



## Call for Nominations

### Editor-in-Chief for *Risk Analysis: An International Journal*

The Publications Committee of the Society for Risk Analysis (SRA) is soliciting nominations for the position of editor-in-chief for *Risk Analysis: An International Journal*, which is the flagship publication of SRA. SRA is a multidisciplinary, interdisciplinary, scholarly, international society that provides an open forum for all those who are interested in risk analysis. The Publications Committee is responsible for soliciting nominations for editor-in-chief and area editor positions for the journal and recommends candidates to the SRA Council. The SRA Council makes the final decision on selection of candidates.

The editor-in-chief of *Risk Analysis* currently works with a managing editor and five area editors in Ecological & Environmental Risk Assessment, Engineering, Health Risk Assessment, Social Sciences, and Decision Sciences.

The editor-in-chief position is for a five-year term of appointment that may be renewed. The current editor-in-chief, Dr. Elizabeth L. Anderson, is completing her second term and has asked that a search begin for her successor. Under Dr. Anderson's leadership, the journal has grown substantially with respect to impact factor, number of pages per year of published papers, and breadth and depth of scholarly content. Furthermore, Dr. Anderson has implemented changes to the managerial structure of the journal that have facilitated the timely and expert review of manuscripts, including area editorships that have disciplinary focus and creation of the position of managing editor to facilitate the handling of manuscripts and preparation of issues.

Dr. Anderson's leadership and service to the journal is deeply appreciated. In recognition of her service to SRA and the journal, Dr. Anderson received a Presidential Recognition Award at the 2006 SRA Annual Meeting.

### Duties and Responsibilities of the Editor-in-Chief

The editor-in-chief works closely with the area editors to (1) ensure that a sound peer-review process takes place, (2) solicit journal articles, and (3) carry out editorial policies of the Society. The editor-in-chief is responsible for determining the suitability of submitted manuscripts for publication in the journal, acting in consideration of the recommendation made by the area editor assigned to each paper. In instances where area editors are unable to provide direct supervision of the peer-review process (due, for example, to a conflict of interest), the editor-in-chief may provide such supervision. The editor-in-chief has the overall responsibility for organizing the content of each issue, using articles accepted by area editors and in collaboration with the managing editor. The editor-in-chief will maintain and work with a diverse editorial board that represents various specialty areas of risk analysis. The editor-in-chief establishes guidelines for timing of the review and publication process in order to maintain the highest standards of content for an archival peer-reviewed journal publication and maintains balance across disciplinary areas and specialties. The editor-in-chief is expected to use innovative mechanisms to solicit manuscripts, such as special sections, special issues, guest editorials, and book reviews, to promote the interests of the Society and to stimulate lively interest in the journal across a broad audience. The editor-in-chief will interact with the Publications Committee of SRA, will submit an annual report on the state of the journal, and will work with the Publications Committee on strategic planning for the journal. The editor-in-chief may recommend appointment of a managing editor for confirmation by the

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## President's Message



Now is your chance to get more involved in the Society for Risk Analysis (SRA). I know, it is now the middle of the year and SRA may not be foremost on your mind. Nonetheless, a lot of great things are happening and this is a terrific time to be active.

Although the annual meeting may seem far away, the abstract submission date is coming up fast (21 May). Please take the time now to write and submit your abstract or to organize and submit an abstract for a symposium or workshop. Don't wait until the last minute because the submission deadline is firm! Please note that the Monday evening poster session and reception was so popular last year that we plan to do it again. One big change is that there will not be a president's reception. I have long felt that the president's reception has been an exclusive event that alienates members and I would want to invite everyone. Please think of the poster session and reception as the president's reception and please know that you are not being left out of anything at the meeting this year when you don't get an invitation.

If you have not already done so, please take the time to review the proposed changes to the Bylaws and to support our efforts to make the Bylaws consistent with current practice. So far one person commented on the change in the membership categories and objected to the creation of the reduced-fee membership option. As you know from the membership forms used for the past two years, this new membership category has been used even though the required changes to the Bylaws were not brought to the members. I am working to correct problems in the process this year to make sure that we are always in compliance with our Bylaws. Please let me know if you have any questions and thank you again for your support on this required overhaul. If you would like to suggest additional changes, then please send me an email message to let me know and the Council will take them up at the next meeting.

Now for a more exciting opportunity to get involved: SRA is about to experiment with a Members' Only blog. As you know, the SRA does not have a listserv for its members. Although many people mistakenly think of the Riskanal listserv as SRA's, in fact it is separate from the SRA and it is not exclusive to SRA members. Since one of our members suggested that it might be interesting for SRA members to interact electronically in an exclusive forum, SRA Webmaster Jim Butler has developed the forum and you should soon be receiving an email for the launch. Please join with other SRA members in discussing topics on the blog.

If you are waiting to hear about the process of updating the glossary, I now expect that the effort will start sometime this summer. I have a list of some folks who volunteered, but I would appreciate it if everyone who is interested will send me an email message to let me know that they are still interested or that they are now interested. We will have a series of conference calls to discuss the process and then get to work.

We are also still discussing structural issues and the SRA's international growth and we hope to soon focus more on our chapters to encourage their growth. If you would like to get involved locally and you don't have a chapter in your area, then please let us know if you would be willing to start one. We will happily help those interested in starting chapters to reach out to members in their areas.

With respect to the expert database, please start to think about the areas of expertise that you would like to see included. That is still coming, and we will need to develop a list of categories of expertise. If you have suggestions of lists to adopt then please send those to me.

Finally, please submit nominations for the open editor-in-chief position for the journal (see announcement on the cover of this newsletter). If you would like to nominate yourself then please do not be shy.

As always, if you have any other ideas about things that we can do to make the SRA even more valuable to you as a member then please let me know.

Kimberly Thompson, kimt@hsph.harvard.edu



### Correction

**The title for Paul Slovic's annual meeting plenary talk was listed incorrectly in the First Quarter 2007 issue of RISK newsletter. We apologize for the error.**

**The correct title is:**

***If I Look at the Mass I Will Never Act: Psychic Numbing and Genocide***

**The talk is available at [www.decisionresearch.org/Darfur](http://www.decisionresearch.org/Darfur).**

## **Risk '007: Agents of Analysis**

### **SRA Annual Meeting, 9-12 December 2007**

### **Call for Papers — Deadline 21 May 2007**

- Save the date: the next SRA annual meeting will be held at the Marriott Rivercenter in San Antonio, Texas, 9-12 December 2007. This year's theme is "Risk '007: Agents of Analysis." Join nearly 1,000 colleagues from a wide range of disciplines and from around the world—intrepid international risk analyst agents all—for intrigue and adventure at the cutting edge of risk analysis in government, academia, nonprofits, and business.

- Be sure to prepare and submit your abstract for an oral presentation or poster presentation no later than Monday, 21 May 2007, via the online submission form already available at [http://www.sra.org/events\\_2007\\_meeting.php](http://www.sra.org/events_2007_meeting.php). (The submission deadline is firm; the Web link will be closed after that date.)

- As in past years, there is a limit per person: each individual may submit one oral presentation, one symposium proposal, and one poster presentation (although a person may also be listed as a coauthor on others' abstracts). Each oral presentation should last 15 minutes, plus five minutes for audience discussion.

- Organize a symposium session with multiple speakers by submitting the symposium form at the same Web site (above). Be sure to submit your symposium proposal in advance of the 21 May deadline, because you will need to receive the symposium number and pass that number on to the individual presenters in the symposium; every individual presenter in every symposium must then submit his or her abstract for oral presentation, with the symposium number, by the deadline of 21 May (as described above).

- Every specialty group chair should email his or her specialty group members to organize a symposium sponsored by the specialty group, alone or as a joint venture with another specialty group.

- Every chapter and section (regional group) of the SRA should consider sponsoring a symposium, alone or as a joint venture with another regional group. For example, a US chapter could partner with a chapter in another country to organize a symposium on the comparative approaches to a risk analysis topic in the two regions.

- Organize a continuing education workshop to be held on the Sunday preceding the annual meeting (9 December). The Workshop Proposal form is also online at the same Web site (below).

- Apply for a Travel Award (Student or International) or Specialty Group Student Award by checking the relevant box on your online submission form.

- Your name in lights: To be a sponsor of the 2007 SRA Annual Meeting, or to sponsor your organization's exhibit booth, or to include your book in the book exhibit, please contact Lori Strong at [lstrong@burkinc.com](mailto:lstrong@burkinc.com) no later than 1 June 2007.

- To let us know of your ideas and suggestions, please contact us: Jonathan Wiener (president-elect) at [wieners@law.duke.edu](mailto:wieners@law.duke.edu), Gail Charnley (cochair) at [charnley@healthriskstrategies.com](mailto:charnley@healthriskstrategies.com), and Steve Lewis (cochair) at [stevenclewis@alumni.indiana.edu](mailto:stevenclewis@alumni.indiana.edu).

- Many thanks to the members of the Annual Meeting Committee who have generously agreed to volunteer their time in service to the Society: President-elect Jonathan Wiener, Cochair Gail Charnley, Cochair Steve Lewis, Sherri Dennis, Linda Abbott, Michael McElvaine, Trina Stackelberg, Todd Bridges, Charlie Menzie, Rob Goble, Resha Putzrath, Bob Tardiff, Annie Jarabek, Clark Nardinelli, Cristina McLaughlin, Zubair Saleem, Rick Belzer, Rick Canady, Jim Lambert, Stanley Levinson, Amir Mokhtari, Michael Dellarco, Donna Vorhees, Susan Flack, Rick Reiss, Margaret MacDonell, Lori Severtson, Bob O'Connor, Sandra Hoffmann, Paul Locke, Igor Linkov, Luis Cifuentes, and Olivier Salvi.



**The Tower of the Americas—experience the 4D theater ride, restaurant and lounge, and observation deck with fantastic views of San Antonio.**

*SACVB Photo/Al Rendon*

**See you in San Antonio!**

**Meeting information: [www.sra.org/events\\_2007\\_meeting.php](http://www.sra.org/events_2007_meeting.php)**

*(Risk Analysis, continued from page 1)*

SRA Council. The editor-in-chief will ensure that the interests of the Society are promoted by the journal and implement the journal's policies on matters such as conflict of interest.

Candidates for the position of editor-in-chief should be innovative, have an ability to develop with others a vision for the journal and implement that vision, have strong writing and managerial skills, have strong technical accomplishments in one or more disciplines relevant to SRA, preferably have prior experience as an editor of scholarly publications, and have broad interests. Candidates should not hold positions that conflict or compete with those of the editorship. Candidates should have access to institutional, secretarial, and administrative support for running the jour-

nal. ScholarOne software is used to handle and facilitate manuscript submissions and reviews. SRA provides limited financial support for editors. Candidates should have adequate time available to commit to the duties of editor-in-chief. The editor-in-chief is appointed for a five-year term that is effective from the start date and may be renewed.

### Submission of Nominations

Nominations for editor-in-chief should include a statement of the nominee's qualifications, relevant experience, management approach, plans and strategic vision for the journal, a CV, and a list of references. Nominations must be submitted by 1 September 2007 in order to receive full consideration. Nominations will be accepted until the position is filled.

### Nominations should be submitted to:

**Dr. H. Christopher Frey (Chair of SRA Publications Committee and SRA Past-President)**  
**Campus Box 7908**  
**North Carolina State University**  
**Raleigh, NC 27695-7908**

**Email submission is encouraged and should be sent to [frey@ncsu.edu](mailto:frey@ncsu.edu).**

To Members of the Society for Risk Analysis:



Please actively join the search for our next editor-in-chief of *Risk Analysis: An International Journal*. My second term will end in December 2008, concluding 10 years as editor-in-chief, at which time I have asked that I be allowed to conclude my service. I will work with the new editor-in-chief during 2008 to ensure a smooth transition.

Over the past 8.5 years, the journal has expanded its size, the number of subscriptions, and its standing in the scientific communities. This growth has been largely the result of the submission of an increased number of excellent manuscripts, an expanded editorial staff of dedicated, top scholars, and the professional support of our publisher, Blackwell. While the entire editorial staff serves as volunteers in the service of the Society for Risk Analysis, the decision not to hire a paid, permanent staff has resulted in a successful journal. I endorse this approach. Our Society is made up of many highly qualified and dedicated individuals. I am certain that we will be successful in our search. I look forward to completing my work over the next year and a half and to working with the new editor-in-chief after this individual is named.

Sincerely,  
 Betty Anderson



## Member News

### Tony Cox

At the March meeting of the Society of Toxicology, Tony Cox was awarded Best Paper for the Application of Risk Assessment by the Society of Toxicology's Risk Assessment Specialty Section for "Estimating Preventable Fractions of Disease Caused by a Specified Biological Mechanism: PAHs in Smoking Lung Cancers as an Example." The

paper was coauthored by Edward Sanders and published in the August 2006 issue of *Risk Analysis*.

### Ellen Townsend

Updated information for Ellen Townsend, president of the SRA UK Chapter—phone: + 44 115 846 7305, fax: + 44 115 951 5324.





## What Do We Do?

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

### Brandolyn Thran

#### What is your job title?

**Thran:** Environmental Scientist at the US Army Center for Health Promotion and Preventive Medicine (USACHPPM), Aberdeen Proving Ground, Maryland.

#### How is risk analysis a part of your job?

**Thran:** The majority of my job is to develop the capability to assess microbial risk from inhalation pathogens for the US Army. At USACHPPM there is an Environmental Health Risk Assessment Program (EHRAP), which houses approximately 25 risk assessors who specialize in chemical and microbial risk assessment for human and ecological health.

#### How did you decide to pursue this career?

**Thran:** While in graduate school at the University of Nevada, Reno, two chemical risk assessment courses were offered, one on human health and one focused on ecological risk assessment. During the courses I found myself wondering if the process could be applied to microbes.

After graduate school, a Post-Graduate Fellowship position through Oak Ridge Institute of Science and Education was available at USACHPPM in the EHRAP program.

And the timing was perfect, in an ironic way, because the unfortunate events of 11 September 2001 and the anthrax events had just occurred, and EHRAP was looking to start a microbial risk assessment initiative, which I was fortunate enough to be selected to lead.

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

**Thran:** People in the microbial risk assessment (MRA) field are very approachable and helpful. It is by interacting with well-established risk assessors that I have learned the most. The nice thing about the MRA field is that there are plenty of questions left to answer, so plenty of work to go around. It is a very collaborative field; everyone seems to work well together to help improve the science used in and the application of MRA.

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

**Thran:** The most exciting part of my job is being allowed to develop new and innovative ways to help answer complicated questions, like “How clean is clean?” Working for the US Army has given me access to some great data from when our country was in a different mindset with regard to biological warfare. It is very exciting to be able to have a glimpse into the past and read old research reports and then work to use old data to solve new problems.



Brandon, Brandolyn, and Robby Thran

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

**Thran:** It might be cliché to say, but “think outside the box and then go for it.” Take a risk (Ha! Can a risk assessor say “take a risk” without stating the assumptions and uncertainties?!?!), go out on a limb with an idea that might help answer a question, and then work hard to make the idea work. Take advantage of the impressive knowledge base that more experienced risk assessors and scientists have, listen well, learn from others, and run with it.

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

**Thran:** As I mentioned before, there are so many very smart and motivated people in the MRA field, and at SRA meetings or sponsored events is where I have met most of them! My goal is to become more and more involved in the Society, because I love the people I meet, and there is so much more to learn and so many opportunities to serve.

#### Is there anything else you would like to add?

**Thran:** Most importantly, I would like to thank the people who support me in my efforts. No one gets anywhere alone; my husband and family are very supportive, and Brandon, our one-year-old, spends part of his days with a fantastic lady so I can focus on being a scientist. My supervisors mentor me, encourage me to give my best, and give me latitude so I can perform. And thank you to the MRA community for being so willing to help and share. I love my job; it is amazing that I get paid to do what I do. My daydreams from graduate school have come true.





## Committees

### Communications Committee

*Rick Reiss, Chair*

I am very pleased to announce a new Society for Risk Analysis (SRA) experiment to enhance SRA member benefits using today's technology. We have established an SRA Members' Only "blog" to provide a forum for SRA members to discuss and debate current issues in the field. This forum is intended to be for SRA members only. Given the large amount of member interest in the recent Office of Management and Budget risk assessment guidelines proposal and the National Research Council review of those guidelines, we selected this issue as the first discussion topic. If this first experiment goes well, we will open a new discussion thread for topics of interest to our members. If you have ideas for additional topics, please email me at [rreiss@exponent.com](mailto:rreiss@exponent.com).

Please note that the SRA Members' Only blog is intended as a moderated discussion. Please respect a few ground rules in posting. Always be respectful of opposing views and never digress into comments of a personal nature. In short, obey the golden rule. The webmaster will moderate the initial stream and will be reviewing postings on a regular basis, and he may remove offensive or otherwise inappropriate postings. See my introductory post to the blog for some more important ground rules.

Please enjoy this new SRA experience. I welcome any comments or suggestions to improve the blog and your feedback

about whether this is something that you believe is a member benefit that should or should not be continued past the experimental phase. Thanks in advance for your comments.

### Conferences and Workshops Committee

*Kara Morgan, Chair*

The Conferences and Workshops Committee is moving along with the three-subcommittee organization. If you are planning a workshop for the annual meeting, note that the deadline is 21 May 2007 and that materials should be submitted to Kara Morgan (as indicated on the Web site, [www.sra.org/events\\_2007\\_meeting.php](http://www.sra.org/events_2007_meeting.php)) and also copied to Margaret MacDonell. The proposal form and the budget worksheet template for the annual meeting workshops are available on the SRA Web site. If you are planning an event at a different time and place on behalf of SRA, you should use the "sponsorship" form and budget worksheet as indicated on the Web site and submit those materials to Kara Morgan, also copied to Jim Wilson. If you are planning an event for another organization and would like to be able to advertise this event to SRA members, please also use the "sponsorship" template to provide information about the event. A budget worksheet is not necessary in this case. These applications should be sent to Kara Morgan. If you have any questions, you can contact Kara Morgan at [kara.morgan@fda.hhs.gov](mailto:kara.morgan@fda.hhs.gov).



## News and Announcements

### Framework for Metals Risk Assessment

The US Environmental Protection Agency (EPA) has published the *Framework for Metals Risk Assessment* (EPA 120/R-07/001, March 2007, <http://www.epa.gov/osa/metalsframework>).

The *Framework for Metals Risk Assessment* presents guiding principles about the unique attributes of metals and describes how they may be applied in the context of existing EPA risk assessment guidelines and practices. This framework is not a prescriptive guide on how an assessment should be conducted. Rather, it describes how key principles should be considered to foster consistency and apply best practices across EPA programs and regions. The document included input from external stakeholders and from experts throughout the Agency, and it received extensive peer review by EPA's Science Advisory Board. EPA's Risk Assessment Forum oversaw the development of the document. For more information, contact Randy Wentsel, EPA, 202-564-3214, [wentsel.randy@epa.gov](mailto:wentsel.randy@epa.gov), or Anne Fairbrother, EPA, 541-754-4567, [fairbrother.anne@epa.gov](mailto:fairbrother.anne@epa.gov).

#### Metal Principles

EPA assessments vary from simple, screening analyses to complex, definitive assessments. The principles presented in the Framework apply to all levels and include:

- Metals are naturally occurring constituents in the environment and vary in concentration across geographic regions.
- All environmental media have naturally occurring mixtures of metals, and metals often are introduced into the environment as mixtures.
- Some metals are essential for maintaining health of humans, animals, plants, and microorganisms.
- Metals are neither created nor destroyed by biological or chemical processes, although these processes can transform metals from one species to another (valence states) and can convert them between inorganic and organic forms.
- The absorption, distribution, metabolism, and excretion (ADME) of a metal within an organism depends on the metal, the form of the metal or metal compound, and the organism's ability to regulate and/or store the metal.

#### Organization

The introduction lays out the purpose and scope of the document and the contexts in which it can be used and lists the principles for the first time. The second section presents a conceptual model of how metals move through the environment and biota and areas where metal-specific issues arise during risk assessments. Environmental chemistry of metals is reviewed briefly in section three. This is followed by a section on human health assessments of

metals, which discusses bioavailability, background levels of metals, susceptible subpopulations, fate and transport, mixtures, essentiality, and ADME. These same topics are

covered in the last two sections on aquatic and terrestrial ecological risk assessments, along with discussions on routes of exposure and critical body residues. 



## SRA-Japan

<http://www.sra-japan.jp/english/index.html>

*Shoji Tsuchida, President*

### Risk Education and Accredited Risk Managers

The Society for Risk Analysis-Japan (SRA-J) supports risk education. SRA-J has a committee for accrediting risk education and it qualifies persons who finished the attested risk education for accredited risk managers.

SRA-J Past President Dr. Morioka and his colleagues have organized the “Environmental Risk Management Training Program (ERMT)” at the graduate school of engineering, Osaka University. The program is financially supported by the Japanese government. ERMT offers 17 training modules (15 lectures and two case-study exercises) of risk managements, risk communications, and risk assessments. The instructors are faculty members of Osaka University and leading nationwide experts with rich practical experience at associated research institutes and industrial firms. The program had a total of 45 instructors and 132 students at the 2006 autumn semester. It is an extensive education program at the graduate school, and the students were not only the regular graduate students at Osaka University but also 74 working students with various backgrounds (60 from business firms, 11 from local governments, and three from NPOs and research institutes) and eight students from other universities.

SRA-J accredited ERMT in March 2006. So far 24 students have completed more than 30 credits of the program and were registered as “Environmental Risk Managers” by SRA-J.



### International Symposium on Risk Management Education

On 14 February 2007 ERMT had an International Symposium on Risk Management Education, “Building the Platform for Training Risk Managers,” at Osaka University Nakanoshima Center (see photo). SRA-J sponsored the symposium. The symposium had two sessions: “Experiences and Attempts in Japan” and “Sharing Experiences and Knowledge of Good Practices in the World.” Dr. Morioka, Dr. Kato, Dr. Okano, and Dr. Matsui of ERMT, Japan, gave talks at the session “Experiences and Attempts in Japan.” Dr. Hassenzahl (University of Nevada, USA), Professor Shi (Beijing Normal University, China), Mr. Watt (Middlesex University, UK), Dr. Shin (Yonsei University, Korea), and Dr. Scherer (Cornell University, USA) gave talks at the session “Sharing Experiences and Knowledge of Good Practices in the World.”

### Events of SRA-J 2007

The 20<sup>th</sup> annual symposium and the annual assembly 2007 will be held on 22 June 2007 at the University of Tokyo. Dr. Norio Okada (Kyoto University) is organizing the symposium.

The 20<sup>th</sup> annual conference will be held 17-18 November 2007 at the University of Tokushima ([http://www.tokushima-u.ac.jp/English/transportation\\_guide.pdf](http://www.tokushima-u.ac.jp/English/transportation_guide.pdf)). Dr. Jun Sekizawa (the University of Tokushima) is the chief executive organizer of the conference. 



## SRA-Europe

[www.sraeurope.org](http://www.sraeurope.org)

*Julie Barnett, Communication Officer*

The Hague, the Netherlands will be the venue for the 16<sup>th</sup> Annual Conference of SRA-Europe, 17-19 June 2007. The conference theme is “Building Bridges: Issues for Future Risk Research.” The program of the conference is an exciting mixture of plenary sessions, more than 10 mini-symposia and roundtable discussions, and sessions with over 150 individual poster and paper presentations on risk management, risk assessment, and risk perception and communication issues.

Plenary speakers include Nick Pidgeon, Ortwin Renn, and Arie Rip. The mini-symposia and roundtables include

sessions on integrated risk management, nanotechnologies, promoting food safety, natech events, strategies for improved exposure assessment, citizen engagement, and many others.

The complete conference program can be found on the Web site ([www.sraeurope2007.eu](http://www.sraeurope2007.eu)) along with more detailed information about the plenary sessions, the mini-symposia, and paper sessions. Information about conference registration, hotel accommodations, and the venue for both the conference itself and the conference dinner can also be found there. There are many reasons why it is worthwhile to come to The Hague for the 2007 SRA-Europe conference! 

# Global Warming, Climate Change, and Risk Perception

## An Interview with SRA's Anthony Leiserowitz

**Global Warming:** An increase in the average temperature of the earth's atmosphere, especially a sustained increase sufficient to cause climatic change.<sup>1</sup>

**Climate Change:** Any long-term significant change in the weather patterns of an area.<sup>2</sup>

Dictionary definitions are the official meanings of words, but what do those words actually mean to the people hearing them? The perception of a word can determine a person's perception of the risks attached to that word. SRA member Anthony Leiserowitz has studied the thoughts, images, and feelings evoked by the often-heard words "global warming" and "climate change" and has examined the resulting behaviors.



Leiserowitz, Director of Strategic Initiatives at the School of Forestry and Environmental Studies at Yale University and a principal investigator in the Center for Research on Environmental Decisions at Columbia University, earned a PhD in environmental science, studies, and policy from the University of Oregon. He specializes in the fields of risk perception and decision making; sustainability values, attitudes, and behaviors; and the human dimensions of global change.

From November 2002 to February 2003, Leiserowitz conducted a national study examining American risk perceptions, policy preferences, and behaviors related to global warming. His research findings have been published in papers including *American Risk Perceptions: Is Climate Change Dangerous?*,<sup>3</sup> *Climate Change Risk Perception and Policy Preferences: The Role of Affect, Imagery, and Values*,<sup>4</sup> *Communicating the Risks of Global Warming: American Risk Perceptions, Affective Images and Interpretive Communities*,<sup>5</sup> *Policy Report: American Opinions on Global Warming*,<sup>6</sup> and *Global Warming in the American Mind: The Roles of Affect, Imagery, and Worldviews in Risk Perception, Policy Preferences and Behavior*.<sup>7</sup>

Leiserowitz shares some of his findings and insights with SRA members.

### Do you think most Americans believe global warming/ climate change is a real problem?

**Leiserowitz:** Yes, a number of recent surveys (Gallup, Pew, etc., as well as my own) have shown that a large majority of Americans are aware of the issue and believe it is already happening, that most scientists have reached a consensus, and that humans are largely responsible. Further, they strongly support a variety of national and international policies to reduce greenhouse gas emissions. That said, however, global warming is still perceived largely as a distant risk, something that will primarily impact people and places far away in space (like small island countries) and time (not for 50 to 100 years, if ever)—not Americans, now. As a result, it remains a low priority compared to other national issues (the Iraq War, the economy, health care, etc.) and even other environmental issues (water and air pollution, toxic waste, etc.).

### What is the difference between the terms "climate change" and "global warming"?

**Leiserowitz:** "Global warming" and "climate change" can mean very different things to the public. Scientists generally prefer "climate change," which is a technically more accurate term—"global warming" implies that the entire world will warm equally. The climate system, however, is far more complex than this—while the earth on average will warm, some places will get warmer and others get cooler. Likewise, some places will get drier and others will

get wetter, and the entire system is likely to become more variable, with greater extremes.

Among the American public, "climate change" is a relatively bland term that evokes few concrete images and weaker negative affect than "global warming." By contrast, my research demonstrates that "global warming" conjures up stronger imagery and negative affect among the American people. This distinction between the two terms was also identified in focus group research by Republican pollster Frank Luntz who, in a leaked memo to the White House, recommended that the administration stop using the term "global warming," which had connotations of danger and disaster, and instead use the term "climate change," which seemed relatively benign to his research subjects. *The New York Times* then went back and did an analysis of President Bush's speeches and found that prior to getting the memo he often used the term "global warming." Afterwards, he consistently used the term "climate change." So the terms used can have significant implications for risk perception and communication.

I must also point out, however, that connotative meanings (the images, affect, and discrete emotions connected to particular words, symbols, concepts, etc.) are not static. Thirty years ago, the term "global warming" didn't mean what it means to people today. Likewise, my research has also found that while the two terms carry very different connotations for the general public, they were synonymous among climate-change activists I surveyed at the 2000 World

Climate Summit at The Hague. These activists were of course highly engaged with the issue and had connected both terms to an elaborated and relatively rich set of images, feelings, and mental models. I would predict that as the American public begins to increasingly connect the dots between “climate change” and the various impacts that are currently happening and projected to happen, this term will also take on an increasingly negative set of connotations.

### **Do you think public perceptions of climate change risks have changed since your 2003 study?**

**Leiserowitz:** I think they’ve changed only slightly if at all. Without question, climate change has become much more prevalent in the media in the past six months, due to a variety of news stories, including the 2006 congressional elections, Al Gore’s movie *Inconvenient Truth*, the release of the 2007 Intergovernmental Panel on Climate Change report, and recent joint statements on climate change by leading scientists and evangelical leaders on the one hand and by major corporations and environmental groups on the other.

Despite all this, however, I’ve seen no strong response in the polls yet, at least as of today. Gallup for example, finds only small upticks in most of its global warming measures, which are still within the range seen over the past 10 years. There is also some evidence that there’s increasing political polarization on the issue, with Democrats becoming more concerned and Republicans less so. One key thing to remember, however, is that even though climate change is getting more press these days, it is still dwarfed by the coverage of other events, whether celebrity follies or especially the Iraq War, which continues to suck most of the oxygen out of the room.

### **In *American Risk Perceptions: Is Climate Change Dangerous?* you wrote, “Public support or opposition to climate policies (e.g., treaties, regulations, taxes, subsidies) will be greatly influenced by public perceptions of the risks and dangers posed by global climate change.” What are the predominant perceptions that the public has about the risk of climate change?**

**Leiserowitz:** As described above, most Americans perceive global warming as a distant risk. We’ve measured this in a lot of ways, but one way that is particularly revealing is when we ask, “What is the first thought or image that comes to mind when you think of global warming?” This produced a rich dataset of associations, tapping the images most readily available and salient. We then did a content analysis to identify common themes and found that the single greatest set of associations was to melting ice, for example, loss of sea ice in the Arctic Ocean, ice shelves breaking off Antarctica, and melting glaciers. However, very few Americans live in the Arctic or Antarctica, thus these impacts, while perceived as a bad thing, are quite removed from

people’s everyday lives and concerns. Other leading categories of associations were generalized warming trends, impacts on nonhuman nature, or to the ozone hole—an entirely different environmental problem. Mental model researchers like Willett Kempton and Ann Bostrom also identified this confusion of the two issues in the 1990s, which unfortunately persists to this day. So roughly two thirds of respondents’ first associations to global warming were to impacts far away or to nonhuman nature, generalized warming trends, or to an entirely different environmental problem.

### **Where do these perceptions come from?**

**Leiserowitz:** Well the simple answer, of course, is the media. There have been a lot of stories and even dramatic pictures of melting ice around the world. Most Americans have not yet directly experienced the impacts of global warming (or at least recognized that they have) in their local environments, thus are still highly reliant upon the media as the source of information about the issue. Up until recently, much media attention focused on the scientific and political “debate” over whether global warming was actually happening. Right now, however, I think we’re seeing a sea change in the national dialogue on this issue. The “is it happening” debate is largely over and now the debate is turning to “what are the impacts” and “how should we respond?”

### **What factors cause different perceptions in different people?**

**Leiserowitz:** In a recent paper published in *Climatic Change*,<sup>4</sup> I reported that the strongest predictors of American climate change risk perceptions were affect (good or bad feelings associated with global warming), imagery, and underlying cultural worldviews (egalitarianism and individualism). These factors were found to be more powerful influences than knowledge of global warming causes or solutions, political party identification or ideology, or the wide range of sociodemographics. To quote Aaron Wildavsky, “Most people don’t think about most things most of the time.” I think that’s definitely true in the case of global climate change. In the absence of a sophisticated understanding, many people draw heavily on their impressionistic images and feelings about global warming, their underlying value commitments, and their trusted opinion leaders to guide them.

### **When communicating about climate change risks to the general public, what is the best way to address the issue, understanding that risk perceptions vary?**

**Leiserowitz:** I’ve identified several distinct “interpretive communities”—groups or segments of the American public that are predisposed to perceive global warming in very different ways. In subsequent research, we have found five distinct groups within the American public that each per-

ceive a much broader and more diverse set of risks in very different ways. These groups each have a very different profile—different values and attitudes, different sociodemographics, different politics, levels of trust, etc. These results emphasize how important it is that both the messages and messengers be tailored for different groups. Some people are convinced of the urgency of action on global warming because it is a moral issue, others because it will impact polar bears, others because of national security, and others because it presents an enormous business risk or opportunity.

**Do movies like *The Day After Tomorrow* and *An Inconvenient Truth* negatively or positively affect public perception of climate change risk?**

**Leiserowitz:** I did a national study on the impact of *The Day After Tomorrow* (published in the journal *Environment*<sup>8</sup>) in which we surveyed the American public one week before the movie debuted in theaters, four weeks later, and then again four months later. In short, we found that moviegoers perceived global warming as a greater risk and more strongly supported a variety of climate policies than the rest of the public.

Despite becoming one of the most commercially successful movies of all time, however, the movie did not change public opinion as a whole, because only about 10 percent of the adult population had seen it by the time of our surveys. So even though many movie-goers were affected, their numbers were not large enough to change overall opinion.

I didn't do a study on *An Inconvenient Truth*, but I suspect it didn't change public opinion as a whole either. As a documentary, it was seen by a far smaller audience, and the audience that did go to see it was almost certainly more self-selecting, because it featured Al Gore, who remains a politically polarizing figure. That said, I suspect that Gore very effectively raised the awareness and perceived sense of urgency among mainstream Democrats and Independents who had voted for him in 2000 and already trusted him as a messenger, but who hadn't particularly focused on the issue of global warming before.

**After your 2003 study, you published papers in several journals and contributed a chapter to the book *Creating a Climate for Change: Facilitating Social Change*. What are you working on now?**

**Leiserowitz:** I'm currently finishing a two-year study of how Alaskans are responding to global warming. As mentioned above, most Americans think global warming is a distant risk, in space and time. That is what makes Alaska (unfortunately) such an interesting case study. Alaska (and the rest of the Arctic) has warmed approximately twice as much as the rest of the planet and is

already experiencing quite dramatic impacts, including loss of sea ice, permafrost melting, buckling infrastructure, shifting seasons, record-setting wildfires, and massive tree mortality due to insects. Alaska thus provides a "window into the future" to look at how other Americans might respond when they too begin to see impacts in their own backyard. This study includes a statewide representative survey on climate change detection, observations, risk perceptions, policy preferences and behavior; qualitative interviews with leaders across Alaskan society; a content analysis of media coverage on global warming; and a workshop on climate change adaptation among key stakeholders in the Northwest Arctic Borough—a predominantly Inuit region of the state. Some results are already available on the project Web site: <http://www.alaskaclimatechange.org/>.

<sup>1</sup>global warming. Dictionary.com. The American Heritage® Dictionary of the English Language. 4<sup>th</sup> ed. Houghton Mifflin Company; 2004. Available at: <http://dictionary.reference.com/browse/global%20warming>. Accessed 5 April 2007.

<sup>2</sup>climate change. Dictionary.com. Webster's New Millennium™ Dictionary of English. Preview ed. (v 0.9.6). Lexico Publishing Group, LLC. Available at: <http://dictionary.reference.com/browse/climate%20change>. Accessed 5 April 2007.

<sup>3</sup>Leiserowitz A. American risk perceptions: Is climate change dangerous? *Risk Analysis* 25(6): 1433-1442; 2005.

<sup>4</sup>Leiserowitz A. Climate change risk perception and policy preferences: The role of affect, imagery, and values. *Climatic Change* 77(1): 45-72; 2006.

<sup>5</sup>Leiserowitz A. Communicating the risks of global warming: American risk perceptions, affective images and interpretive communities. In: Moser S, Dilling L, eds. *Communication and social change: Strategies for dealing with the climate crisis*; Cambridge University Press; In press.

<sup>6</sup>Leiserowitz A. Policy report: American opinions on global warming; (PDF version) 2003. Available at: [http://www.uoregon.edu/~ecotone/climatechange/US\\_assets/DRPolicyReport.pdf](http://www.uoregon.edu/~ecotone/climatechange/US_assets/DRPolicyReport.pdf). Accessed 11 April 2007.

<sup>7</sup>Leiserowitz A. Global warming in the American mind: The roles of affect, imagery, and worldviews in risk perception, policy preferences and behavior. Unpublished Dissertation; University of Oregon, Eugene; 2003.

<sup>8</sup>Leiserowitz A. Before and after *The Day after Tomorrow*: A US study of climate change risk perception. *Environment* 46(9): 22-37; 2004.

**For more information on Leiserowitz's studies and activities, see [www.uoregon.edu/~ecotone/](http://www.uoregon.edu/~ecotone/).**



## Specialty Groups

### Biological Stressors Specialty Group www.biostressors.org

*Sherri Dennis, Chair*

Want to find more information about the Biological Stressors Specialty Group (BSSG)? Coming soon—our newly designed and updated Web page! By the time you read this our Web site should be available at [www.biostressors.org](http://www.biostressors.org). I want to recognize and thank Cristina McLaughlin (FDA), who put together our first BSSG Web site, and Don Schaffner (Rutgers University), who so kindly agreed to serve as webmaster for our new Web presence. Please send your suggestions for improving the site or additional information to BSSG Chair Sherri Dennis (see below for contact information).

Help us to build SRA membership and raise awareness of BSSG. Encourage students to submit an abstract for the 2007 SRA Annual Meeting that is of interest to the BSSG members. Students should also be encouraged to apply for an SRA Student Travel Award or Student Merit Award. It is easy to do—when submitting an abstract, specify “Biological Stressors” as either the primary or additional specialty group and click “YES” in the Awards section of the form. At least one Student Merit Award of \$500 will be awarded by BSSG to a deserving student.

The Executive Committee also invites you to send us your creative ideas for using the BSSG funds. In the past, we have used these funds for sponsoring/cosponsoring mixers during the annual meeting and to provide travel assistance for the selected student merit awardees. For additional information please contact BSSG officers: Chair Sherri Dennis (Sherri.Dennis@fda.hhs.gov), Vice Chair Emma Hartnett (ehartnett@AnalyzeRisk.com), Secretary-Treasurer Michael McElvaine (Michael.McElvaine@usda.gov).

### Ecological Risk Assessment Specialty Group

*Wayne Landis, Chair*

I just visited the joint Chicago Regional Chapter of the Society for Risk Analysis (SRA) and the Midwest Chapter of the Society of Environmental Toxicology and Chemistry (SETAC) meeting held at the Argonne National Laboratory at Argonne, Illinois. Let me thank Matt Hudson (president of the Midwest SETAC Chapter) and Heidi Hartmann (president of the SRA Chicago Chapter and meeting cochair) and Charles Maurice (meeting program chair) for a great meeting. Talks and sessions included such topics as human health, ecotoxicology, cumulative effects, and risk assessments in all kinds of combinations. Peter Press (US Environmental Protection Agency [USEPA]) and Charles Menzie (Exponent) gave great keynote talks that I had to follow. The highlight for me was the question-answer-discussion session that followed the keynote addresses that turned into

a very interesting dialog about cumulative risk assessment, USEPA policy, and a comparison of human health and ecological risk assessment. The discussion went 15 minutes into the lunch hour—and would have gone farther if the chair had not brought it to a close. A meeting such as this clearly demonstrates the interconnectedness of the fields of research and study.

Putting on my hat as Area Editor for Ecological Risk Assessment for *Risk Analysis*, I have been in discussions to arrange a special group of papers on the application of Bayesian approaches to ecological risk assessment, an area of special interest to both ecological and human health risk assessors.

An area of risk that has not been well characterized has been the implications of ecological risks for areas such as human health, transportation, and disease. The long-term destruction of the wetlands in Louisiana apparently exacerbated the impacts of Katrina upon the infrastructure of New Orleans, leading to wholesale destruction and direct impacts on human health. An alteration of agricultural productivity or fishing resources, a topic in ecological risk assessment, has risk implications for economies in the affected regions. It is clearly time that the old Greek and Western cultural notion that humans are separate from the natural world be broken and that the intimate connection between ecological risk assessment and the other topics in the field be recognized. I am looking for and encouraging papers that broach this area of research.

### Engineering and Infrastructure Specialty Group www.sra.org/eisg

*Jim Lambert, Chair*

The Engineering and Infrastructure Specialty Group (EISG) of the SRA is open to all members of the SRA interested in the development, testing, and use of risk analysis methods for engineered systems broadly defined and critical infrastructure. The group’s membership spans academia, government, and industry. We welcome new members. We encourage our members and others conducting research in engineering and infrastructure risk analysis to (1) submit abstracts and symposia proposals for the 2007 SRA Annual Meeting by 21 May, designating EISG as the topic area, (2) submit proposals for profit-making workshops on engineering and infrastructure topics by a deadline soon thereafter, (3) submit student merit and travel award candidate papers (we sponsor an EISG student award again this year), (4) submit proposals for SRA cosponsorship of engineering events involving risk analysis anytime, and (5) submit papers for publication in *Risk Analysis*, the journal of the SRA, anytime (<http://www.sra.org/journal.php>). For submitting engineering papers to *Risk Analysis*, contact Professor Yacov

Haimes, Engineering Area Editor of *Risk Analysis* (haimes@virginia.edu). Thanks to Seth Guikema, sguikema@civil.tamu.edu, for bringing up and maintaining our new Web page ([www.sra.org/eisg](http://www.sra.org/eisg)) in March 2007. The Web page provides our welcome and mission statement, the names of our executive committee, how to join, the past student paper awards, the EISG charter, the allied professional societies in engineering and infrastructure, and related journals. Contact our EISG chair, Jim Lambert, lambert@virginia.edu, 434-982-2072, with your suggestions and any issues needing attention of the EISG as a whole.

### Decision Analysis and Risk Specialty Group

*Igor Linkov, President, and Greg Kiker, Secretary-Treasurer*

The Decision Analysis and Risk Specialty Group (DARSG) is quickly coming upon its second year of existence. The 2006 SRA Annual Meeting in Baltimore was the first meeting featuring a decision analysis track. The full-day continuing education workshop explored applications of risk assessment and decision analysis in military settings. The case studies discussed included chem/bio defense, remediation and restoration planning, budget and resource allocation, adaptive management, resilience, and prioritization. The workshop was organized in collaboration with the Department of Defense by Drs. Ditmer, Linkov, and Ferguson. We would like to thank the organizers and lecturers for donating profit generated by the workshop to the DARSG. Decision analysis was a prominent theme in multiple symposia and sessions including “Modeling and Communicating Risks to Support Decision Making for Natural Disasters”; “Applications and Advances in Risk Analysis for Homeland Security”; “Risk Assessment and Decision Analysis: State of Applications in DOD and DHS”; “Decision Analysis for Risk Management of Catastrophic Events”; “Managing Uncertain Risks for Nanotechnology Development”; “Multi-Criteria Decision Analysis Applications and Tools”; “Risk Analysis and Decision Analysis Applications in Business and Finance”; and “Health Advisories and Homeland Security: Methodology to Application.”

About 100 scientists attended the December DARSG business meeting in Baltimore, which provided a great opportunity to discuss future DARSG activities. Topics included an increased coordination with the INFORMS Decision Analysis Society, opportunities for research funding in combined risk/decision analysis projects, development of best practices, and potential benefits from the combination of decision analysis and adaptive management for the development of more efficient/cost effective regulation. Yashika Forrester (University of Maryland) received the DARSG Best Student Paper Award.

In February, DARSG organized a joint meeting with SRA-New England in Boston. Dr. Jose Figueira from Portugal presented a talk on “Recent Trends in Multi-Criteria Deci-

sion Making,” which discussed multicriteria decision making (MCDM) methods. His presentation was followed by a panel discussion on the relevance of formal decision methods and tools to risk practitioners. The panel included Igor Linkov of Intertox and Tom Agnus of Massachusetts DEP and was hosted by ICF International.

DARSG is currently sponsoring two NATO workshops in Portugal: “Risk Assessment for Non-Chemical Stressors” (April 2007, [www.risk-trace.com/portugal/index.php](http://www.risk-trace.com/portugal/index.php)) and “Nanomaterials: Environmental Risks and Benefits” (October 2007). We are establishing collaboration with other societies as well, including the INFORMS Military Applications Society, where DARSG is hosting a session on “Risk Assessment and Decision Analysis” (July 2007, <http://meetings.informs.org/PuertoRico07/program.htm>) at its next meeting in Puerto Rico. DARSG is also planning to organize a joint session at the next INFORMS annual meeting in Seattle (November 2007).

DARSG will be running its first election. According to the bylaws, the group is led by the president and the secretary-treasurer. Please send your nominations for both positions to [ilinkov@yahoo.com](mailto:ilinkov@yahoo.com).

### Dose Response Specialty Group [www.sra.org/drsg](http://www.sra.org/drsg)

*Katie Clark*

On 3 December 2006, the Dose Response Specialty Group (DRSG) held a continuing education course titled “Approaching Adversity: What’s Adverse? What’s Not? Why You Should Care.” As the name implies, the aim of the course was to explore the use of the term “adverse effect” in the context of health risk assessment. Two factors that prompted this special course were the OMB’s Risk Assessment Bulletin and a 2005 report by Duke University students on the legal and regulatory uses of “adverse” and related terms.

The first speaker, Dr. Steve Lewis, set the agenda for the day by outlining the use of “adverse” in guidance documents and providing definitions of “adverse effect.” In the context of risk assessment, “adverse effect” is used to imply a harmful outcome.

The American Chemistry Council provided the DRSG with a small grant to fund a research project on the use of the term “adverse effect” and related terms. Two students from Duke University conducted the research under the supervision of Jonathan Wiener, JD, the second speaker, who reported the findings at this meeting.

The talks that followed these introductory presentations focused on specific examples of chemicals or conditions in which the line between adverse effect and non-adverse effect was difficult (or impossible) to identify. Dr. Gary Foureman pointed out several reasons that made the determination of adversity difficult. Dr. Sara Hale discussed new

studies on the neurotoxicity of acrylamide. Dr. Michael Bolger discussed lead, a well-documented neurotoxicant whose “safe levels” are set more for practical reasons than scientific reasons. Dr. James Wilson presented on perchlorate contamination of groundwater. Dr. John Doull provided a review of the issues surrounding fluoride in drinking water. Dr. Rick Belzer argued that economics could be a better model than science to determine whether an effect should be considered adverse. Dr. Heather Douglas gave the concluding presentation at the talk in which she considered how stakeholders’ values will affect their definition of adversity.

Following the speakers series, there was a discussion about the best (and worst) ways to define adversity. The meeting provided a thorough overview of the difficulties in defining “adversity” as well as the associated legal and regulatory challenges. A more thorough summary of the course can be found on the Dose Response Specialty Group Web site ([www.sra.org/drsg](http://www.sra.org/drsg)).

The DRSG offers a merit award to a student conducting graduate research in dose-response assessment. All abstracts must be submitted for presentation at the 2007 SRA Annual Meeting, following normal SRA guidelines for abstract submission ([www.sra.org/events\\_2007\\_meeting.php](http://www.sra.org/events_2007_meeting.php)). For more information go to [www.sra.org/drsg/drsgawar.htm](http://www.sra.org/drsg/drsgawar.htm).

### Exposure Assessment Specialty Group

*Michael Dellarco, Chair*

As incoming chair of the Exposure Assessment Specialty Group (EASG) I would like to thank Donna Voorhees for her service as chair last year and her willingness to assist me this year. Our goal is to continue to increase the visibility and importance of exposure analysis in risk assessment, expand interaction among specialty group members, and help meet the needs of the Society in this area. Accordingly several efforts are underway. Haluk Ozkaynak and Michael Dellarco organized a symposium concerning recent developments in exposure analysis for the annual conference of

SRA-Europe, Building Bridges: Issues for Future Risk Research, The Hague, Netherlands, 17-19 June 2007 ([www.sraeurope2007.eu/](http://www.sraeurope2007.eu/)); Michael Dellarco has taken steps to establish a Web site for the EASG; and members have been invited to serve on the 2007 Annual Meeting Committee. Other activities under consideration include providing EASG representatives to serve on the World Risk Congress Planning Committee, contributing book reviews for the Society’s journal, *Risk Analysis*, preparing a white paper or feature article on a major issue in exposure assessment, and planning special symposia for the 2007 SRA Annual Meeting.

### Risk Communication Specialty Group

[www.sra.org/rcsg](http://www.sra.org/rcsg)

*Lori Severtson, Chair*

For this year’s annual meeting, we hope to once again lead the pack in total abstract submissions. We are especially encouraging submissions for the Risk Communication Specialty Group (RCSG) ExxonMobil student paper award, interdisciplinary symposia, and joint symposia between SRA and other professional societies. Check the SRA Web site for details about symposium proposals. Be sure to allow extra time since the organizer must first submit a symposium description to obtain an ID number that symposium presenters use for submitting their abstracts.

Applying for the student paper award is a terrific way to prescreen a potential publication. Submit the paper abstract online via the SRA “call for abstracts” link ([www.sra.org/events\\_2007\\_meeting.php](http://www.sra.org/events_2007_meeting.php)) and then select “Risk Communication” as the primary specialty group and “Student Merit Award” to get to the award application, which requires an extended abstract of 900-1,000 words.

Students will be notified midsummer if they have been selected to submit a full paper by a fall due date. Check the RCSG Web site for more information. 



## Chapter News

### Australia and New Zealand Chapter

[www.acera.unimelb.edu.au/sra/index.html](http://www.acera.unimelb.edu.au/sra/index.html)

*Keith Hayes, President*

The Australia and New Zealand Chapter of the Society for Risk Analysis (SRA) was formed in June 2006 and held its first annual conference in the same month (<http://www.acera.unimelb.edu.au/materials/conferences.html>). The purpose of the chapter is to provide an opportunity for an inclusive, broad-based society that promotes communication between disciplines, a breadth of tools and viewpoints, and platforms for training, workshops, and conferences in Australia and New Zealand. The chapter objectives are:

1. To serve as the focal point for interaction of members of the Society and other interested individuals and organisations in Australia and New Zealand.
2. To further understanding, awareness, and appropriate applications of risk analysis and to promote an exchange of ideas and practical experiences among members of the academic, professional, industrial, and regulatory communities involved in risk analysis and risk management in Australia and New Zealand.
3. To hold scientific and educational meetings.

The Australia and New Zealand Chapter is sponsored by the newly established Australian Centre for Risk Analysis (ACERA) (<http://www.acera.unimelb.edu.au/index.html>).

## Northern California Chapter

[www.sra.org/ncc](http://www.sra.org/ncc)

*Kay M. Johnson, President*

On 13 March, the Northern California Chapter of the Society for Risk Analysis (NCCSRA) held its first brown-bag lunchtime seminar for 2007. Continuing with a series started in 2006, these brown-bag seminars offer members the unique opportunity to participate in NCCSRA events while conveniently remaining at their own desks. Web-assisted teleconferencing allowed members to dial in and interact with Ray Neutra, MD, Dr.PH (NCCSRA past president), who presented a slide show on "A Bayesian Critique of the IARC and NTP Hazard Categories." Neutra described an alternative approach for examining toxicological evidence supporting carcinogenic categorization of a chemical or other constituent. The functionality of the process was demonstrated with excerpts from a study of the potential carcinogenicity of electromagnetic frequency (EMF). Members participated in a lively question-and-answer period following Neutra's 45-minute presentation.

This presentation is a part of a series of events sponsored by the NCCSRA to showcase the wide range of topics of interest to our members. For example, a previous seminar, presented by Dr. Ken Bogen, was "Spatiotemporal Fluctuation in Urban Airborne Chemical Concentrations Can Greatly Magnify Threat Zones." Future seminar topics may include childhood asthma, indoor vapor intrusion, or preparations for a possible influenza pandemic. Announcements of future seminars will be emailed to members and posted on the NCCSRA Web page ([www.sra.org/ncc](http://www.sra.org/ncc)).

The NCCSRA also recently held elections and elected the following individuals as additional members of the executive board that will guide future events: Jennifer Block, president-elect, Cassandra Tzou, secretary, and Dr. Alvin Greenberg and Dr. Mark Stelljes, councilors.

## Southern California Chapter

*John Kulluk, President*

The Southern California Chapter has been busy since our last annual workshop in May 2006. This year we have had two dinner meetings. The initial one discussed the risk of E. coli and other organisms entering our food supply. This was a very timely topic due to the E. coli outbreak in the packages of fresh spinach that was in the news headlines at the end of summer. Dr. Mary McDaniel gave the presentation and, as usual, spiced it up with a battle between two halves of the room over which half knew more about E. coli. Our second presenter was Dr. Mic H. Stewart, Manager of Water Quality, Metropolitan Water District of Southern California. His presentation was titled "Pharmaceutical Residuals in Drinking Water Sources." Although this is not a serious problem now, it is only a matter of time until measures will have to be taken to keep these materials out

of our drinking water. The main concern with pharmaceuticals is the minute concentrations that can present a health risk problem.

We have set the time and place for our 20<sup>th</sup> Annual Meeting. It will be at the Southern California Gas Company Complex on 24 May 2007. We are putting together an interesting program covering risk-related topics from a number of fields. The categories of the talks will include Health Risks from Fine Particles, Chemical Safety, Risk Issues and Land Use, Risk Management Plans/Process Safety Management, and Global Warming Risks to Health. One of the highlights of the meeting will be a presentation by Chemical Safety Board Lead Investigator Don Holmstrom on the British Petroleum Refinery Explosion.

## UK Chapter

*Ellen Townsend, President*

The SRA UK Chapter is hosting a one-day conference on 7 September 2007 on "Risk Perception: Current Theories and Debates."

Keynote speakers will include Professor Nick Pidgeon and Professor Joyce Tait.

Additional conference details are posted at [www.psychology.nottingham.ac.uk/research/rasph/SRA\\_UK2007.html](http://www.psychology.nottingham.ac.uk/research/rasph/SRA_UK2007.html).

## Chicago Regional Chapter

[www.sra.org/chicago](http://www.sra.org/chicago)

*Jerry Mathers, Secretary*

A joint meeting with the Midwest Chapter of SETAC was held 14-16 March 2007 at Argonne National Laboratory. The meeting theme was "Moving Toward Cumulative Risk Assessment," and keynote speakers were Dr. Peter Preuss, National Center for Environmental Assessment, ORD, US EPA; Dr. Charlie Menzie, director of Ecosciences, Exponent Corp.; and Dr. Wayne Landis, Institute of Environmental Toxicology, Huxley College of the Environment, Western Washington University. The day-and-a-half meeting included keynotes, eight breakout sessions, and a poster social and had 95 registrants. Student poster presentation awards went to Tina Hunter of the University of Cincinnati, Susan Miller of the University of Wisconsin at Milwaukee, and Sara Wuellner of the University of Illinois at Chicago.

The Chicago Chapter Web page ([www.sra.org/chicago](http://www.sra.org/chicago)) has been updated to include meetings and events from other area organizations that feature risk topics. The annual chapter business and planning meeting will be held in June. 

**In Memoriam**  
**Chauncey Starr**  
**14 April 1912 - 17 April 2007**



## Advertisements

### National Nuclear Security Administration General Engineer/Physical Scientist (Senior Technical Safety Advisor)

The National Nuclear Security Administration is recruiting to fill a General Engineer/Physical Scientist (Senior Technical Safety Advisor), EN-801/1301-V, position in Livermore, California. As senior technical expert, incumbent provides technical evaluation of Lawrence Livermore National Laboratory (LLNL) nuclear safety programs including nuclear facilities safety basis, criticality safety, and system engineering. Emphasis will be placed on nuclear facilities operations to ensure they are carried out safely, in accordance with the facility's authorization basis. Incumbent reviews program changes and revisions and makes recommendations on the safety impacts. Incumbent's recommendations, decisions, and actions involve complex nuclear operations that have a pronounced effect on defense programs, and the nation, in continuing the long-term, state-of-the-art nuclear weapons goals without nuclear testing. Incumbent conducts oversight of LLNL nuclear facilities, interfaces with the Defense Nuclear Facilities Safety Board (DNFSB), and acts as coordinator for all Price Anderson Amendment Act (PAAA) activities. This is a critical position which coordinates and oversees all facets of nuclear facility safety and operations, including LLNL site's safety authorization basis. Interested individuals may go to <http://www.usajobs.opm.gov> to view the current announcements and follow the online application procedures listed in vacancy announcement 07-0081-EN-NAT (open to all US citizens) or announcement 07-0081-EN-GOV (open to current federal employees).

### Environmental Risk Assessment Specialist

MWH is a global leader in engineering, environmental, construction, technology, and management services. Currently, MWH is seeking qualified applicants for an Environmental Risk Assessment Specialist to be located in Bellevue, Washington, or Walnut Creek, California.

This position will perform environmental data evaluation, statistical analysis, qualitative and quantitative risk evaluations, and the preparation of human health and/or ecologi-

cal risk assessment reports. Under direct supervision, this position is accountable for supporting assigned environmental project activities through the application of environmental principles and techniques on projects and assisting in the completion of reports and other technical work. This position interacts with environmental project and program managers internally within the business unit organization and, potentially, with external clients.

Qualifications: Requires bachelor's degree (master's preferred) with up to 10 years of experience in environmental investigation and human health and/or ecological risk assessment. New graduates are encouraged to apply.

MWH is an equal opportunity, affirmative action employer. Minorities, women, disabled, and veterans are encouraged to apply. Please submit your résumé online at [mwhglobal.com](http://mwhglobal.com). Reference: mw-00004119.

### Exponent - Health Sciences

Exponent is currently hiring toxicologists, epidemiologists, physicians, risk assessors, exposure assessors, statisticians, industrial hygienists, and other health science professionals at all levels. These opportunities are available in multiple locations supporting a variety of projects in the areas of children's health, decision analysis, environmental and occupational epidemiology, ergonomics, industrial hygiene, pharmacoepidemiology, and risk assessment. Strong academic and professional credentials are required. Previous consulting experience is desired.

Exponent offers an excellent benefits package, including company-subsidized medical, dental, vision, life insurance, and a 401(k) retirement program with a 7 percent company contribution.

For more information about Exponent, please visit our Web site: [www.exponent.com](http://www.exponent.com). To submit your résumé, please contact:

Email: [hrhealth@exponent.com](mailto:hrhealth@exponent.com)

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### RISK newsletter Advertising Policy

Books, software, courses, and events may be advertised in the Society for Risk Analysis (SRA) RISK newsletter at a cost of \$250 for up to 150 words. There is a charge of \$100 for each additional 50 words.

Employment opportunity ads (up to 200 words) are placed free of charge in the RISK newsletter. Members of SRA may place, at no charge, an advertisement seeking employment for themselves as a benefit of SRA membership.

Camera-ready ads (greyscale) for the RISK newsletter are accepted at a cost of \$250 for a 3.25-inch-wide by 3-inch-high box. The height of a camera-ready ad may be increased beyond 3 inches at a cost of \$100 per inch.

The RISK newsletter is published four times a year. Submit advertisements to the Managing Editor, with billing instructions, by 30 December for the First Quarter issue (published early February), 30 March for the Second Quarter issue (early May), 30 June for the Third Quarter issue (early August), and 30 September for the Fourth Quarter issue (early November). Send to Mary Walchuk, Managing Editor, RISK newsletter, 115 Westwood Dr., Mankato, MN 56001; phone: 507-625-6142; fax: 507-625-1792; email: [mwalchuk@hickorytech.net](mailto:mwalchuk@hickorytech.net).



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*Address Changes:* Send to SRA@BurkInc.com

**Deadline for RISK *newsletter* Submissions**

Information to be included in the **Third Quarter 2007** SRA  
RISK *newsletter*, to be mailed early August, 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 June 2007**.



The Society for Risk Analysis (SRA) is an  
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communication.

SRA was founded in 1981 by a group of  
individuals representing many different dis-  
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 com-  
mitted to research and education in risk-related fields and to the  
recruitment of students into those fields. It is governed by bylaws  
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The Society has helped develop the field of risk analysis and has  
improved its credibility and viability as well.

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