#### Ann Bostrom

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#### **EARNED DEGREES**

Ph.D.	1990	Carnegie Mellon University	Public Policy Analysis
M.B.A.	1986	Western Washington University  Transfer credits from: Stockholm School of Economics	Emphasis in Statistics and Information Systems
B.A.	1983	University of Washington  Transfer credits from: Brandeis University, La Sorbonne, University of Stockholm	English, Creative Writing

### **EMPLOYMENT**

Professor, Daniel J. Evans School of Public Affairs, University of Washington (effective Sept)	2009-present
Associate Dean of Research, Daniel J. Evans School of Public Affairs, University of Washington	2007-present
Associate Professor, Daniel J. Evans School of Public Affairs, University of Washington	2007-2009
Adjunct Professor, School of Public Policy, Georgia Institute of Technology	2007-2010
Professor, School of Public Policy, Georgia Institute of Technology	2007
Associate Dean for Research, Ivan Allen College, Georgia Institute of Technology	2004-2007
Director, Decision Risk and Management Science Program, National Science Foundation	1999-2001
Associate Professor, School of Public Policy, Georgia Institute of Technology	1998-2007
Assistant Professor, School of Public Policy, Georgia Institute of Technology	1992-98
ASA/NSF/BLS Research Associate, Bureau of Labor Statistics	1991-92
Post-doctoral Research Fellow, Carnegie Mellon University	1990-91
Fulbright Scholar, Department of Psychology, University of Stockholm	1989-90
Head Teaching Assistant/Graduate Teaching Assistant, Carnegie Mellon University	1987-90
Statistician (summer internship), Census Bureau	1986
Graduate Research Assistant, Western Washington University	1985-86

#### **SCHOLARSHIP**

#### **PUBLISHED BOOKS**

- Bostrom, A., French, S.P. and Gottlieb, S.J. (Editors), <u>Risk Assessment, Modeling and Decision Support:</u> <u>Strategic Directions</u>. Springer-Verlag, Berlin, 2008.
- Morgan, M.G., Fischhoff, B., Bostrom, A. and Atman, C.J. <u>Risk Communication: A Mental Models Approach</u>. Cambridge University Press, 2002.
- Evans, G., A. Bostrom, R.B. Johnston, B.L. Fisher, and M.A. Stoto (Eds). <u>Risk Communication and Vaccination: Summary of a Workshop</u>. Vaccine Safety Forum, Board on Health Promotion and Disease Prevention, Institute of Medicine. Washington D.C.: National Academy Press, 1997. *Note: This is a monograph summarizing the workshop, not an edited collection of papers.*

#### **PUBLISHED PARTS OF BOOKS**

- Lombardo, P.A. and Bostrom, A. "Swimming Upstream: Regulating Genetically Modified Salmon," in B. Andrew Lustig, Baruch A. Brody, Gerald P. McKenny (Eds). Altering Nature, Volume Two: Religion, Biotechnology, and Public Policy. Volume 98, Philosophy and Medicine. Springer, Dordrecht, The Netherlands, 2008.
- Bostrom, A. (2008). "Putting Seismic Risk and Uncertainty on the Map." In Bostrom, A., French, S.P., Gottlieb, S.J. (Ed.), Risk Assessment, Modeling and Decision Support: Strategic Directions. Berlin: Springer-Verlag.
- Bostrom, A. and Atkinson, E. "Trust and Risk in Smallpox Vaccination" pp 173-186 in Michael Siegrist, Timothy C. Earle and Heinz Gutscher (Eds.), <u>Trust in Cooperative Risk Management: Uncertainty and Scepticism in the Public Mind</u>. Earthscan, London, 2007.
- Bostrom A. and Lashof, D. "Weather It's Climate Change" Chapter 1 (pp 31-43) in Susanne Moser and Lisa Dilling (Eds), <u>Creating a Climate for Change: Communicating Climate Change Facilitating Social Change</u>. Cambridge University Press, 2007.
- Evans, G. and Bostrom, A. "The Evolution of Vaccine Risk Communication in the United States: 1982-2002 (pp 57-71). In <u>Jordan Report 20th Anniversary: Accelerated Development of Vaccines 2002</u>, U.S. Department of Health and Human Services, National Institutes of Health, National Institute of Allergy and Infectious Diseases, 2002. <a href="http://www.niaid.nih.gov/dmid/vaccines/jordan20/">http://www.niaid.nih.gov/dmid/vaccines/jordan20/</a>
- Bostrom, A. and Fischhoff, B. "Communicating Health Risks of Global Climate Change." In <u>Research in Social Problems and Public Policy</u>, special issue, G. Böhm, J. Nerb, T. McDaniels & H. Spada (Eds). Environmental Risks: Perception, Evaluation, and Management, 2001.
- Bostrom, A. Who calls the shots?: Credible Vaccine Risk Communication. George Cvetkovich and Ragnar E Lofstedt (Eds.), Social Trust and the Management of Risk, World: Earthscan Publications (Island Press in the US), 1999.

- Bostrom, A. and G. Kingsley, "Citizenship on the Net: The case of environmentalism." Chapter in <u>The Information Revolution: Its Current and Future Consequences</u>. Westport, Conn. Ablex publishers (1998).
- Fischhoff, B., Bostrom, A., & Quadrel, M.J. "Risk perception and communication." In R. Detels, J. McEwen & G. Omenn (Eds.), Oxford textbook of public health, 987-1002. London: Oxford University Press, 1997.
- Bostrom, A., C.J. Atman, B. Fischhoff and M.G. Morgan."Public Knowledge About Indoor Radon: The Effects of Risk Communication." In J. Geweke (Ed.), <u>Decision Making under Risk and Uncertainty:</u>
  New Models and Empirical Findings, 243-251. The Netherlands: Kluwer Academic Publishers, 1992.
  (Peer-reviewed, book chapter. The book came out of the Fifth International Conference on the Foundation and Applications of Utility, Risk, and Decision Theories, Duke University, June 9-13, 1990, but only papers that were selected through peer-review after the conference were included).

#### REFEREED PUBLICATIONS

### Refereed Journal Articles

- Turaga R.M.R., Noonan D. and Bostrom A. Hot spots regulation and environmental justice. <u>Ecological Economics</u> (forthcoming).
- Park, J., Bostrom, A., Goodno, B.J. and Craig, J.I. Application of Probabilistic Decision Models for Seismic Rehabilitation of Structures. <u>International Journal of Information Technology & Decision Making</u> (forthcoming).
- Gregory R., Harstone M., Rix G. and Bostrom A. Seismic Risk Mitigation Decisions at Ports: Multiple Challenges, Multiple Perspectives. <u>Natural Hazards Review</u>, *(forthcoming, NHENG-40R2)*.
- Bostrom, A. and Lofstedt, R.E. Nanotechnology Risk Communication Past and Prologue. <u>Risk Analysis</u>, 30(11), 1645–1662, 2010.
- Reynolds T.W., Bostrom, A., Read, D. and Morgan, M.G. "Now What Do People Know About Global Climate Change? Survey Studies of Educated Laypeople." <u>Risk Analysis</u>, 30(10), 1520-1538, 2010.
- Bostrom, A. "Lead is like mercury: risk comparisons, analogies and mental models." <u>Journal of Risk Research</u>, 11(1-2), 99-117, 2008.
- Bostrom, A., Anselin, L., Farris, J. "Visualizing Seismic Risk and Uncertainty: A Review of Related Research." <u>Annals of the New York Academy of Sciences</u>. 1128: 29–40, 2008. [Refereed for selection into the volume].
- Dueñas-Osorio, L. Craig, JI, Goodno, BJ and Bostrom, A. "Interdependent Response of Networked Systems." ASCE Journal of Infrastructure Systems, 13(3), 185-194, September 2007.
- Bostrom, A., Barke, R., Turaga, R.M., O'Connor, R.C., Environmental Concerns and the New Environmental Paradigm in Bulgaria. <u>Journal of Environmental Education</u>, 27(3), 25-40, 2006.

- Bostrom, A., Turaga, R.M., and Ponomariov, B. "Earthquake Mitigation Decisions and Consequences." <u>Earthquake Spectra</u>, 22(2), 313-327, 2006.
- Woo, E.J., Ball, R., Bostrom, A., Shadomy, S.V., Ball, L.K., Evans, G., and Braun, M.M. "Vaccine Risk Perception Among Reporters of Autism after Vaccination: Vaccine Adverse Event Reporting System 1990-2001." <u>American Journal of Public Health</u>, 94(6), 990-995. June 2004.
- Dueñas-Osorio, L., Park, J., Towashiraporn, P., Goodno, B. J., Craig, J. I., Bostrom, A. & Frost, D. "Passive Response Modification for Fragility Reduction Within Consequence Based Engineering (CBE)," <u>International Journal of Structural Engineering and Mechanics (JSEM)</u>, vol 17 (3-4), 527-537, 2004. (Also published in the Proceedings of the U.S.-Korea Joint Workshop on Smart Infrastructural Systems, Pusan, Korea, August 23-24, 2002 pp. 103-113).
- Bostrom, A. "Future Risk Communication." <u>Futures</u>, (special volume on the future of social sciences, edited by Bruce Tonn) 35 (6), 553-573, 2003.
- Bostrom, A. and Löfstedt, R.E., "Communicating Risk: Wireless and Hardwired, <u>Risk Analysis</u> 23(2), 241-248, 2003. \*Note: This article was peer-reviewed, but is also the introductory piece for this special issue on risk communication co-edited by Bostrom and Löfstedt.
- Fisher E.B., Walker E.A., Bostrom A., Fischhoff B., Haire-Joshu D., Johnson S.B. "Behavioral science research in the prevention of diabetes: status and opportunities." <u>Diabetes Care</u>. Mar; 25(3): 599-606, 2002.
- Ball, L.K., Evans, G. and Bostrom, A. "Risky Business: Challenges in Vaccine Risk Communication." Pediatrics, March, 101, 453-458, 1998.
- Bostrom, A. "Risk Perceptions: Experts versus Laypeople." <u>Duke Environmental Law and Policy Forum</u>, VIII, 101-113, 1998. *Note: This was blue-booked*.
- Bostrom, A. "Vaccine Risk Communication: Lessons from risk perception, decision making, and environmental risk communication research." <u>Risk: Health, Safety and Environment</u>, 8(3), 177-200, 1997.
- Porter, A.L. and Bostrom, A. "Less labor, longer lives: Time to share." <u>Technology Analysis & Strategic Management</u>, 8(3), 315-329, Sep 1996. *Also reprinted as a chapter in <u>The Information Revolution: Its Current and Future Consequences</u>, Westport, Conn: Ablex publishers, 1998.*
- Bostrom, A., Morgan, M.G., Fischhoff, B. and Read, D. "What do people know about global climate change?: 1. Mental models." <u>Risk Analysis</u>, 14(6), 959-970, 1994.
- Read, D., Bostrom, A., Morgan, M.G., Fischhoff, B. and Smuts, T. "What do people know about global climate change?: 2. Survey studies of educated laypeople." <u>Risk Analysis</u>, 14(6), 971-982, 1994.
- Atman, C.J., Bostrom, A., Fischhoff, B. and Morgan, M.G. "Designing Risk Communications: Completing and Correcting Mental Models of Hazardous Processes, Part I." <u>Risk Analysis</u>, 14(5), 779-788, 1994. Also reprinted in Environmental Risk Planning and Management, and Simon Gerrard, R. Kerry Turner, and Ian Bateman, (eds.), Cheltenham, UK: Edward Elgar Publishing, 2001.
- Bostrom, A., Atman, C.J., Fischhoff, B. and Morgan, M.G. "Evaluating Risk Communications: Completing and Correcting Mental Models of Hazardous Processes, Part II." Risk Analysis, 14(5), 789-798, 1994. Also

- reprinted in Environmental Risk Planning and Management, and Simon Gerrard, R. Kerry Turner, and Ian Bateman, (eds.), Cheltenham, UK: Edward Elgar Publishing, 2001.
- Bostrom, A., Morgan, M.G., Adams, J., and Nair, I. "Preferences for Exposure Control of Power-Frequency Fields Among Lay Opinion Leaders." <u>Risk: Health, Safety and Environment</u>, 5(4), 295-318, Fall, 1994.
- Robinson, J.P. and Bostrom, A. "The overestimated workweek?: What time-diary measures suggest." Monthly Labor Review, 117(8), 11-23, 1994.
- Fischhoff, B., Bostrom, A. and Jacobs-Quadrel, M. "Risk Perception and Communication." <u>Annual Review of Public Health</u>, 14, 183-203, 1993. Reprinted in Judgment and Decision making.: An Interdisciplinary Reader, Second Edition. Terry Connelly, Hal Arkes, and Ken Hammond, Editors, Cambridge University Press, 2000, pp 479-499.
- Bostrom, A., Fischhoff, B. and Morgan, M.G. "Characterizing Mental Models of Hazardous Processes: A Methodology and an Application to Radon." <u>Journal of Social Issues</u>, vol. 48, no. 4, pp 85-100, 1992. Reprinted in R. Lößstedt & L. Frewer (Eds), (1998) The Earthscan reader in risk and modern society. London: Earthscan.
- Morgan, M.G., Fischhoff, B., Bostrom, A., Lave, L. and Atman, C.J. "Communicating Risk to the Public." Environmental Science & Technology, vol. 26, no. 11, pp 2048-2056, 1992.
- Roth, E., M.G. Morgan, B. Fischhoff, L. Lave, and A. Bostrom. "What Do We Know About Making Risk Comparisons?" Risk Analysis, vol. 10, no. 3, pp 375-387, 1990. Reprinted in R. Lofstedt & L. Frewer (Eds), The Earthscan reader in risk and modern society. London: Earthscan, 1998.

### Refereed Research Reports

- National Research Council, Committee on the Review of the Tsunami Warning and Forecast System and Overview of the Nation's Tsunami Preparedness, Ocean Studies Board, Earth and Life Studies. Tsunami Warning and Preparedness: An Assessment of the U.S. Tsunami Program and the Nation's Preparedness Efforts. National Academies Press, Washington, D.C., 2010. Committee members: John A. Orcutt (Chair), Martha R. Grabowski (co-Chair), Brian Atwater, Ann Bostrom, George Crawford, Richard K. Eisner, Jian Lin, Hugh B. Milburn, Dennis S. Miletti, Costas E. Synolakis, Nathan J. Wood, Harry Yeh, Claudia Mengelt (staff).
- National Research Council and Institute of Medicine, Committee on the Review of the Food and Drug Administration's Role in Ensuring Safe Food, Food and Nutrition Board, Board on Agriculture and Natural Resources. Robert B. Wallace and Maria Oria (Eds). Enhancing Food Safety: The Role of the Food and Drug Administration. National Academies Press, Washington, D.C., 2010. Committee members: Robert B. Wallace (Chair), Douglas L. Archer, Keith C. Behnke, Ann Bostrom, Robert E. Brackett, Julie A. Caswell, Lewis Grossman, Lee-Ann Jaykus, Tim F. Jones, Barbara Kowalcyk, J. Glenn Morris Jr., Martha E. Rhodes Roberts, Joseph V. Rodricks.
- U.S. Environmental Protection Agency Science Advisory Board Committee on Valuing the Protection of Ecological Systems and Services: A report of the EPA Science Advisory Board. EPA-SAB-09-012, May 2009, <a href="www.epa.gov/sab">www.epa.gov/sab</a>. Members: Barton H (Buzz) Thompson (Chair), Kathleen Segerson (Vice-Chair), William Louis Ascher, Gregory Biddinger, Ann Bostrom, James Boyd, Robert Costanza, Terry Daniel, A. Myrick Freeman, Dennis Grossman, Geoffrey Heal, Robert Huggett, Douglas E. MacLean, Harold Mooney, Louis F. Pitelka, Stephen

- Polasky, Paul G. Risser, Holmes Rolston, Joan Roughgarden, Mark Sagoff, Paul Slovic, and V. Kerry Smith.
- Institute of Medicine, Food and Nutrition Board, Committee on Nutrient Relationships in Seafood:
  Selections to Balance Benefits and Risks, Malden Nesheim and Ann Yaktine (Editors). Seafood Choices:
  Balancing Benefits and Risks. National Academies Press, Washington, D.C., 2006. Members: Malden C.
  Nesheim (Chair), David Bellinger, Ann Bostrom, Susan E. Carlson, Julie A. Caswell, Claude Earl Fox,
  Jennifer Hillard, Susan M. Krebs-Smith, Stanley T. Omaye, Jose M. Ordovas, W. Steven Otwell,
  Madeleine Sigman-Grant, Nicolas Stettler, Susan Ferenc (FNB liaison). Consultants: James T. Heimbach,
  Eric Loring, Nicolaas P. Pronk. Study Director: Ann L. Yaktine.
- National Research Council, Board on Radioactive Waste Management, Committee on Optimizing the Characterization and Transportation of Transuranic Waste Destined for the Waste Isolation Pilot Plant. <a href="Improving the Characterization Program for Contact-Handled Transuranic Waste Bound for the Waste Isolation Pilot Plant.">Isolation Pilot Plant</a>. National Academies Press, Washington, D.C., 2004. Members: Susan Wiltshire, (Chair), Chris Whipple (Vice-Chair), John C Allen, Ann Bostrom, Gregory R Choppin, Alfred Grella, Michael Mobley, Kenneth Mossman, Robert H Neill, John Plodinec, Detlof Von Winterfeldt, Raymond G Wymer, Milton Levenson (BRWM Liaison), Barbara Pastina (Study Director).
- Transportation Research Board, National Research Council, Committee for the Study of a Motor Vehicle Rollover Rating System. An Assessment of the National HighwayTraffic Safety Administration's Rating System for Rollover Resistance. Transportation Research Board Special report 265. National Academy Press, Washington, D.C., 2002. Members: David N. Wormley (Chair), Karin M. Bauer, James E. Bernard, Ann Bostrom, Susan A. Ferguson, B. John Garrick, Paul A. Green, David L. Harkey, J. Karl Hedrick, David C. Holloway, L. Daniel Metz, N. Eugene Savin, Kimberly M. Thompson, Jill Wilson (Study Director).
- Scholz, D.K, J.H. Kucklick, R. Pond, A.H. Walker, D. Aurand, A. Bostrom, and P. Fischbeck. <u>A Decision-maker's Guide to Dispersants: A Review of the Theory and Operational Requirements.</u> Prepared by Scientific and Environmental Associates, Inc., Cape Charles, VA. Prepared for the American Petroleum Institute, Washington, DC. API publication 4692 37 p. 1999b.
- Scholz, D.K, J.H. Kucklick, R. Pond, A.H. Walker, A. Bostrom, and P. Fischbeck. <u>Fate of Spilled Oil in Marine Waters: Where Does It Go, What Does It Do, and How Do Dispersants Affect It?</u> Prepared by Scientific and Environmental Associates, Inc., Cape Charles, VA. Prepared for the American Petroleum Institute, Washington, DC. API publication 4691, 43 p, 1999a.
- Bostrom, A., P. Fischbeck, JH Kucklick, R. Pond, A. Hayward Walker (1996). <u>Ecological Issues in Dispersant Use: Decision-Makers' Perceptions and Information Needs</u>. Scientific and Environmental Assoc. Inc., for the Marine Preservation Association. Washington DC, Oct 31, 1996.
- Transportation Research Board, National Research Council, Committee on the Study of Consumer Automotive Safety Information (CASI), Shopping for Safety: Providing Consumer Automotive Safety Information, Transportation Research Board special report 248. National Academy Press, Washington DC, 1996. Members: M. Granger Morgan (Chairman), Ann Bostrom, Thomas D. Gillespie, Lindsay I. Griffin III, Albert I. King, Wesley A. Magat, Roger E. Maugh, R. David Pittle, Allan F. Williams, Tom Carr, Greg Dana, Douglas Greenhaus, Henry Pony, Stephen R. Kratzke, Richard Pain (Transportation Research Board Staff), Nancy P. Humphrey (Study Director).

Bostrom, A., Fischbeck, P., Kucklick, J.H., and Hayward Walker, A. <u>A Mental Models Approach to the Preparation of Summary Reports on Ecological Issues Related to Dispersant Use</u>. Marine Spill Response Corporation, Technical Report Series, 95-019. Washington D.C. 1995.

#### **OTHER PUBLICATIONS**

### Encyclopedia articles (refereed)

- Bostrom, A. "Risk Assessment" in Mitcham, Carl (Ed), Encyclopedia of Science, Technology and Ethics. MacMillan Reference, 2005.
- Bostrom, A. "Risk Perception" in Mitcham, Carl (Ed), Encyclopedia of Science, Technology and Ethics. MacMillan Reference, 2005.

### Published papers (non-refereed)

- Bostrom, A. "The social amplification of risk." Review of "Social Amplification of Risk/" Journal of Risk Research, 8 (3): 277-280, 2005.
- Bostrom, A. "Risky Diseases, Risky Vaccines, Risky Policies." <u>Research Horizons</u>, Volume 20, Number 1, Fall, 2002.
- Stoto, Michael A., Evans, G., Bostrom, A. (1998)." Vaccine risk communication." <u>American Journal of Preventive Medicine</u>, April, Vol 14(3), 237-239.
- Bostrom, A. "Risq and risicum: Aspects of Risk." Review of Risk Analysis, Assessment and Management, J. Ansell and F. Wharton (Eds) <u>Journal of Behavioral Decision Making</u>, vol. 8, 1995.
- Bostrom, A. "Toward Effective Evaluation of Risk Communication." <u>Hazardous Substances & Public</u> <u>Health: A publication of the Agency for Toxic Substances and Disease Registry</u>, vol. 3, no. 4, pp 7-8, 1994. (This was reviewed internally at ATSDR and the Centers for Disease Control and edited after review).
- Atman, C.J., and Bostrom, A. "Risk Research: Back to Basics," <u>NAPEC Quarterly</u> (National Association of Professional Environmental Communicators), vol. 3, no. 2, pp 10-11, 1992.
- Bostrom, A. "Working Women." Transition, vol. 58, pp 162-168, 1992.

#### Other Science Advisory Reports (not independently refereed)

- U.S. Environmental Protection Agency Science Advisory Board Committee on Valuing the Protection of Ecological Systems and Services. <u>Review of EPA's Draft Ecological Benefit Assessment Strategic Plan;</u> An Advisory, 2005. EPA-SAB-ADV-05-004 (Chair Barton H (Buzz) Thompson).
- Board of Scientific Counselors, U.S. Environmental Protection Agency. <u>Communicating Research Results</u>. Prepared for the Assistant Administrator, Office of Research and Development, U.S. Environmental Protection Agency. US EPA BOSC, Washington DC, *May, 2004*. *Bostrom chaired the ad hoc committee on*

- Communications that prepared this report. This has been peer-reviewed, but not in a blind-review process as with NRC reports.
- Board of Scientific Counselors, U.S. Environmental Protection Agency. <u>Management Review of the Particulate Matter Research Program</u>. Prepared for the Assistant Administrator, Office of Research and Development, U.S. Environmental Protection Agency. US EPA BOSC, Washington DC, December, 2000. *Bostrom was Vice-Chair of the Exposure Subcommittee, which was chaired by J. Schnoor.*
- Science Advisory Board and Board of Scientific Counselors, U.S. Environmental Protection Agency. <u>A Joint SAB/BOSC Report: Review of the Science to Achieve Results (STAR) Program.</u> Prepared by a joint subcommittee of these two committees, comprised of Marilyn Brown, Randall Seeker (co-Chairs), Ann Bostrom, Stephen Brown, William E. Cooper and Ishwar Murarka. EPA-SAB-EC-00-008, US EPA SAB/BOSC, Washington D.C. March, 2000.
- Science Advisory Board, U.S. Environmental Protection Agency (1995). "An SAB Report: Recommendations for Radon Research." A report of the Radon Science Initiative Subcommittee of the Radiation Advisory Committee. Members: Richard G. Sextro (Chair), Ann Bostrom, David Brenner, Douglas Chambers, Raymond Guilmette, Philip Hopke, Genevieve M. Matanoski, Michael Reimer, Alan Siniscalchi, and James E. Watson. EPA-SAB-RAC-95-011, June 1995. US EPA SAB, Washington, D.C.
- Science Advisory Board, U.S. Environmental Protection Agency. "An SAB Report: Review of EPA's approach to screening for radioactive waste materials at a superfund site in Uniontown, Ohio." Prepared by the *ad hoc* Industrial Excess Landfill Panel of the Science Advisory Board. Panel Members: Jan Stolwijk (Chair), Ann Bostrom, Norman H. Cutshall, Robert Morrison, Oddvar Nygaard, Mitchell Small, Michael Stein, and Myint Thein. Robert J. Huggett originally served as chair. EPA-SAB-EC-94-010, US EPA SAB, Washington D.C., September 1994.

#### **CONFERENCE AND SEMINAR PRESENTATIONS**

### Invited and Keynote address

- Bostrom, A. (invited speaker). 21st century challenges in communicating weather and climate: Communicating Risk. U.S. National Oceanic and Atmospheric Administration's (NOAA) National Weather Service (NWS) International Sessions on Communicating Weather and Climate Information Saturday, January 22, 2011, 91st American Meteorological Society (AMS) Annual Meeting, Seattle, Washington.
- Bostrom, A. (invited speaker). Seismic Risk Perception, Planning, and Management at North American Seaports, Panel on Ports and Harbors. (based on paper co-authored with Tim Scharks, Lori Reimann-Garretson and Glenn Rix). Quake Summit 2010, NEES and PEER Annual Meeting. Marriott Marquis, San Francisco, October 8, 2010.
- Bostrom, A. Invited participant and speaker. Construing Climate Change. Climate Change Perceptions, Risk Communication and Public Engagement Workshop sponsored by UK Economic and Social Research Council through a Climate Leader Fellowship to Nick Pidgeon. Cumberland Lodge, Windsor Great Park, UK, 20-22nd July 2010.
- Bostrom A. (invited speaker) Characterizing mental models of emerging nanotechnologies: A nano sunscreen study. Nanotechnology Risk Perception Specialist Meeting, Center for Nanotechnology in Society, University of California, Santa Barbara, January 29-30, 2010.

- Bostrom, A. The potential to apply methods from psychology and risk assessment to the valuation of cultural ecosystem services. The National Center for Ecological Analysis and Synthesis "Cultural Ecosystem Services" group workshop: Cultural ecosystem services from marine and coastal systems: Counting the intangibles (working group member). Santa Barbara, CA, August 25, 2009.
- Bostrom, A. (invited speaker), "Local Global Warming: The media, NGO's and decision making." Plenary Roundtable on the Role of Politics, Media and NGOs, Bergen Summer Research School: Global Development Challenges, hosted by the City of Bergen at VilVite, Bergen, Norway, June 29, 2009.
- Bostrom, A. (invited speaker) "Now what do people know about Climate Change?" Emerging Research Agendas Seminar, February 27, 2009, Urban Planning and Design, University of Washington.
- Bostrom, A. Invited speaker panel on Paths to Earthquake Risk Reduction, Earthquake Engineering Research Institute-Western States Seismic Policy Council 2009 annual meeting "Earthquake Risk Reduction: Are Voluntary Actions the Key?", "Making Earthquake Risk Perceptions and Decisions More Effective." February 12, 2009, Salt Lake City, Utah.
- Bostrom, A. (invited speaker) plenary session on The Need for More Effective Risk Communication. Workshop on "Assessing, Managing and Communicating Environmental Risk: A Call to Action," Center for Science, Technology, Hubert H. Humphrey Institute for Public Affairs, University of Minnesota. December 3, 2008.
- Bostrom, A. (invited paper presenter). "Nanotechnology Risk Communication." NanoRisk Analysis: Advancing the science for nanomaterial risk management. Workshop September 10-11, 2008. Washington D.C. Paper co-authored by Ragnar Löfstedt.
- Bostrom, A. (invited seminar speaker), "What do we know now about climate change?" Institute for the Study of Society and Environment Risk & Uncertainty Seminar, National Center for Atmospheric Research, Boulder, Colorado, July 17, 2008. Paper co-authored by Travis Reynolds.
- Bostrom, A. "Weather it's climate change," Urban Ecology Laboratory seminar series, University of Washington, Seattle, WA. March 19, 2008.
- Bostrom, A. "Parental Mental Models of Lead Paint Hazards: Toward Improved Communications About Environmental Health Risks to Children," Southern Center for Communication, Health and Poverty, (invited seminar presentation; funded seminar series), University of Georgia. April 26, 2007
- Bostrom, A. Invited speaker, "Informing earthquake risk mitigation decisions: dynamic decision support" Inter-Jurisdictional Regulatory Collaboration Committee (www.ircc.gov.au/) meeting on risk in building regulations, San Francisco, CA, October 17, 2006.
- Bostrom, A. Invited plenary speaker, "Lead is like mercury: risk comparisons, analogies and mental models." New Perspectives on Risk Communication: Uncertainty in a Complex Society, A Multi-Disciplinary International Research Conference (RiskCom Göteborg 2006), The Centre for Public Sector Research, Göteborg University, Göteborg, Sweden, August 31-September 2, 2006.
- Bostrom, A. Invited speaker, "Mental models, risk perception, and communication." National Science Foundation- and Society for Risk Analysis-sponsored workshop on Strategies for Risk Communication: Evolution, Evidence and Experience May 15-17, 2006, Montauk, Long Island, New York.

- Bostrom, A. and D. Lashof, "Weather it's climate change." Invited presentation (by Bostrom), session on Communicating Climate Change Science: Conundrum or Creative Challenge? III, American Geophysical Union meetings, San Francisco, December 15, 2004.
- Bostrom, A. Invited speaker and participant, workshop on Communicating Urgency, Facilitating Social Change (organizers Lisa Dilling and Susi Moser), National Center for Atmospheric Research (NCAR/ESIG) workshop, June 8-11, 2004.
- Bostrom, A. Invited presentation: Risk Perception and Vaccination Acceptability. (in one of a few special sessions on vaccines and vaccination sponsored by the Gates Foundation). American Association for the Advancement of Science meetings, Seattle, February 14, 2004.
- Bostrom, A. Invited speaker and participant. "Cognitive/psychometric aspects of risk perception and communication." Spatial Analysis of Health Risk Perception workshop, Center for Spatially Integrated Social Science, University of California, Santa Barbara, October 14-17, 2003.
- Invited speaker and participant, Management of Risk and Trust: Implications for Business and Society, an International conference initiated and organised by Rüschlikon and the University of Zurich. Paper: "Trust and Risk in Smallpox Vaccination, by A. Bostrom and E. Atkinson (GT Undergraduate Research Experience advisee) September 17-20, 2003, Rüschlikon, Zurich, Switzerland.
- Invited speaker (to represent the National Science Foundation), Forum on Risk Management and Assessments of Natural Hazards: Toward a Safer America: Building Natural Hazard Resistant Communities Through Risk Management and Assessments. Monday, February 5, 2001, Washington D.C.
- Bostrom, A. Invited presentation: "Science and Technology Transform Future Risk Communication." "Erisk?" conference, co-sponsored by The Swedish ICT Commission and the Swedish Council for Planning and Coordination of Research (FRN), Stockholm, Sweden, November 20, 2000. \*The Swedish ICT Commission is appointed by the Swedish Government as its advisory body in the field of Information Technology.
- Invited speaker, "A mental models approach to vaccine risk communication." Vaccine Communication Workshop, sponsored by The National Vaccine Advisory Committee, the Inter-Agency Vaccine Communications Group and the National Vaccine Program Office of the Centers for Disease Control and Prevention. October 5-6, 2000. Key Bridge Marriott Hotel, Arlington, VA.
- Invited presentation at the National Center for Environmental Decision Making Research: "Characterizations of mental models of risk: New tool for policy makers" Knoxville, Tennessee, April 17, 1998.
- Invited presentation at the Cummings Colloquium, "Experts versus Laypeople." November 1996, Duke University, Durham, North Carolina.
- Co-moderator and invited speaker, Institute of Medicine workshop on Risk Communication and Vaccination, Vaccine Safety Forum. "An overview of risk communication," May 13. 1996, Washington, DC.
- Bostrom, A. and Fischhoff, B. (1995). "Communicating Health Risks of Global Climate Change." Invited white paper prepared for and distributed to all participants at the National Science and Technology Council and National Institute of Medicine Conference on Human Health and Climate Change, Breakout Session 6: Public Outreach and Risk Communication, September, 1995, Washington, DC. (Invited

- participant also, but the paper was sent in advance of the Conference not in proceedings and was not presented orally. Only some dozen invited papers were so distributed).
- Bostrom, A. "Lay Perceptions of Global Climate Change" Presentation at the First Open Meeting of the Human Dimensions of Global Environmental Change Community, Duke University, Durham, NC June 1-3, 1995 (Invited).
- Bostrom, A. "Radon Risk Communication" EPA Region IV States Radon Meeting, Biloxi Mississippi, April 26, 1995 (Invited keynote).
- Bostrom, A. "Risk Perception, Communication, and Management" Paper included in <u>Risk Modeling in Agriculture</u>: Retrospective and Prospective, Program Proceedings for the annual meeting of Technical Committee of S-232, March 24-26, 1994, Gulf Shores State Park, Alabama, pp 133-147, 1994. (Invited speaker, proceedings non-refereed)
- Bostrom, A. and Robinson, J.P. "The overestimated workweek: Alternative approaches to estimating hours at work." Invited keynote presentation at the Washington Statistical Society monthly meeting, Bureau of Labor Statistics, Washington D.C., February, 1993.

### **Conference Presentations with Proceedings**

- Bostrom, Ann, Sandra Hoffmann, Alan Krupnick and Wictor Adamowicz. "Parental Decision-Making and Children's Health." U.S. EPA NCER/NCEE Workshop Morbidity and Mortality: How Do We Value the Risk of Illness and Death? May 2006. Paper submitted to conference proceedings; paper presented by Sandra Hoffmann and Alan Krupnick.
- Bostrom, A., Craig, J., Goodno, B. and Park, J. "Selection and Application of Decision Models for Seismic Rehabilitation of Building Structures." 8th National Conference on Earthquake Engineering in San Francisco, CA, April 19, 2006 (poster session presented by J. Park; paper published in peer-reviewed proceedings).
- Bostrom, A., and Turaga, R.M. "Acceptable Consequences in Earthquake Engineering Decisions." 13th World Congress on Earthquake Engineering, