



RISK *newsletter*

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Society for Risk Analysis 2002 Annual Meeting “The World of Risk Analysis” New Orleans, 8-11 December

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Award Winners**

New Officers
President Bernard D. Goldstein
President-elect Caron Chess
Councilor Lorenz Rhomberg
Councilor Kimberly Thompson
Councilor Wendy Wagner

**Thank you to the following SRA members who
have completed their terms on the SRA Board:**
John Ahearne
Michael Greenberg
Mitchell Small
John Vandenberg

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**The SRA Membership Directory is now available online.
Please check and update your contact information at www.sra.org.**



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

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

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

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

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Society for Risk Analysis
Web Site
www.sra.org

President's Message



The Society for Risk Analysis has an astonishingly broad range of disciplines integral to its activities, more than almost any other learned society. There are no major societal problems that will be solved by any one discipline working alone. Thus our Society is well positioned to respond to the many risk-related challenges of the modern world. The potential ferocity of these challenges has become painfully evident in recent years.

The SRA has recently completed a strategic rethinking of our goals and objectives, focusing on the role of risk analysis in modern society. A major thrust of this strategic plan is the recognition that we must proactively be involved in the processes by which society measures and responds to risk. Current events have reinforced the importance of understanding and acting appropriately in this arena. However, acting on this goal requires reaffirming the strengths of the disciplines underlying risk analysis, and basing our activities on the highest principles of these disciplines. Our educational outreach efforts should go beyond policy makers to include the general public as well as elementary and high school students.

The leadership of the SRA should be oriented toward facilitating the scientific and technical disciplines underlying risk analysis; projecting the role of risk analysis and of the SRA membership in responding to major societal challenges; and serving the members of the SRA in achieving their professional and personal goals. We need to expand in size and number our specialty sections and regional chapters. These serve to facilitate our technical skills, to respond to societal needs, and to demonstrate the value of the SRA and of its members to a broader constituency. The SRA should be appropriately aggressive in demonstrating the value of the field and of its practitioners to those responsible for using the output of risk analysis, and we should be active in ensuring appropriate rewards to those who have the relevant expertise.

We also should continue to expand SRA's international role. The addition of chapters in other countries and world areas, and the participation of their members at our annual meeting and in other SRA activities, has been a tremendous benefit to all of us. There is a tendency for nations to wrap trade barriers in the green flag of environmentalism. Risk analysis is central to harmonization of environmental approaches to trade, but it is not without its critics. Demonstrating the value and the robustness of risk analysis in international trade issues will be central to the future of risk analysis as a decision tool. As part of this process we can anticipate a growing discussion of the role of the precautionary principle as part of risk analysis, an adjunct to it, or a completely separate and perhaps antagonistic approach to it. It is important that our Society engage in this discussion and be an active part of the inevitable adaptation of current risk analysis techniques to future world trade and globalization demands.

It is appropriate for us to refocus our attentions on our younger members and on future members. Specific activities should include further outreach efforts to undergraduate and graduate students in relevant disciplines, fund-raising efforts to facilitate the attendance of students and new members at SRA meetings, and mentoring programs through our regional chapters and specialty sections. These will insure that our Society will long maintain its preeminent role as a forum for the exchange of ideas and for the advancement of our field.



2003 SRA Officers

The Society for Risk Analysis (SRA) welcomed the following new officers at the 2002 Annual Meeting in New Orleans:

President Bernard D. Goldstein

Bernard D. Goldstein is currently the Dean of the University of Pittsburgh Graduate School of Public Health. From 1986 to 2001 he was the founding director of the Environmental and Occupational Health Sciences Institute, a joint program of Rutgers University and Robert Wood Johnson Medical School, and was chairperson of the Department of Environmental and Community Medicine at the medical school from 1980 to 2001. Dr. Goldstein earned his BS in psychology at the University of Wisconsin and his MD at New York University School of Medicine.



Goldstein was Assistant Administrator for Research and Development at the Environmental Protection Agency (EPA) from 1983 to 1985. He has been a member of numerous national, state, and local advisory committees related to environmental risk. These include serving as chairperson of EPA's Clean Air Scientific Advisory Committee, the National Institutes of Health Toxicology Study Section, and the Health Effects Institute Research Committee. He has been chairperson of six National Research Council committees, including the committees on Risk Assessment Methodology, on Biomarkers in Environmental Health Research, and on Evaluation of EPA Guidelines for Naturally Occurring Radioactive Materials. He was a member of the Presidential/Congressional Committee on Risk Assessment and Risk Management.

For the Institute of Medicine (IOM) Goldstein has chaired the Section on Public Health, Biostatistics, and Epidemiology, has served on the IOM Committee on Environmental Justice, chaired two committees concerning the role of the health professional in environmental health, and is currently a member of the IOM Board of Health Sciences Policy and the IOM Roundtable on Environmental Health Sciences. He is on the Board of the International Life Sciences Institute, where he serves as scientific advisor to the Risk Science Institute, and he is a member of the Advisory Council of the Center for Communications, Health, and the Environment. His international experience includes chairing the Scientific Group on Methodologies for the Safety Evaluation of Chemicals and the Industry Panel of the World Health Organization Commission on Health and Environment. Currently, he is vice president of the Scientific Committee on Problems of the Environment. He has had sabbatical experiences working in Paris on aspects of the precautionary principle and risk analysis in environmental policy and in Malaysia as a visiting professor and consultant to a new academic environmental and occupational health program.

Goldstein is the author of over 200 articles and book chapters related to environmental health sciences, toxicology, risk assessment, risk communication, and public policy. He currently is coteaching a course on risk assessment at the Graduate School of Public Health.

His honors include the 1999 Distinguished Achievement Award from the Society for Risk Analysis and membership in the Institute of Medicine.

President-Elect Caron Chess

Caron Chess is director of Rutgers University's Center for Environmental Communication and Associate Professor in the Department of Human Ecology.

Dr. Chess has authored not only many peer-reviewed publications in academic journals but also materials that are used widely by government and industry practitioners, including "Communication with the Public: Ten Questions Environmental Managers Should Ask" (which was named #1 on the Society for Risk Analysis must-read list, developed by the Risk Communication Specialty Group for industry communicators) and a manual for industry (which was named #2). In addition, her "Improving Dialogue with Communities: A Short Guide to Government Risk Communication" has been translated into three languages. She has also provided risk communication training and presentations to a variety of local, state, national, and international agencies. For example, during the past year she provided risk communication training to Environmental Protection Agency (EPA) Administrator Christine Whitman and her senior staff and delivered a keynote address to the inaugural meeting of the New Zealand Society for Risk Management.

Chess' research interests include methods to evaluate public participation and study of the impact of organizational factors on public participation and risk communication. Current research includes studies of communication in New Jersey about anthrax, risk communication to low-income Latina women at risk from contaminated fish, and evaluation of collaborative watershed management efforts.

She has served on the National Academy of Sciences (NAS) Committee on Risk Characterization, which was responsible for the report "Understanding Risk: Information Decisions in a Democratic Society," and she has been helping NAS define a new study on public participation. She has also served on the NAS Board on Radioactive Waste Management and the Institute of Medicine Committee on NIH Research Priority Setting as well as on committees of the EPA Scientific Advisory Board and Board of Scientific Counselors. She currently serves on the editorial boards of *Risk Analysis*, *Human Ecology Review*, and *Journal of Applied Environmental Education and Communication*.

Prior to joining academia in 1987, Chess served as Right to Know coordinator for the New Jersey Department of Environmental Protection and was founding executive director of the Delaware Valley Toxics Coalition. She has a BA in English from the State University of New York (SUNY) Buffalo, an MS in behavior and environment from the University of Michigan, Ann Arbor, and a PhD in environmental studies from SUNY Environmental Science and Forestry, Syracuse, including policy studies at Syracuse University's Maxwell School.

Since joining SRA in 1987, she was elected to SRA's Council, where she headed the membership committee. She also has served on the advisory committee to the Council, the executive committee of the Risk Communication Specialty Group, the awards committee, the program committee for the annual meeting, and the editorial board of the journal.



Councilor Lorenz Rhomberg

Lorenz Rhomberg is a Principal at Gradient Corporation, a Cambridge, Massachusetts, environmental consulting firm. Before joining Gradient he was an assistant professor at the Harvard School of Public Health, where he maintains an adjunct appointment. From 1984 to 1994 he was a risk assessor at the U.S. Environmental Protection Agency in Washington.

Dr. Rhomberg earned his PhD in population biology from the State University of New York at Stony Brook and his BSc in biology from Queen's University in Ontario. His interests lie in methodology and science policy for quantitative risk analysis, including pharmacokinetic modeling and probabilistic methods with special emphasis on cross-species extrapolation, chlorinated solvents, and endocrine active agents. Rhomberg is a member of the Office of Pesticide Programs Food Quality Protection Act Science Review Board and has served on several Federal Insecticide, Fungicide, and Rodenticide Act Scientific Advisory Panels, National Academy of Sciences Committees, and other panels. He is a past president of the New England Chapter of SRA.



Councilor Kimberly M. Thompson

Kimberly Thompson is Associate Professor of Risk Analysis and Decision Science in the Departments of Health Policy and Management and Maternal and Child Health at Harvard School of Public Health in Boston.

Thompson's research interests and teaching focus on the issues related to developing and applying quantitative methods for risk assessment and risk management, and consideration of the public policy implications associated with including uncertainty and variability in risk characterization. Drawing on a diverse background, she seeks to effectively integrate technological, social, political, legal, and economic issues into risk analyses that inform public policy and improve decision making. She recently initiated a long-term effort to use an analytical approach to address risks to children (www.kidsrisk.harvard.edu). This effort will broadly apply comparative risk analysis tools to highlight the value of informed decisions and it will ultimately lead to the develop-



ment of appropriate risk models for children. This work builds on Thompson's long-standing interest in the issues related to variability in risk for sensitive subpopulations, particularly children, and the potential risk tradeoffs associated with policies designed to protect them. The work includes research on a range of children's risks and the portrayal of risky behaviors in popular entertainment media. Building on her broad training, Thompson also focuses on the characterization of information and communication of risks. She developed a guide to help consumers take charge of health information and now speaks widely about life in the Age of Risk (www.aorm.com).

