be addressed is so often taken for granted. Moreover, risk communication comes in many guises and covers many kinds of communication activities, representational modes, and institutional settings and further research is needed to account for these different varieties of risk communication.

We are therefore pleased to announce that the Centre for Public Sector Research, Göteborg University, in conjunction with the King's Centre for Risk Management, King's College London, are hosting a multidisciplinary international research conference, "New Perspectives on Risk Communication: Uncertainty in a Complex Society," cosponsored by the SRA London Chapter to take place 31 August-2 September 2006 in Göteborg, Sweden. The main aims of the conference are (1) to develop and further conceptualise risk communication as a multidisciplinary research field, (2) to achieve open and creative intellectual discussion about risk communication and risk-related problems and possibilities in a complex society, (3) to bring together regulators, policy makers, civil society, business, and academia to exchange experiences and knowledge from diverging horizons.

Keynote speakers so far include Ortwin Renn, University of Stuttgart; Ann Bostrom, Georgia Institute of Technology; Geoffrey Podger CB, Chief Executive UK Health and Safety Executive; Jens Allwood, Göteborg University; and Bill Freudenberg, University of California, Santa Barbara. Prospective participants are invited to submit abstracts to Asa Boholm, CEFOS, Göteborg University (asa.boholm@cefos.gu.se) by 15 May. Further details regarding general topics and specific themes to be addressed, along with registration information, may be found at the Web site www.riskcom2006.se.

Managing Risks of Catastrophic and Extreme Events: Call for Papers

Yacov Y. Haimes, Engineering Area Editor

The Society for Risk Analysis (SRA) will devote a special issue of its flagship journal, Risk Analysis, to the theme of managing risks of catastrophic and extreme events and to the roles of risk and security around the world today. These roles have been markedly redefined by events such as the unrest and conflict in the former Soviet Union, globalization, the shrinking of the world through e-commerce and information technology, the September 2001 attacks on the United States, the threats of weapons of mass destruction (chemical, nuclear, biological, and the "dirty bomb"), the increase of suicide bombing in the world, cyber attacks through supervisory control and data acquisition (SCADA) systems, highaltitude electromagnetic pulse (EMP) attacks, and the war in Iraq and the subsequent insurgency. On 26 June 2005, US Secretary of Homeland Security Michael Chertoff spoke at the Center for Catastrophic Preparedness and Response and the International Center for Enterprise Preparedness at New York University. He echoed the importance of risk analysis to address the not-unlikely risks of catastrophic events:

Because what we are trying to protect—and at the same time, preserve—is not only our lives, but also our way of life. That's why we need to adopt a risk-based approach in both our operations and our philosophy... Risk management is fundamental to managing the threat, while retaining our quality of life and living in freedom. Risk management can guide our decision-making as we examine how we can best organize to prevent, protect against, respond, and recover from an attack.

Managing risks of catastrophic and extreme events is not a new challenge. The preparedness, response, and recovery from major natural hazards, such as earthquakes, floods, hurricanes, tsunamis, and major pandemics, have been on the agenda of every community in the world. Knowledge, know-how, and experience gained over the years in the risk management of natural hazards should serve us well in our quest to combat catastrophic events sponsored and executed by terrorists. In particular, the SRA's *Risk Analysis* journal provides an authoritative forum for addressing the emergence of not-unlikely catastrophic terrorist attacks on civilian targets. To meet the new challenges highlighted by Secretary Chertoff, it is imperative to build upon the theory, methodology, and application of risk-management approaches developed and deployed by natural scientists, legal experts, and others.

To this end, researchers and practitioners are encouraged to submit original papers for the SRA journal's special issue on this theme. The complete manuscripts must be submitted to *Risk Analysis: An International Journal* by 15 April 2006 (www.sra.org/journal_manuscript.php). Following a rigorous peer-review process, submitting authors will be notified of the status of their papers within three months.

Important Information About the RISK newsletter

Based on the results of the member survey and a show of hands at the 2005 Annual Meeting, the SRA Council has decided to move toward primarily delivering the quarterly RISK *newsletter* to members via email. The RISK *newsletter* will continue to be posted on the Web site (www.SRA.org).

Given this move, this issue of the RISK *newsletter* may be the last printed and mailed copy that you will receive unless you complete and return the form below. Depending on the number of responses received requesting continuation of printed and mailed copies, the SRA Council will evaluate the costs and benefits of the options that will meet the needs of SRA members. The SRA remains committed to producing the RISK *newsletter* and to providing news to members, and the Communications Committee is currently considering options to provide more news and more frequent news to members. Any savings from reduced printing and mailing expenses will be devoted to providing more news and content to members. If you would like to comment on the RISK *newsletter* and/or on how the SRA provides news to its members, please contact Rick Reiss at rreiss@sciences.com. The next RISK *newsletter* will provide an additional update.

Printed RISK newsletter Request Form:

If you would like to continue to receive printed copies of the RISK *newsletter* by mail, please complete the following and then fax it to the SRA Secretariat at 703-790-2672 or put it in an envelope and send it to Stephanie Cross, Society for Risk Analysis, 1313 Dolley Madison Blvd., Suite 402, McLean, VA 22101:

Name:

SRA Member ID:

Address:

Comments:



Advertisements

Scientific Program Manager

The ILSI Health and Environmental Sciences Institute (ILSI HESI) seeks a Scientific Program Manager.

Position will manage a diverse set of projects related to the development and application of toxicology data in safety/risk assessment. An in-depth knowledge of biological sciences, basic toxicology, risk assessment, and regulatory issues is necessary. This mid-level position will be responsible for committee management, including research project development and coordination, literature reviews, technical writing, conference and meeting organization, budget preparation and monitoring, and development of correspondence and reports.

Successful applicant will be detail oriented, well organized, and able to work well in a team-oriented environment. A master's degree or PhD in a scientific field such as toxicology, pathology, environmental health, or related life sciences is required. Experience in project management, scientific consulting, and/ or regulatory affairs background is a plus. Salary is commensurate with experience.

To be considered, send detailed résumé and salary history by mail to ILSI Human Resources, One Thomas Circle, Ninth Floor,

Washington, DC 20005, or by fax to 202-659-3859. Please include reference code SPM-SRA in any correspondence. EOE-M/F/D/V.

Scientist Position

ChemRisk is a consulting firm providing state-of-the-art toxicology, industrial hygiene, epidemiology, and risk assessment services to organizations that confront public health, occupational health, and environmental challenges. ChemRisk is seeking applicants with training in toxicology, pharmacology, the environmental sciences, risk assessment, biomedical engineering, industrial hygiene, medicine, or health physics.

This position requires a bachelor's degree in environmental or toxicological sciences. Candidates with a PhD or master's degree are preferred. Candidates with a background in consulting are especially desired. Positions are available in the offices in San Francisco, California; Boulder, Colorado; Houston, Texas; and Pittsburgh, Pennsylvania.

Please send résumés to ChemRisk, 25 Jessie Street, Suite 1800, San Francisco, CA 94105, or email: hr@chemrisk.com, phone: 415-896-2400, fax: 415-896-2444, www.chemrisk.com.

2006 SRA Officers and Councilors

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Information to be included in the **Second Quarter 2006** SRA RISK *newsletter*, to be mailed early May, should be sent to Mary Walchuk, RISK *newsletter* Managing Editor (115 Westwood Dr., Mankato, MN 56001; phone: 507-625-6142; fax: 507-625-1792; email: mwalchuk@hickorytech.net) no later than **20 March 2006**.



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ciplines 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.

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