Thompson has been a member of the SRA since 1991. She chaired the Exposure Assessment Specialty Group in 1999 and is an active participant in several of the SRA Specialty Groups. She holds an MS in chemical engineering from the Massachusetts Institute of Technology and an ScD in environmental health from the Harvard School of Public Health.

Councilor Wendy Wagner

Wendy Wagner is the Joe A. Worsham Centennial Professor in Law at the University of Texas School of Law. After receiving an MES and JD from Yale, Wagner clerked for Judge Engel of the Sixth Circuit, U.S. Court of Appeals, and practiced in both the Enforcement Division of the Department of Justice's Environment and Natural Resources Division and the Department of Agriculture's Office of the General Counsel. Wagner specializes in environmental law and the use of science in environmental and public health policy.

Her articles include "The Science Charade in Toxic Risk Regulation" (*Columbia Law Review*), "Choosing Ignorance in the Manufacture of Toxic Products" (*Cornell Law Review*), and "Congress, Science, and Environmental Policy" (*Illinois Law Review*). Wagner currently serves on a number of committees and boards, including the National Conference of Lawyers and Scientists; the Columbia Center for Science, Policy, and Social Outcomes; the *Journal of Risk, Decision, and Policy* (Cambridge Press); the Environmental and Natural Resources Regulation Committee of the ABA Administrative Law Section; and the Society for Risk Analysis. Before joining the Texas faculty in 2001, Wagner was professor at Case Western Reserve School of Law and a visiting professor at Columbia Law School and Vanderbilt University Law School.



Call for Nominations for 2004 SRA Officers

The Society for Risk Analysis Nominating Committee invites nominations for the following offices in the Society's elections for 2004 officers:

President-elect Secretary Treasurer-elect Three Councilors

Please submit nominations with a brief paragraph supporting each by **25 April 2003** to Secretariat, Society for Risk Analysis, 1313 Dolley Madison Blvd., Suite 402, McLean, VA 22102; phone: 703-790-1745; fax: 703-790-2672; email: SRA@BurkInc.com.

Note: This year officer elections will be held earlier than in the past. Ballot returns will be due 15 August 2003.



2002 Award Winners

Distinguished Achievement Award

Elisabeth Paté-Cornell



Because of her outstanding and diverse contributions to a broad array of risk issues, Elisabeth Paté-Cornell received the Distinguished Achievement Award, which honors any person for extraordinary achievement in science or public policy relating to risk analysis.

A Past President and Fellow of the SRA, Paté-Cornell is the Burt and Deedee McMurtry Professor in the Stanford University School of Engineering and has been chair of the Department of Management Science and Engineering at Stanford since its creation.

Chauncey Starr Award

Alison Cullen



Alison Cullen received the Chauncey Starr Award which honors individuals under the age of 40 who have made exceptional contributions to the field of risk analysis. Cullen specializes in environmental risk analysis, environmental science and policy, quantitative uncertainty analysis, and statistical decision theory. She is Associate Professor of Public Affairs and Director of the Environmental Management program at the

University of Washington in Seattle, having joined the faculty of the Evans School of Public Affairs there in 1995.

Outstanding Service Award

Timothy McDaniels

Timothy McDaniels was presented with the Outstanding Service Award, which honors SRA members for extraordinary service to the Society.

McDaniels served the Society as Secretary for two terms, is actively involved in planning and promoting the World Congress on Risk, and is an active, enthusiastic, and hard-working member of SRA.

He is Director of the Eco-Risk Research Unit at the University of British Columbia where he is an associate professor in the Institute of Resources and Environment and the Graduate School of Community and Regional Planning.



Outstanding Risk Practitioner Award

William Farland



William Farland received the Outstanding Risk Practitioner Award for his substantial contributions to the field of risk analysis through work in the public sector. Farland is Acting Deputy Assistant Administrator for Science in the U.S. Environmental Protection Agency (EPA) Office of Research and Development. He is Director of EPA's National Center for Environmental Assessment, which has major responsibility for the conduct of chemical-specific risk assessments in support of EPA regulatory programs, the development of Agency-wide guidance on risk assessment, and the conduct of research to improve risk assessment.

Best Paper Award Winners



Winners of the 2002 Best Paper Competition with SRA President Bernard Goldstein, left to right, Tony Cox ("Quantifying Human Health Impacts of Antimicrobial Risk Management Alternatives for Enrofloxacin"), Paul Slovic ("Risk as Analysis and Risk as Feeling: Some Thoughts about Affect, Reason, Risk and Rationality"), Joanna Burger ("Fish Consumption Advisories: Knowledge, Compliance and Why People Fish in an Urban Estuary"), Goldstein, Felicia Wu ("The Economic Benefits and Risk of Genetically Modified [Bt] Corn: Who Wins, Who Loses, Who Cares?"), and Justin Teeguarden ("Accounting for Serum Binding Proteins in Extrapolations among Chemicals and Across Life-Stages and Species for Endocrine Active Compounds"). Not pictured: Luis Cifuentes ("Explanatory Power of the Psychometric Paradigm for Individual Risk Perceptions") and Joost Santos ("Modeling the Demand-Reduction Input-Output [I-O] Inoperability of Interconnected Infrastructure Due to Terrorism").



2002 Award Winners

Fellows Award

SRA Fellows are selected based upon substantial achievement in science or public policy relating to risk analysis and substantial service to the Society.

Robin Cantor

Robin Cantor is a principal and managing director of the Environmental Practice of LECG, formerly Law and Economics Consulting Group. She has a faculty appointment in the Graduate Part-Time Program in Engineering of the Johns Hopkins University. She has a PhD in economics from Duke University. Cantor's expertise includes several areas of environmental and energy economics, statistical modeling, risk management, public policy, and societal decision making.



Cantor was the 2002 President of the SRA. She is a past Councilor and was also chair of the Grants Management Committee, the Conference Committee for annual meetings, and the Organizing Committee for the International Symposium on Risk and Governance. She was a member of the Awards Committee and in 1999 she received the SRA Outstanding Service Award.

Robin Gregory

Robin Gregory is a senior researcher at Decision Research and associate director of the Eco-Risk Research Unit at the University of British Columbia. His specializations include valuation of nonmarket environmental resources, risk management and perceptions of hazardous technologies, understanding small-group negotiation behaviors, choice and preference behavior, economics and psychology of value, stakeholder involvement in environmental risk and resource decisions, and decision making and group negotiations under uncertainty.



Gregory has been a frequent reviewer for *Risk Analysis* and has been a member of SRA for more than 10 years.

Charles N. Haas

Charles Haas is the L.D. Betz Professor of Environmental Engineering in the Department of Civil, Architectural and Environmental Engineering at Drexel University in Philadelphia, where he has been on the faculty since 1991. He earned his PhD in environmental engineering in the Department of Civil Engineering at the University of Illinois at Urbana-Champaign. His areas of interest in the field of risk analysis are in microbial risk assessment, dose-response modeling, and food and water risk assessment.



Haas is an active member of SRA, has presented papers at the annual meeting, and has published articles in *Risk Analysis*. He is currently an SRA Councilor.

Elaine M. Faustman

Elaine Faustman is a professor in the Department of Environmental Health and director of the Institute for Risk Analysis and Risk Communication at the University of Washington in Seattle. She is also director of the Center for Child Environmental Health Risks Research, principal investigator for the Consortium for Risk Evaluations with Stakeholder Participation, and principal investigator for the Center for the Study and Improvement of Regulation. She earned her PhD in pharmacology and toxicology from Michigan State University. Her research interests include mechanistic investigations of the reproductive and developmental toxicity of metals and pesticides. She has developed quantitative risk assessment methods for noncancer end points.



John A. Moore

John (Jack) Moore serves as Principal Scientist of the NTP Center for Evaluating Risks to Human Reproduction, selectively consults on toxicology and policy issues, continues his 15-year effort to establish an international toxicology data base for high production volume chemicals, and serves as President of the Toxicology Education Foundation.

He received a Doctor of Veterinary Medicine degree from Michigan State University. He has had a career that represents a unique blend of experience as a research scientist, regulator, and senior government policy manager.



Marc Poumadère

Marc Poumadère conducts action research interventions on issues of risk and safety within contexts like nuclear power plants. Marc is an Associate professor at l'Ecole Normale Supérieure, Cachan, France; his teaching and research bears upon both organizational issues of risk management and public risk communication. He serves in several governmental and international advisory or scientific committees.

Marc's current interests include situations where cooperation between the involved stakeholders leads to mutual risk definition and effective resolution of risk issues and the development of extreme scenarios for risk management studies in the European context.

Poumadère became an SRA member in 1986 and was actively involved in the creation of SRA-Europe, which he presided over in 1993.

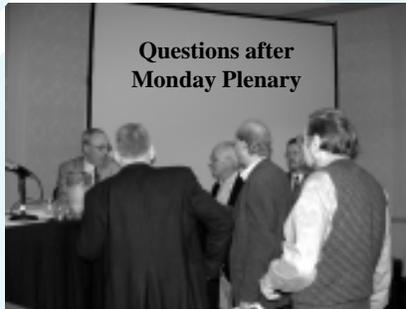


file photo

“The World of Risk Analysis”
New Orleans, 8-11 December
Society for Risk Analysis
2002 Annual Meeting



Registration



New Member Breakfast



Check the SRA Web site for more meeting photos
www.sra.org

Passing on the symbols of office:
Bernard Goldstein receives the President's gavel from Robin Cantor and Leslie Hushka receives the Treasurer's mask from Richard Belzer



Past President Robin Cantor and her mother Joan Cantor



President's Reception



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“What do you mean the flight's cancelled - you mean we skipped out of the meeting and we have to locate another flight? Those trout better be worth it.”

“The World of Risk Analysis”

The 2002 Annual Meeting of the Society for Risk Analysis (SRA), held 8-11 December in New Orleans, included three plenary sessions highlighting the meeting theme “The World of Risk Analysis.” SRA Past President Dr. John D. Graham discussed “The Precautionary Principle” at Monday’s Plenary Session. Graham is head of the White House Office of Management and Budget (OMB) Office of Information and Regulatory Affairs.

Three speakers contributed to the Tuesday Plenary Session discussion on “International Perspectives on Risk Assessment.” The Latin American perspective was provided by Dr. Carlos Santos-Burgoa, a senior Mexican official responsible for risk assessment and an epidemiologist and former faculty member at the University of Michigan. The Asian perspective was offered by Dr. Deoraj Caussy, of the Department of Evidence for Information and Policy, World Health Organization, South East Asia Region, located in New Delhi. The European perspective was discussed by Dr. Ragnar Löfstedt, Director of King’s Centre for Risk Management, School of Social Science and Public Policy, at King’s College in London.

Wednesday’s Plenary Session was a panel discussion on “Environmental Terrorism: Role for Risk Analysis.” The panel was chaired by Dr. Peter Jutro, Counselor to the Administrator for Environment and Security at the U.S. Environmental Protection Agency and Deputy Director of the new Homeland Security Research Center. Joining him were Col. Randy Larsen, Director of ANSER Institute for Homeland Security (www.homelandsecurity.org); Dr. Barry Erlick, Chief Scientist with Special Programs at Battelle; Dr. Dorothy Canter, Science Advisor at the Office of Solid Waste and Emergency Response at Environmental Protection Agency; and Ken Duncan, Chair of the CIA Interagency Intelligence Committee on Terrorism. All three sessions were followed by lively and informative question-and-answer periods involving SRA members in attendance.

Risk, Precaution, and Regulation

John D. Graham

summarized by Gen Roessler

John D. Graham, on behalf of the Bush Administration, applauded SRA efforts to “build, validate, and apply the tools of risk analysis—to the many risks faced pre-9/11 and the many new (or newly recognized) challenges we face since 9/11.” He said, “We also applaud the work of SRA’s social scientists and lawyers, those seeking to both understand how the public perceives risks, how people balance risks and benefits, and how we can build more competent, accountable, and trustworthy risk-management organizations.”

Graham concentrated his remarks in two areas: “(1) what we are doing at the OMB to promote better risk regulation in the Federal Government, and (2) what the Bush Administration sees as the appropriate role of precaution in risk management and how that role is similar to, yet also different than, the so-called precautionary principle espoused by our European colleagues on the other side of the Atlantic.”

Highlighting aspects of his SRA experience that have served him well in his job at OMB, Graham said that he has learned to appreciate the critical roles that various disciplines have to play in making sound public policy. He added that through SRA he has had the opportunity to appreciate the international dimensions of risk issues including bioengineered foods, global climate change, and the World Trade Organization.

“President Bush has instructed me to pursue an agenda of smarter regulation,” Graham commented, outlining what OMB is doing to promote better risk regulation. He pointed out that smart regulation is “neither uniformly pro-regulation or anti-regulation” and added that he has strived to establish a climate of openness at his OMB office. The public and SRA members can track the daily activities of his office at <http://www.whitehouse.gov/omb/inforeg/regpol.html>.

Outlining his thoughts on precaution in risk management, Graham said he could be brief because his thoughts on the subject are posted on the OMB Web site. His major points were

that there are possible risks in daily life that are subject to substantial scientific uncertainty—indeed there may be no risk at all—but that, for one reason or another, trigger significant public concern. He presented what he thinks, under these circumstances, is the appropriate role for precaution in the responses of risk managers. He first defined what is presumed by the term “precaution.” One meaning may be “a measure taken beforehand against possible danger.” He said that precaution is a well-respected concept that people practice regularly in the stock market, in hospitals, and on the highway. He cited several examples of where Americans have experienced the pain and suffering that can result from insufficient precaution in risk management.

“The use of precaution in risk management is sensible but susceptible to misuse,” Graham said, adding that “in the United States we have learned the hard way that the urge for precaution can lead to unfortunate outcomes.” He pointed out that “in energy policy, some of us regret our historical decisions regarding nuclear energy. . . . The possible risks of nuclear power generation, coupled with the desire for precaution and rising costs of construction, caused a virtual halt in the construction of new nuclear plants in the United States.” This has led to our being even more deeply dependent now on fossil fuels which are a major source of environmental concerns and calls for precaution.

Graham discussed various areas of precaution as used by regulators in the United States and within the European Commission. He concluded his presentation on notes of both optimism and caution saying, “Precaution is a perfectly sensible concept that is built into many health, safety, and environmental laws in the United States. At the same time, it may be wise to apply a precaution approach to any attempt to enact a universal precautionary principle into American law.”

Graham’s talk in its entirety may be read on the OMB Web site at http://www.whitehouse.gov/omb/inforeg/graham_risk120902.pdf.



International Perspectives on Risk Assessment

A Latin American Perspective on the Risk Assessment Divide

Carlos Santos-Burgoa

There is a lack of understanding of risk assessment in the majority of countries; however, this lack of understanding is much more pronounced in the developing countries of the world. While most countries in the developed world take for granted the basics of risk assessment, the factors that are required for risk assessment are not well established in most of the developing countries. These factors range from the formal knowledge of the perceived risk or the societal values that surround it to having a quantifiable or semiquantifiable database that allows one to make the magnitude of populations, or exposures, hazards, or actual health effects, "objective." An important factor which is absent in most of these countries is a professional base of persons who work actively on performing an objective analysis in order to support decisions within industry or government. This absence can be explained by intermingled factors, including the lack of a legal framework which is required for transparent decision making and the fact that transparency is required when no authoritarian decision making is done, that is, within a democratic process.

Therefore, in the international discussion on risk analysis, we should not take it for granted that we all come from the same background. As an example, in Mexico we are now in the midst of a profound democratic transition. In Mexico, when we developed quantified risk assessment of air pollution health effects in Mexico City, lead and ozone had been tackled but inhaled particulates had not been. Economic benefit analysis was done under different scenarios and benefits were calculated either from direct medical costs or by considering indirect costs and the willingness to pay. It was difficult to identify both who was currently paying such costs or who will benefit from the controls, but mainly previous decisions had been taken



without such analysis. Mexico is now going through institutional and legal changes that will provide an impetus for further development of risk assessment.

This development of risk assessment is critical in a globalized world where we have to develop a societal response, such as in our case when confronting rapid transfer of risks, of assuring that we have the global transfer of methods to address risks. At the World Summit on Sustainable Development (WSSD), developing countries resisted the introduction of risk assessment language because it was perceived as a trade barrier. And indeed, sanitary issues will remain as the only trade barrier whenever we build a free-trade world. The current agreements rely on the Sanitary and Phytosanitary Agreement (SPS) as enacted since the Uruguay Rounds and further incorporated into the General Agreement on Tariffs and Trade, the World Trade Organization, and other trade instruments. The SPS Agreement explicitly states that countries have the right to protect their population's health based on risk assessment; the problem is the lack of understanding of such methods by many of the trading members. This provides a great disadvantage even when it is used to protect their own nations.

We acknowledge that historically one of the five reasons for international health collaboration is the shortcoming of national or regional health systems. We call for a risk assessment capacity-building effort as committed in the WSSD implementation plan and the SPS Agreement and strongly urge the Society for Risk Analysis to help expand its scope; go international, not only in the developed world but the developing countries; and decide to become an empowering professional force to these developing countries.

Health Risk Assessment: Perspectives from the World Health Organization

Deoraj Caussy

Health Risk Assessment is particularly crucial for the South East Asia Region. Home to almost 1.5 billion persons, the Region is exposed to both traditional risks from natural disasters such as floods, cyclones, earthquakes, and air pollution, as well as modern risks associated with development and industrialization. In view of the high prevalence of risks and limited resources, risk assessment forms an integral part of one of the key strategic directions of the World Health Organization's (WHO) missions.

A number of practical challenges have to be overcome in applying the health risk paradigm to our region. The lack of large data bases makes it impossible to fulfill all the criteria of the paradigm with regard to hazard identification, dose response assessment, exposure assessment, and risk characterization. Furthermore, where data bases exist they are limited and are fraught with many uncertainties. In these circumstances it becomes particularly important to adopt the precautionary principles for managing risk to human health and pro-



tecting the vulnerable populations. However, one has to maintain a practical balance between not raising unnecessary fears by alarming the population with low probability risks and concomitantly addressing important risks of high public health impact.

In the face of these challenges, WHO has focused the World Health Report 2002 on "Reducing Risk, Promoting Healthy Life." Considerable uncertainties exist in the criteria for health risk assessment and these were resolved in part by constituting task forces entrusted with comparative risk assessment of selected risk factors through a combination of literature review, meta-analysis, and expert opinion to calculate attributable risks and arrive at the global unit of DALY (Disability-Adjusted Life Year). The results, although intuitively obvious, were stunning when it was revealed that childhood and maternal underweight were leading risk factors for global burden of disease whereas cholesterol, alcohol, and tobacco were consistent risk factors for disease burden in both developing and

developed nations. Since risk assessment is a bridge between science and policy, it is envisaged that these findings will catalyze the formulation of healthy public policy and in supporting governments to develop risk reduction strategies. A number of global risk-reduction strategies have been identified and these include behavior change, health practices, provision of safe water and hygiene, and targeted interventions such as childhood undernutrition.

One of the major risk problems in the South East Asia Region is arsenic poisoning due to drinking contaminated groundwater. It is estimated that nearly 40 million persons from Bangladesh, Nepal, India, Myanmar, and Thailand may be exposed to ar-

senic levels in excess of the WHO guideline values. However, there are a number of uncertainties regarding the risk assessment particularly in exposure assessment, dose response, and risk characterization. In its efforts at risk mitigation of arsenic contamination, WHO is constituting task forces and expert committees for the formulation of guidelines on exposure assessment and supporting the development of national standards.

In the true spirit of partnership, WHO's Regional Office for South East Asia welcomes the involvement of risk assessors and members of the Society for Risk Analysis in forging partnership, building capacity, and transferring tools to characterize and mitigate the prevailing risks in our Region.

The Evolving Risk Management Field in Europe: Some Insights and Speculations

Ragnar Löfstedt

Risk management in Europe is presently driven by three distinctive yet not entirely unrelated factors. These are competitiveness, sustainable development, and governance. Increasingly these factors are integrating, all to form what the European Commission refers to as "Better Regulation." With regard to better regulation, two areas in particular stand out. Firstly, the Commission recognizes a need for better preparing the community's regulatory actions, arguing that the preparatory phase is often regarded as insufficient. This preparation is composed of making the action in question as rigorous as possible, using minimum standards of public consultation, putting forward guidelines on how to draw on expertise, and making the preparatory process coherent and transparent. Secondly, the Commission is concerned about having the regulation in question properly implemented. The Commission is



aware that it is not good enough to make and put forward regulation in Brussels without seeing it implemented in the member state countries.

To ensure the making of better regulation, two tools have been put forward, namely the so-called precautionary principle and impact assessment; of these, regulatory impact assessment is seen as increasingly more important. Indeed there are indications that the use of the precautionary principle as a regulatory tool within the European Commission has peaked, as the phrase is used less and less in European circles—indeed in the so-called Better Regulation package that came out in July 2002, the term precautionary principle was not once mentioned. In conclusion, there is a need to pay close attention to the present changing regulatory environment in Europe. Of particular importance is to see how the forthcoming European chemical regulations will be framed.

Environmental Terrorism: Role for Risk Analysis

Assigning Priorities Using Risk-Based Analysis

Peter Jutro

Analyses of terrorism and the environment need not be about environmental terrorism. The activities of Saddam Hussein, in his intentional destruction of Iraq's marshes or his attempt to destroy the Kuwaiti oil fields, are historically recent examples of what is generally regarded as intentional environmental terrorism: the unlawful use of force against *in-situ* natural resources. Terrorism is differentiated from warfare in that in targeting noncombatants as the essence of its strategy, it violates the legal doctrine of *jus in bello*: that warfare must be conducted in a just fashion. Since a major objective of environmental terrorism is to have a psychological effect on the target population, the doctrine becomes applicable. But this strict legal approach does not mean that there could not be environmental consequences to any terrorism, just as there are environmental consequences to warfare. Although we may again encounter environmental terrorism, we may also encounter classical state- or nonstate-supported political terrorism of a potential nature and scale that allows it to wreak damage so substantial that



environmental damage is a probable outcome.

It is this very issue of nature and scale that marks a notable transition from the past. Until recently, vulnerability had never been part of America's national self image. Our entire national protective apparatus had been based on the notion that our society's enemies have what might be thought of as functioning superegos—that there were some actions that were so beyond reason, and thus of such infinitesimally small probability, that we did not need to devote scarce societal resources to protect against them. September 11th, 2001, proved us wrong. Our world has become more complicated in part because there are no longer limits on what we must consider as rationally expectable actions. Nevertheless, we must assign priorities to the threats we protect against, and this analysis must be risk based.

We face questions about how to think systematically about this broader set of complex and interrelated vulnerabilities, who should do this thinking, and how this thinking should be shared.

These concerns are shared by the intelligence community which must warn us of potential threats, our military which may have to respond to them, our governments' environmental, health, and food, and agricultural protection departments and agencies, some of which have both protection and response missions, and the academic community, which must provide the

analytical techniques that allow integrated analysis to be undertaken. Conducting such integrated analysis presents us with particular problems, because each of these communities has different methodological approaches to risk analysis, uses different vocabularies, has different cultures, and has institutional barriers to cooperation.

Capabilities × Intent × Vulnerabilities = Threat . . . or Risk

Randy Larsen



Of all the threats to the American homeland, and there are many, none scares me more than uncontrolled spending. We must understand the enemy's intents and capabilities and our vulnerabilities. The formula we recommend is Capabilities × Intent × Vulnerabilities = Threat . . . or Risk. America cannot afford a risk-free society. It is therefore critical that we educate

the senior elected and appointed officials so that they understand the need for prioritization.

We cannot defend against every nut with a gun, but we must be prepared to prevent, mitigate, and recover from those threats that most seriously threaten large numbers of Americans, our economy, and our Constitutional and cultural values. The new technologies that can produce powerful biological and cyber weapons are perhaps the most worrisome. These technologies allow small nation-states, well-financed terrorist organizations, and transnational criminal organizations to threaten a superpower.

Antiagricultural Biological Warfare

Barry Erlick

Antianimal and antiplant agents represent half of the four broad classes of agents included in the Biological and Toxin Warfare Convention. The potential impact of the use of these agents is not necessarily about food. Our population will not go hungry if they are used. We have numerous alternate food sources. As with any terrorist attack, their potential use is about fear, attention to a cause, disruption, economic impact, and generating social and political pressures to change our will and society.

Foreign pathogens and pests of concern are readily available throughout the world. In many cases they represent a "no tech" threat. Plant pathogens and pests of concern include those that can attack wheat, soybean, rice, corn, and sorghum that can have a high impact, produce broadscale economic consequences, and significantly affect trade. High-risk foreign animal diseases of concern are included on the World Organization for Animal Health (Office of International Epizootics or OIE) List A Diseases. These are transmissible diseases of cattle, swine, sheep, goats, and equine and avian species with the potential for very serious and rapid spread irrespective of national borders. They are considered to be of serious socioeconomic or public health consequence and can impact international trade of animals and their products significantly.

Some issues deserving particular attention concerning contagious animal diseases include prevention, detection, control requirements for contagious diseases, animal welfare, environmental impact, and disease drift into wildlife reservoirs.

Although there are numerous other considerations, the financial impact of OIE List A animal diseases to the agriculture sector and the economy in general can be huge. Recent outbreaks of List A animal diseases throughout the world and Bovine spongiform encephalopathy (BSE—an OIE List B disease) and Nipah virus (newly recognized viral agent) reflect this impact. Since 1996 when BSE was found to infect humans, the cost to the United Kingdom is estimated to be \$6 billion U.S.



Until 1997 Taiwan had been free of foot-and-mouth disease (FMD) for 68 years. However, outbreaks of this disease primarily in 1997 and then 1998, 1999, and 2000 decimated their lucrative pork industry. The continuation of sporadic FMD outbreaks will likely prevent them from resuming their role as a major player in global pork trade. The estimated cost of FMD to Taiwan is currently more than \$10 billion U.S.

As a result of the 1997-1998 Classical Swine Fever epidemic in the Netherlands, more than 10 million pigs were slaughtered. The estimated cost was \$2.3 billion U.S.

As a consequence of the 1999 Nipah virus (a highly hazardous Biosafety Level 4 agent) outbreak in Malaysia, 1.1 million pigs were slaughtered and of the 265 people infected 105 died. The cost was estimated to be greater than \$200 million U.S.

During the FMD outbreak in the United Kingdom in 2001 about 6 million livestock were destroyed. Including compensation, cleaning and disinfecting farms, loss of exports, tourism, loss of taxes, and so on, the estimated cost was almost \$15 billion U.S. Since 2001, FMD has emerged in several countries that had been free of the disease for many decades. Included are the Republic of Korea (previous outbreak-1934) and Japan (previous outbreak-1908).

Within the U.S. Department of Agriculture (USDA) and other federal departments and agencies there is a clear awareness of the biological threat to agriculture and the food supply system. Moreover, there is a growing appreciation of this threat elsewhere, including several states and major agriculture and food stakeholders. Led by USDA, this concern is generating numerous countermeasures designed to reduce the risk. Current and projected efforts include homeland security targeted USDA funding to the states and the generation of roadmaps to characterize vulnerabilities and threat leading to action plans that will produce "fixes." These efforts will increase our capacity to deter, prevent, and, if necessary, effectively respond to and recover from an attack on agriculture and the food supply system.

Responding to Anthrax Contamination

Dorothy A. Canter

Late in 2001 there were three known terrorist attacks using *Bacillus anthracis* (*B.a.*) spores transmitted through the U.S. mail system. In the first attack letters mailed to media outlets in New York City entered the mail system in Trenton, New Jersey, on or about 18 September. The second attack involved a letter or package sent in late September to American Media Incorporated (AMI) in Boca Raton, Florida. The two letters to Senators Daschle and Leahy entered the mail system in Trenton, New Jersey, on or about 9 October. Twelve cases of cutaneous anthrax and 11 cases of inhalational anthrax resulted from these attacks. Five of the persons with inhalational anthrax died.

Numerous sites were contaminated either directly or through cross-contamination. Among these were media offices, postal facilities, the Capitol Hill Anthrax Site, and residences. The contaminated postal facilities included large processing and distribution centers such as the Hamilton facility in Trenton, New Jersey, the Brentwood facility, and the Morgan facility in New York City. Numerous smaller U.S. Postal Service (USPS) facilities also experienced contamination, as did a number of federal government mail facilities downstream of the Brentwood facility.

The remediation process for each of the sites consisted of up to eight steps—site assessment, isolation of contaminated areas, artifact and critical item removal, source reduction, remediation of contaminated areas/articles, postremediation environmental sampling, further remediation and sampling if the initial postremediation sampling indicated continuing areas of contamination, and disposal of decontamination waste. The roles of the U.S. Environmental Protection Agency (EPA) in the remediations were to ensure that the cleanups were performed in accordance with the Comprehensive Environmental Restoration Compensation and Liability Act (Superfund Law), either by performing the cleanups or by providing technical assistance to the organizations conducting the cleanups, and to grant crisis exemptions for treatments with pesticidal agents not registered under the Federal Insecticide, Fungicide, and Rodenticide Act.



Three surface remediation agents—chlorine bleach, aqueous chlorine dioxide, and hydrogen peroxide/peroxyacetic acid—have been used in the cleanups, and three fumigants—chlorine dioxide gas, paraformaldehyde, and vaporized hydrogen peroxide—have been used at sites needing fumigations. At the Capitol Hill Anthrax Site, EPA fumigated the Daschle suite in the Hart Senate Office Building with chlorine dioxide gas on 1 December 2001. That suite consists of 90,000 cubic feet on two floors. The fumigation significantly reduced the load of spores resulting from the opening of the contaminated letter to Senator Daschle on 15 October in the mail receiving area. Thereafter, surface treatments with aqueous chlorine dioxide were performed, and all postremediation environmental samples in the suite were negative for growth of *B.a.* spores. The entire Hart Building was reopened on 22 January 2002.

The Brentwood facility consists of 14 million cubic feet on two floors. A total of four workers at the facility contracted inhalational anthrax, of whom two died. Following its closure on 21 October 2002, the site was demonstrated to have widespread *B.a.* contamination. The USPS decided to fumigate the entire site at one time, using chlorine dioxide gas. That fumigant was chosen to be consistent with the remedial process for the Capitol Hill site. The USPS had to resolve a number of safety and efficacy issues prior to the fumigation, given the large size of the facility. The fumigation was scheduled to begin on 13 December.

The interim criteria currently being used for judging the effectiveness of the fumigation of a site are twofold: (1) the killing of all spores on all surrogate spore strips placed prior to the fumigation in areas of known or suspected contamination and in areas hard to reach by the fumigant and (2) zero growth of *B.a.* spores from all postfumigation environmental samples.

Anthrax remediation risk assessment research needs include a determination of the minimum number of spores needed to induce inhalational anthrax, susceptibility factors for anthrax, modes of action of the *B.a.* toxins, and re-aerosolization properties of finely milled *B.a.* spores inside buildings.

BRIDGING RISK DIVIDES

2003 Society for Risk Analysis Annual Meeting—7-10 December—Baltimore, Maryland

“Bridging Risk Divides” is the theme for the 2003 Society for Risk Analysis Annual Meeting. Inspired by the 2002 plenary session on risk in the developing world, this meeting will highlight building links among risk disciplines and sectors (academia, industry, government, and nonprofit), as well as the haves and the have-nots.

ABSTRACT DEADLINE 9 MAY

Abstracts must be submitted online.

Check the Web site for submission information (www.sra.org) or contact the Secretariat at SRA@BurkInc.com.

We are also interested in your

- **Feedback** inspired by the 2002 annual meeting
- **Colleagues** who are not SRA members who should be
- **Interest** in helping with the 2003 annual meeting

Please forward your ideas, concerns, and contacts to Program Chair Caron Chess, chess_c@aesop.rutgers.edu

If you wish to be on the *Program Committee*, please let Caron know. The Program Committee meeting will be held in early June in the Washington, D.C., area. We have limited travel funds so particularly appreciate the help of people nearby.

Looking at Terrorism from Every Angle

Ken Duncan

The Interagency Intelligence Committee on Terrorism (IICT) advises and assists the Director of Central Intelligence in the coordination and dissemination of national intelligence on terrorism and promotes the effective use of Intelligence Community resources on terrorism issues. Its membership includes more than 70 U.S. Government agencies from the intelligence, defense, law enforcement, regulatory, crisis management, and regulatory communities placing it at the intersection of homeland security and the Intelligence Community. We look at all aspects of terrorism. In this regard, although the committee has gone a long way toward bringing together many parts of the Federal Government to focus on the issue of terrorism, residual "cultural" and communications barriers still remain.

It is important to realize that the Intelligence Community does not do risk analysis. Its function is to provide threat intelligence and assessments, which when considered in conjunction with vulnerability studies equates to risk. When looking at terrorist threats, "we see through a glass darkly"—this is why analysis is an art, not a science. Terrorists operate in small cells (a quintes-



sential old-boy network), communicate by trusted couriers, and practice good security. To penetrate their networks, therefore, one has to be very good and very lucky.

What will happen next? Here are three unpleasant thoughts: (1) because of terrorism's ability to promote panic at relatively low cost it will remain a popular tool of the weak, (2) the September 11th and anthrax attacks will inspire future terrorists to similarly exploit the vulnerabilities of open societies, and (3) terrorists will have the means of conducting attacks in the United States.

There will also be unintended consequences of terrorist attacks. One could be ecological, for example, when a bombed tanker pollutes beaches. Another is financial, for example, the anthrax attack which cost millions in cleanup and closed buildings for months. In calculating the risk factor here we must look beyond direct threats to the environmental consequences.

To fight terrorism effectively, we must not let attending to the high-probability but low-risk threats distract us from the low-probability but high-risk threats which are the most dangerous. That is where the challenge lies.



"Risk and Governance"

The First World Congress on Risk, 22-25 June 2003, Belgium

The First World Congress on Risk, cosponsored by the Society for Risk Analysis (SRA) and other scientific and professional organizations interested in risk, will be held 22-25 June 2003 at the Sheraton Brussels in Belgium.

"Risk and Governance" is the theme of this International Conference, reflecting the worldwide trend toward making better use of risk-oriented concepts, tools, and processes (derived from both research and practice) in public decision making and risk management. This is the first of a series of World Congresses on Risk that will be important, logical steps to further develop the field of risk analysis and its applications.

Updated List of Conference Organization and Sponsors

Sponsors: Organizations participating with SRA for the First World Congress on Risk include SRA-Europe (SRA-E), SRA-Japan (SRA-J), Society of Environmental Toxicology and Chemistry (SETAC), Society of Toxicology (SOT), International Association for Probabilistic Safety Assessment and Management (IAPSAM), International Union of Toxicology (IUTOX), International Council on Systems Engineering (INCOSE), German Foundation for Environment and Risk Management, American Physical Society (APS), UK Safety and Reliability Society (SARS), U.S. National Institute of Environmental Health Sciences (US NIEHS), World Business Council on Sustainable Development (WBCSD), U.S. Department of Energy (US DOE), American Chemistry Council (ACC), and German Commission on Harmonizing Risk Standards (GCHRS).

Conference Organizers: Robin Cantor, Rae Zimmerman

Planning Committee:

SRA John Hearne, Richard Belzer, Gail Charnley, Bernard Goldstein, Yacov Haimes, Igor Linkov, Timothy McDaniels, Mitchell Small
 SRA-E Roger Kasperson, Joanne Linnerooth-Bayer, Ragnar Löfstedt, Ortwin Renn, Joyce Tait
 SRA-J Saburo Ikeda, Michinori Kabuto
 SETAC Anne Fairbrother
 SOT Michael Dourson
 NIEHS Chris Schonwalder

World Congress on
Risk Web Site

[www.sra.org/
worldcongress3.pdf](http://www.sra.org/worldcongress3.pdf)

Conference Coordinator: Society for Risk Analysis, 1313 Dolley Madison Blvd., Suite 402, McLean, VA 22101, 703-790-1745, fax: 703-790-2672, email: SRA@BurkInc.com



Specialty Groups

Economics and Benefits Analysis Specialty Group

Scott Farrow, Chair

The first anniversary of the new Economics and Benefits Analysis Specialty Group (EcBen) occurred in New Orleans with a successful joint workshop, two paper sessions, a poster session, and a specialty group meeting. The group coorganized the workshop "From Quantitative Risk Assessment to Cost-Benefit Analysis: Tools, Methods and Techniques" with the Food/Water Safety Risk Specialty Group. The high-profile example of acrylamide was woven into many of the presentations made by researchers from government, nonprofits, and the private sector. Over 20 people attended. More information is available from Cristina McLaughlin (Cristina.McLaughlin@cfsan.fda.gov). The two organized sessions and a poster session featured three best paper finalists, a best paper winner, and two international travel award presenters. The sessions were chaired by Dominic Mancini and Zubair Saleem.

The mixer and meeting of the EcBen group featured a discussion on the direction of the new group. Ideas for future activities include working jointly with other groups, outreach to all interested parties, and symposia and workshop planning. Interest also existed for following up a meeting of members held last year in the Washington, D.C., area and planning joint activities for 2003 with the D.C. chapter. On business items, a motion for a \$10 membership fee was passed and officers were elected: Scott Farrow (chair); Dominic Mancini (vice-chair/treasurer); and Sue Ferenc and Clark Nardinelli (secretary/outreach). The Economics and Benefits Analysis Specialty Group welcomes suggestions for joint activities or other suggestions. Contact Scott Farrow (farrows@gao.gov).

Ecological Risk Assessment Specialty Group

Igor Linkov, Chair, and Randy Ryti, Chair-elect

The Ecological Risk Assessment Specialty Group (ERASG) held its annual meeting during the Society for Risk Analysis Annual Meeting in New Orleans. The agenda included nominations/election for chair-elect, professional development courses, student travel awards, specialty group Web site, and initial plans for the 2003 annual meeting.

To maintain continuity of leadership in the specialty group, a sequence of chair-elect, chair, and past-chair was started. Nominations for the chair-elect position were solicited before the meeting and one self-nomination was received from Dr. Randy Ryti. As no other nominations for chair-elect were received at the meeting, the 2003 chair-elect for the specialty group will be Ryti. He is a Senior Scientist at Neptune and Company, Inc., with broad interests in environmental statistics, chemistry, and toxicology. Ryti holds a PhD in biology from the University of California, San Diego and has over 20 years of experience in basic and applied environmental problems. His current interests include application of risk assessment tools to environmental decision making, interpretation and presentation of complex environmental data, and arid ecosystems risk assessment evaluation and interpretation.

At this year's annual meeting, ERASG sponsored two symposia, two professional development workshops, four platform

sessions, and a poster session. Our special thanks to Drs. Ron Checkai, Mark Powell, and Rob McDowell for organizing workshops and symposia. The professional development workshops at the 2002 meeting (Introductory and Advanced Bayesian Techniques) were successful and generated revenue for the specialty group. The funds generated from these courses may be used to support a Student Best Paper Award, future short courses, and student travel grants to future society meetings. Other short courses will be solicited for the 2003 annual meeting in Baltimore.

Another topic of discussion was the specialty group Web site. Ryti volunteered to start this effort. Initial suggestions were to advertise opportunities for the upcoming meetings and to provide links to other relevant organizations, like the SETAC Ecorisk specialty group and current activities of that group.

There was also some discussion on ways to increase interest in the specialty group. There were suggestions to start or to continue to forge association with other SRA specialty groups—like the Exposure Assessment and Economics and Benefits Analysis groups. Charlie Menzie offered to help develop a joint symposium with the Economics and Benefits Analysis Specialty Group. Igor Linkov will continue to build on the relationship with the Exposure Assessment Specialty Group. Another suggestion was to solicit papers on topics of local interest for the 2003 Baltimore meeting. Such topics may include marine ecological risk and the Chesapeake Bay. Anne Sergeant offered to contact local universities to elicit interest in attending the annual meeting. Finally, joint activities with regional chapters were also encouraged. ERASG supported a Special Seminar in the Boston area on 13 January 2003. Gordon Butte and Sarah Thorne of Decision Partners spoke on "Improving Ecological and Environmental Management Effectiveness with Strategic Risk Communication." Thomas Gloria of ICF Consulting presented a lecture on "A Taxonomy of Life Cycle Impact Categories: Focus on Ecological Risk."

In the past year, ERASG was sponsored by ICF Consulting (www.icfconsulting.com), Neptune and Company (www.neptuneandco.com), and the American Chemistry Council (www.americanchemistry.com). If you or your company would like to sponsor ERASG in general or specific ERASG activities (such as student fellowships, workshops, etc.), please contact Igor Linkov (ilinkov@icfconsulting.com).

Risk Communication Specialty Group

Robert E. O'Connor, Chair

The annual business meeting of the Risk Communication Specialty Group (RCSG) is a celebration of the previous year's activities, a chance to plan together for the next year, and an opportunity to socialize with old friends and meet new ones. The availability of refreshments at the meeting facilitated discussion and deepened our glow of exuberance.

Regarding celebration, SRA councilor Steve Lewis of Exxon Biomedical Sciences presented Melissa Simons of Ohio State University with the RCSG Annual Student Paper Award. Attendees expressed their appreciation to ExxonMobil for its long-term support of this award. Although ExxonMobil funds the award, the company plays no role in the judging. This year Robert Griffin managed the competition with re-

viewers Ann Bostrom, Katherine McComas, Kurt Neuwirth, Susan Santos, and Cliff Scherer.

Because of the high quality of many student paper submissions, the group decided that more than one paper should receive recognition. In the future, the RCSG will award two runners-up with both official recognition and a paid membership in the Society and the RCSG. Ragnar Löfstedt proclaimed that the *Journal of Risk Research* will fund one of the memberships.



SRA Councilor Steve Lewis of Exxon Biomedical Sciences presents Melissa Simons of Ohio State University with the RCSG Annual Student Paper Award.

The April issue of *Risk Analysis* will focus on risk communication. In light of the success of this competition, RCSG will pursue a fresh special issue, possibly for publication in the *Journal of Risk Research*.

Attendees listened to Richard Lempert, division director for social and economic sciences at the National Science Foundation (NSF), announce that NSF's new priority area of "human and social dynamics" includes a focus on decision making and risk management. He encouraged RCSG members to check the NSF Web site (www.nsf.gov/home/sbe) for information as this opportunity moves forward. He also reminded members that the ongoing program in decision, risk, and management sciences (DRMS) is looking for good risk communication proposals. He encouraged members to contact DRMS program director Robert O'Connor for information.

Regarding goals for the new year, a major undertaking is to improve the Web site (www.sra.org/rcsg), including developing a mechanism to make new research available to practitioners as well as to academics in a useful form. Another goal is to develop workshops that will appeal to practitioners for inclusion at the 2003 annual meeting in Baltimore.

Christina Drew, Lois Levitan, and Henry Willis (executive committee), Felicia Wu (secretary treasurer), Christine Brittle (student representative), and Joseph Arvai (vice-chair) are newly elected officers. They expressed their desire to model their work on the performance of the outgoing officers, although they also realized the problem of setting such high standards, especially those of outgoing chair Katherine McComas. Besides organizing the business meeting, McComas also scheduled an early-morning roundtable on teaching risk communication at the postsecondary level. Two dozen participants shared syllabi (to be posted on the RCSG Web site), experiences, and ideas. Participants found the experience valuable and urged its inclusion in the 2003 annual meeting.

RCSG is inclusive, not exclusive. We invite all SRA members to visit our Web site, sign up for the risk-com listserv (the Web site provides instructions), and join our specialty group. To make suggestions or even rant, do not hesitate to contact me (roconnor@nsf.gov) or vice-chair Joseph Arvai (arvai.7@osu.edu).

Dose Response Specialty Group

John Lipscomb, President

To further stimulate student participation in the annual meeting, held December 2002 in New Orleans, the Dose Response Specialty Group (DRSG) conducted a competition for the best student presentation in the area of dose response assessments. Justin Teeguarden (ENVIRON Corporation) chaired the awards committee. After reviewing the submitted abstracts, the committee selected winners, and cash awards and plaques were presented at the annual meeting. The winning abstract ("Dose-Timing Information Improves the Clinical Explanatory Power of Data on Patient Compliance with Antiretroviral Drug Regimens") was submitted by Bernard Vrijens, University of Ghent, Belgium.



Justin Teeguarden (right) presents Bernard Vrijens of the University of Ghent, Belgium, with a plaque and student travel award for the winning abstract submitted to the Dose Response Specialty Group student award competition.

Two runners-up were selected by the committee: "Choice of Microbial Dose Response Models under Consideration of Attendant Sampling Error" by Andrea Vicari, North Carolina State University, and "A Model System to Explore the Hormesis Dose Response Relationship" by Marc Nascarella, University of Massachusetts, Amherst.

During December 2002 the Dose Response Specialty Group held its annual election of officers. John Lipscomb (US EPA/ORD/NCEA) ascended to the position of president, Gary Foureman (US EPA/ORD/NCEA) was chosen as president-elect, Peter McClure (Syracuse Research Corporation) was elected secretary/treasurer, and Paul Schlosser (CIIT Centers for Health Research) was selected to serve as trustee-at-large. Our liaison officer this year is Ann Bostrom (Georgia Institute of Technology). We deeply appreciate the services of Ron Brown as president during the past year.

The DRSG endorsed four sessions during the SRA meeting: Symposia on "Dose Response for Endocrine Effects" (Schlosser) and "Short-Term Exposure Limits" (Brown), the roundtable session "The Replacement of Default Uncertainty Factors with Those Based on Data" (Lipscomb), and a workshop cosponsored with the Food/Water Safety Risk Specialty Group, "Mechanistic Dose Response Modeling for Microbial Risk Assessment" (Peg Coleman and Isabell Walls).

The DRSG and the Food/Water Safety Risk Specialty Group hosted a mixer at the meeting which provided an opportunity for members of each specialty group to interact, enjoy some New Orleans-style appetizers, and unwind after the day's sessions. The keynote speaker at the mixer was Dr. Arie Havelaar, from the National Institute of Public Health and the Environment in the Netherlands, who spoke about microbial dose response modeling.

The DRSG holds monthly teleconference calls and hosts quarterly telefora (seminars) on dose response-related topics of interest from 3:30 to 4:30 EDT, and welcomes newcomers. The dial-in number is 202-260-7280, code 0577#.

Food/Water Safety Risk Specialty Group

*Cristina McLaughlin, Chair, Greg Paoli, Vice-Chair,
Peg Coleman, Secretary*

At the December 2002 SRA Annual Meeting in New Orleans, the Food/Water Safety Risk Specialty Group (FWSRSG) co-sponsored two full-day workshops: "Mechanistic Dose Response Modeling for Microbial Risk Assessment," cosponsored with the Dose Response Specialty Group, and "From Quantitative Risk Assessment to Cost Benefit Analysis: Tools, Methods, and Techniques," cosponsored with the Economics and Benefits Analysis Specialty Group. Both full-day workshops held on Sunday—prior to the annual meeting—were a great success.

The FWSRSG also held a business meeting on 10 December to welcome this year's elected officers and to discuss future activities for the group. During the Tuesday night meeting, ideas for a workshop and symposia at next year's annual meeting were discussed. Potential topics included the use of epidemiological (food borne disease outbreak) data in risk assessment, risk assessment of genetically modified organisms, risk assessment of irradiated food, risk assessment of acrylamide in food, risk issues on food security and traceability, and risk assessment issues related to nutrition.

After the business meeting, the FWSRSG cohosted a mixer with the Dose Response Specialty Group. During this event, members of both groups enjoyed a chance to mingle in an informal setting. The highlight of the mixer was a thought-provoking presentation by Dr. Arie Havelaar on "Use of Animal Models for Developing Mechanistic Microbial Dose Response Models." Havelaar presented data from his laboratory and four prospective approaches for applications in risk assessment, with his assessment of strengths and weaknesses for each approach.

In spite of the late hour, the presentation stimulated an active dialogue with interesting perspectives from members of both specialty groups on common challenges of interpretation and extrapolation. Some of the ethical implications of human and animal clinical trials were discussed from European and U.S. perspectives. Much thanks to Dr. Havelaar for his insightful presentation and also to SRA for its financial support for the mixer.

If you would like more information about the activities of the specialty group, you may contact Cristina McLaughlin at Cristina.McLaughlin@cfsan.fda.gov, Greg Paoli at gpaoli@decisionanalysis.com, or Peg Coleman at peg.coleman@fsis.usda.gov. In addition, please contact one of the officers if you would like to develop a topic as a workshop or symposium for the next annual meeting (December 2003) in Baltimore. You may also visit the SRA Web site (<http://www.sra.org>) and follow the links from Chapters and Sections to the FWSRSG Web site for online information.

Exposure Assessment Specialty Group

Susan Flack, Chair

The Exposure Assessment Specialty Group (EASG) had a much-improved presence at the 2002 annual meeting and wishes to thank all symposium and mixer participants, especially Pamela Williams, for organizing the game-show mixer which set new records for both attendance and fun. During the coming year, EASG plans to host a student paper award, establish a group Web site, and cosponsor a symposium with another SRA specialty group at the 2003 annual meeting in Baltimore. The new EASG chairperson and chairperson-elect for 2003 are Susan Flack (sflack@ensr.com) and Sheryl Beauvais (sbeauvais@cdpr.ca.gov).

For information on the Exposure Assessment Specialty Group and its activities, please contact Susan Flack at sflack@ensr.com; ENSR, 1544 North Street, Ste. 110, Boulder, CO 80304; phone: 303-818-5118; fax: 303-939-8318. 

SRA Call for 2003 Award Nominations

The Society for Risk Analysis (SRA) Awards Committee invites nominations for the following 2003 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 2003 award will be for the private sector.

The **Chauncey Starr Award** honors individuals under the age of 40 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 **25 April 2003** to the SRA Secretariat (1313 Dolley Madison Blvd., Suite 402, McLean, VA 22101; fax: 703-790-2672; email: SRA@BurkInc.com).

Please note that the deadline for nominations is earlier this year.



Chapter News

Northern California Chapter

Michele Emerson Amaral, Past-Secretary

The Northern California Chapter of the Society for Risk Analysis (NCCSRA) held its annual fall meeting 29 October 2002, featuring four presentations on "Challenges of Emerging Chemicals." This well-attended seminar focused on chemicals that are potential regulatory, public health, and environmental challenges for the coming years.

John Gregson, a Senior Chemist at the San Francisco Public Utilities Commission, discussed consumer chemicals as indicators of wastewater contamination. Thomas Mohr, a Solvents and Toxics Cleanup Liaison at the Santa Clara Valley Water District, addressed 1,4-dioxane and other solvent stabilizer compounds in the environment. Renae Magaw, a Staff Toxicologist with the ChevronTexaco Energy Research and Technology Company, discussed new toxicological issues associated with naphthalene and ethylbenzene. Finally, Thomas McDonald, a Staff Toxicologist/Specialist with the California Environmental Protection Agency's (Cal/EPA) Office of Environmental Health Hazard Assessment, addressed acrylamides in foods.

The NCCSRA held officer elections at the end of 2002. Please welcome the new and continuing chapter officers for 2003: President Greg Brorby of Exponent®, President-elect Ed Morales of AIG Environmental; Treasurer Robert Blaisdell of Cal/EPA Office of Environmental Health Hazard Assessment; Councilors Ravi Arulanantham of Geomatrix (Past-President), Mark Stelljes of SLR International Corp, and Amy Arcus-Arth of Cal/EPA Office of Environmental Health Hazard Assessment; and Secretary Kassandra Tzou of Camp, Dresser & McKee, Inc.

National Capitol Area Chapter

David Kent, Executive Committee

We're Back!!!

The National Capitol Area Chapter (NCAC) of SRA has recently been rejuvenated under the direction of an Executive Committee led by Kara Morgan, David J. Kent, Jerry Chandler, and others. For those not familiar with the chapter, we cover the greater Washington, D.C., area and have a variety of events being planned for 2003. Here are some of the highlights of the new NCAC.

Web Site

NCAC has a new URL for its Web site, which is the first place to check for upcoming events, member news, and specialty section activities (<http://groups.msn.com/NationalCapitolAreaChapterSRA/SpecialtySections>).

Currently there are five specialty sections established within the chapter, and additional sections are expected to form as new members join. Interested parties are asked to contact the respective section leaders.

Ecological Risk Analysis—David J. Kent, leader (dake@weinberggroup.com)

Human Health Analysis—John Keller, leader (toxicol@msn.com)
Risk, Science, and Law—Katy Kunzer, leader (Kathleen_kunzer@americanchemistry.com)

Economics and Benefits—Scott Farrow, interim leader

Risk Communication—Kara Morgan, interim leader (kmorgan@rti.org)

Quarterly Seminars

NCAC is planning a series of quarterly seminars sponsored by the specialty sections. Each seminar (or symposium) will cover a topic of interest to NCAC members.

1st Quarter: The first seminar of 2003, being planned by the Economics and Benefits specialty section, will feature the talk "Risk Assessment When the Stakes are High: Lessons from *When Smoke Ran Like Water* by Devra Davis, Ph.D." Dr. Davis is a world-renowned epidemiologist. The meeting will be held 6:30-8:30 p.m. on 20 February at the AAAS Building in Washington, D.C. More information can be found on the NCAC Web site.

2nd Quarter: The Ecological Risk Analysis specialty section is cosponsoring a full-day symposium in cooperation with the Chesapeake and Potomac Regional Chapter (CPRC) of the Society of Environmental Toxicology and Chemistry (SETAC). The symposium will cover the meeting of ecological and human health issues and will be held at the Calvert Marine Museum in Solomons, Maryland. More details are available on both the NCAC and CPRC Web sites (www.cprcsetac.org).

3rd and 4th Quarter: To Be Determined

More Information

Besides the above, NCAC is planning to sponsor social events, dinners, happy hours, etc., to encourage networking among chapter members. For more information, contact Kara Morgan (kmorgan@rti.org) or David Kent (dake@weinberggroup.com) or check out the NCAC Web site.

New England Chapter

Susan Matkoski, Newsletter Coordinator

On 13 November 2002 Dr. Jim Cogliano, Chief of the Quantitative Risk Methods Group at the Environmental Protection Agency's (EPA) National Center for Environmental Assessment in Washington, provided an update on the EPA cancer guidelines. EPA is updating the methodology used to evaluate the potential of chemicals for causing cancer in humans. In general, the revised guidelines will emphasize analysis of all available data, including information about the agent's mode of action. The revised guidelines will also call for explicit consideration of risks to children in each assessment.

The meeting was held at the Region I headquarters in Boston and was well attended by local scientists as well as by EPA staff. This meeting gave people who may not otherwise have commented on the guidelines an opportunity to become acquainted with the process used by EPA, and the reasons for the recent changes in this process, as well as an opportunity to comment on the outcome.

Jim's slides are posted on the New England Chapter (SRA-NE) Web site (<http://www.sra-ne.org>). The Proposed Guidelines are available at <http://www.epa.gov/ORD/WebPubs/carcinogen/>.

Unfortunately, the 5 December meeting was cancelled because of a storm. It is planned that the speakers will be rescheduled.

On 8 January we welcomed Dr. William Thilly, PhD, Professor of biological engineering and Director of the Center for Environmental Health Sciences, Massachusetts Institute of Technology, who presented "Review of the Evidence for Environmental Cancer, Risk Factors Among and Within the United States," and Dr. James Heltshe, PhD, Professor of statistics,

University of Rhode Island, who presented a talk on “Bootstrap Sampling and Bootstrap Estimation.”

Other upcoming seminar dates are 12 February, 4 March (special session with Licensed Site Professionals [LSPs]), 12 March, 9 April, 14 May, and 11 June. In addition, a possible joint session with the local chapter of the Society of Toxicology is being planned for April.

SRA-NE Membership

Our officers would like to hear from members of the National SRA who live in New England so that we can communicate with, and plan activities for, all New England members. In the past, activities have been centered in Boston, Massachu-

setts, but we would like to sponsor some events in other areas of New England as well. To do that, we need to know where interested members are!! Please send an email to Karen Vetrano or Marion Harnois (marion.harnois@worldnet.att.net) so that we can include you on the mailing list for upcoming activities. You may also keep in touch with SRA-NE news and events by visiting our Web site (www.sra-ne.org).

Membership is not necessary for attendance at meetings and activities, but if you wish to support the chapter as a member, contact Secretary Karen Vetrano (860-298-6351, kvetrano@trcsolutions.com) or Treasurer Arlene Levin (781-674-7369, Arlene.Levin@erg.com). 



Regulatory Risk Review

Risk Ironies

David Clarke, American Chemistry Council

When the World Health Organization (WHO) recently published its report evaluating the 20 biggest worldwide risks to human health, two major killers stood out: malnutrition in poor countries and obesity in rich countries. Both contribute significantly to disease burden, with malnutrition estimated to have caused 3.4 million deaths in 2000—mainly in Africa (1.8 million) and Asia (1.2 million)—and “overweight and obesity” estimated to kill about 220,000 men and women a year in the United States and Canada and about 320,000 men and women a year in Western European countries. “The report shows that a relatively small number of risks cause a huge number of premature deaths and account for a very large share of the global burden of disease,” according to the introduction of the *World Health Report 2002, Reducing Risks, Promoting Healthy Life*, released in late October 2002.

For the risk assessment community, the report should make interesting reading on many levels. Not only does it prompt ruminations about the now room-temperature debate about relative risks—which once raged so hotly in the U.S. Congress and across many states—but it also blares the message clearly and consistently that risk assessment has a major role in helping to define and manage risks facing rich and poor societies alike. In a message accompanying the report, WHO Director-General Dr. Gro Harlem Brundtland reminds us that “virtually every major advance in public health has involved the reduction or elimination of risk,” including drinking-water supply and sanitary improvements made during the 19th and 20th centuries and mass immunization programs to reduce risks from infectious diseases. She also notes, “The best health policies are those based on scientific evidence.”

Every chapter of the WHO report deals with risk findings and risk concepts. Chapter 2, for instance, deals with “Defining and Assessing Risk to Health” and explains the importance of focusing on health risks as a means to prevent disease and injury in the first place rather than waiting until disease occurs and then pursuing a “rule of rescue” to treat disease after it has occurred. “Reliable, comparable and locally relevant information on the size of different risks to health is therefore crucial to prioritization, especially for governments setting broad direc-

tions for health policy and research,” the report concludes, while noting the typical shortage of such information and the opportunity such information gaps create for interest groups to either “downplay or to overestimate some risks.” Chapter 2 also tackles analytical issues, such as the need for a “common currency” (for example, disability-adjusted life year) to assess risk factors. A separate chapter on “Perceiving Risks” reviews recent controversies over quantitative risk and the emerging importance of risk perceptions in understanding risk issues.

Reading the *World Health Report 2002* serves to remind us that the Environmental Protection Agency (EPA) was originally cobbled together in 1970 from parts of several public health agencies, and thus we see such familiar EPA issues as unsafe drinking water and urban air pollution discussed in the report. But, as a global assessment of the biggest risks, the WHO report goes far beyond risks addressed by EPA programs to encompass such towering risks as unsafe sex (AIDS), alcohol abuse, tobacco, and indoor air problems caused by the burning of solid fuels such as dung, wood, and agricultural residues. Although the breadth of the WHO report might lead some to dismiss its relevance for U.S. policy makers—after all, what have malnutrition and dung burning got to do with breast cancer in Long Island or the Great American Dioxin Debate?—it nevertheless ought to inform our own thinking about risk in a number of ways. Among other things, WHO calls attention to the unhealthy diets, rich in salt, fat, and sugar, of citizens in the wealthiest nations and urges not only healthier personal choices but also stronger guidelines—perhaps even legislation—to reduce unhealthy ingredients in food. It should also highlight for us the fact that the path toward sustainable development must be a path of reducing both risks *and* poverty, given that poverty is itself such a risk factor.

However one reads it, the report’s analyses are well worth pondering, and contain some interesting ironies. Perhaps its insights will prod us to stick with our New Year’s resolutions for 2003 to exercise more and eat healthier diets—and if not, there will be another report next year, to remind us again.

The report is available online at <http://www.who.int/whr/2002/en/>. 

... two major killers stood out: malnutrition in poor countries and obesity in rich countries.



SRA-Europe

Andrea T. Thalmann, Information Officer
Martin Clauberg

The successful Society for Risk Analysis-Europe (SRA-E) Berlin 2002 conference was detailed in the last issue of the *RISK newsletter* (Fourth Quarter 2002). Additionally, however, SRA-E would again like to welcome the nearly 100 new members to the Society. This positive membership development and other important issues were discussed at a recent SRA-E Executive Committee meeting held on 11 January 2003 in Berlin.

The discussants at the meeting included Peter M. Wiedemann (President), Jose M. Palma Oliveira (Past President), Peter Allen (Executive Secretary), Jan M. Gutteling (Treasurer), Gisela Böhm (Committee Member), Martin Clauberg (Committee Member), Andrea T. Thalmann (Information Officer), and Margaret Sherry (SRA-E Secretariat). The important issues deliberated were Web site redevelopment, move to a permanent conference organizer, SRA-E 2004 conference, SRA-E elections of new committee members, *Journal of Risk Research* and special Berlin Conference issue, other membership issues, SRA World Congress, and SRA-E Information Brochure.

The SRA-E Web site will finally receive some much-needed professional attention and a proposal by a Web site design company has been accepted for implementation. Besides a quick update of vital information, the redevelopment will provide in the near-to-middle term a new face for the SRA-E Web site with several value-added features such as discussion forums, regional and country-specific notices for risk-related conferences and events, and linked pages to risk-related institutions, organizations, and sponsors. Special consideration for platform-specific issues and access for disabled users will be planned. This major SRA-E Web site redevelopment can be realized through the healthy budgetary condition of the Society and a positive balance of the Berlin 2002 conference. It is hoped that potential contributions of sponsors featured on the Web site will help offset the costs of the Web site redevelopment.

In addition to the permanent secretariat (please see the Web site for contact information, www.sraeurope.org), the Executive Committee agreed that a permanent conference organizer would be of great benefit for increasing the professional handling of future SRA-E conferences. This is of special importance in light of the European expansion and the necessity that SRA-E will in the future have a much larger geographic area of coverage. The Executive Committee has asked for three proposals of European conference organizing companies for review.

It is hoped that a permanent conference organizer and early planning for the SRA-E 2004 conference will ensure many more successful conferences. A Special Conference Committee has been created (Anna Vari, Peter Allen, Martin Clauberg) and will present a proposal for a location of the SRA-E 2004 conference for decision at the next Executive Committee meeting in March.

The SRA-Europe will not hold a separate conference in 2003, opting rather to be a partner in the SRA World Congress (see last paragraph and notice on page 11). Thus, the election of new Executive Committee members has not been so time critical and has slipped somewhat. A list of nominees has now been developed and a ballot will be sent shortly to the SRA-E members. Please see the Web site for current election information. While at the Web site, please make sure to go to the online

SRA membership directory (www.sra.org) and update your personal contact information so that the ballots can be mailed to your current address.

A review of the activities of the *Journal of Risk Research* was recently published by the editorial board in an editorial in the last issue of the journal (vol. 6, no. 1, 2003). Summarizing, the circulation is up 10% over last year, the publishers—Taylor & Francis—renewed the contract to publish the journal for at least another five years in addition to holding the subscription prices for SRA members, and there will be an increase in issues per volume from four to six issues, not including special issues. The Executive Committee approved plans to publish a Special Berlin 2002 Conference Issue and has selected volunteers to constitute a special editorial board to aid the editors and expedite the publication.

One of the most important issues the Executive Committee discussed is the topic of retention and expansion of membership. In part as a response to the valuable input received at the Berlin 2002 conference, the Executive Committee has agreed to develop a position paper on membership of the SRA-E under the leadership of Jose Palma Oliveira. It is planned that the position paper will address membership issues, including, for example, strategies for supporting development of country and regional chapters—an important effort especially in light of European expansion.

To help members get the most of the Society as well as aiding in the implementation of the membership strategies, an information brochure for SRA-E will be developed and presented at the SRA World Congress.

The First World Congress on Risk, 22-25 June 2003 in Brussels, Belgium, is a joint conference of several participating organizations. The SRA-E Executive Committee is actively looking forward to this event and is pleased to see that many SRA-E members have developed and submitted proposals for Mini-Symposia. The SRA-E will hold its annual business meeting at the World Congress. The Executive Committee is considering plans to host a special reception for the members and will seek sponsors to help make this a memorable event. As mentioned above, please also look for the SRA-E information brochure at the World Congress. If you have comments or ideas about this or other issues, please contact SRA-E through the Secretariat (for contact information, please see the Web site at www.sraeurope.org).



A living statue on Jackson Square in New Orleans. For more photos from the 2002 Society for Risk Analysis Annual Meeting in New Orleans check the SRA Web site at www.sra.org.

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Member News

Robert J. Griffin

Robert J. Griffin, professor in the College of Communication and Director of the Center for Mass Media Research at Marquette University (MU) in Milwaukee, has been appointed by the National Academy of Sciences (NAS) to the National Research Council's new Committee on Emerging Issues and Data on Environmental Contaminants. Griffin, a former chair of the Society for Risk Analysis Risk Communication Specialty Group, is serving in his capacity as a researcher in health and environmental risk communication. NAS advises the federal government on scientific and technical matters.

The new standing committee is made up of 22 members from the academic and private realms. Governmental agencies are represented via a federal liaison group, which includes representatives from the Food and Drug Administration and the

Environmental Protection Agency, among others. The committee met for the first time in early November 2002 and plans to meet three to four times a year.

Dominating the discussion at the first meeting were issues related to using new technologies to address environmental health issues. Toxicogenomics, the study of how an organism's genome influences its response to toxic substances, was presented as a new field that will impact environmental health from a variety of directions and perspectives. The implications of this new field for science and society will be the committee's first order of business.

Griffin teaches communication theory, research methods, and science, health, and environmental communication at MU. He was awarded Marquette's Faculty Award for Teaching Excellence in 1997.



Grant to Fund Educational Opportunities for African, Latino, and Native American College Students in Risk Analysis and Risk Management Disciplines

The Society for Risk Analysis (SRA) has received a \$15,000 grant from the ExxonMobil Foundation for the upcoming year to provide educational opportunities for African, Latino, and Native American college students who are interested in pursuing one of the risk analysis and risk management disciplines. Potential students should be enrolled in a college or university program in biology, chemistry, economics, psychology, geography, physics, environmental management, or other risk analysis-related disciplines. The competition for three student positions is open to all members of SRA.

If you are interested in hosting an intern, please contact Michael Greenberg, the SRA council member who worked with ExxonMobil to obtain the funding and who is administering the program for SRA (phone: 732-932-0387, x673; email: mrg@rci.rutgers.edu). Dr. Greenberg will provide you with the details and some examples. For example, last year an African American female student worked with Greenberg on a comparison of the legal restraints of redeveloping a Superfund site versus a brownfield site. Laboratory projects in toxicology, field studies in epidemiology, water resources, environmental justice, ecological risk analysis, and many other projects are welcome.

We have sufficient funds to support three students, but we hope to increase the size of the funding so that the Society can help increase the representation of African, Latino, and Native American populations in risk analysis and management.



Journal Notes

Risk Analysis: An International Journal An Official Publication of the Society for Risk Analysis

Risk Analysis provides a focal point for new developments in risk analysis for scientists from a wide range of disciplines. The analysis of risks is being increasingly viewed as a field in itself, and the demand for a more orderly and formal treatment of risks is great. *Risk Analysis* is designed to meet these needs of organization, integration, and communication. The journal covers topics of great interest to regulators, researchers, and scientific administrators. It deals with health risks, engineering, mathematical, and theoretical aspects of risks, and social and psychological aspects of risk such as risk perception, acceptability, economics, and ethics. All scientific articles in *Risk Analysis* are fully peer reviewed.

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Subscription and submission information can be found on the SRA Web site (<http://www.sra.org/journal.htm>).





Committees

Conferences and Workshops Committee

Scott Ferson, Chair

The Issues in Fire Risk Assessment and Management: Addressing the Spectrum from Expected to Extreme Events Symposium, cosponsored by the Society of Fire Protection Engineers and the Society for Risk Analysis, was held 5-6 December 2002 at the Astor Crowne Plaza Hotel in New Orleans, Louisiana, USA.

This two-day event offered a unique opportunity for all members of the fire protection engineering, building regulations, re-

search, academic, and risk analysis communities to discuss a broad range of issues related to fire risk assessment and management. The symposium featured 19 presentations, from the perspectives of four different countries (Australia, Switzerland, the United Kingdom, and the United States), on topics ranging from fire risk assessment methods, to risk- and performance-based regulations, to systems reliability. In addition to these issues, there was also discussion on factors that affect risk decisions, tools to help in the decision-making process, and national and international activities in the area of risk fire assessment. Total attendance was 40. 



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Social Science Research Training Fellowship for Junior Faculty

Applications are being solicited from junior faculty for a unique research training program aimed at fostering the next generation of social scientists addressing societal considerations of natural hazards and extreme events. This program, "Enabling the Next Generation of Hazard Researchers," is funded by the National Science Foundation and is being undertaken by the University of North Carolina at Chapel Hill in collaboration with faculty from seven other universities. The program will consist of a two-year series of workshops, tutorials, and discussions focusing on practical advice about research initiation and research proposal development for social science research addressing hazards and extreme events. This is a unique opportunity for junior faculty who are early in their research careers. Participants will receive an honorarium and travel expenses to workshops and meetings with senior faculty mentors.

Deadline for applications: 1 March 2003.

For more details, please visit our Web site at <http://enabling.unc.edu>.

Please contact Leanna Hush (hush@email.unc.edu) or Dr. Raymond Burby (burby@email.unc.edu) for more information.

RISK newsletter and SRA Web Site Advertising Policy

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

Ads may be placed both in the RISK newsletter and on the Web site for \$375 for 150 words and \$100 for each additional 50 words.

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

Camera-ready ads 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 15 January for the First Quarter issue (published mid-February), 15 April for the Second Quarter issue (mid-May), 15 July for the Third Quarter issue (mid-August), and 15 October for the Fourth Quarter issue (mid-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.

To place an employment ad on the Web site, fill out the online submittal form at www.sra.org/opptys.php. To place other ads on the Web site contact the SRA Webmaster at webmaster@sra.org. Ads placed on the Web site will usually appear several days after receipt. For additional information see the Web site at www.sra.org/policy.htm#events.



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Address Changes: Send to SRA@BurkInc.com

Update your email information

The Society for Risk Analysis will be sending members many important announcements by email. Please make sure the Secretariat has your most current contact information.

The Membership Directory is now online so you can check your information at www.sra.org (click on Membership Directory). Make changes there or contact the Secretariat at SRA@BurkInc.com.

Paper copies of the Membership Directory will no longer be printed and mailed to members.

Deadline for RISK newsletter Submissions

Information to be included in the **Second Quarter 2003 SRA RISK newsletter**, to be mailed mid-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 **5 April**.

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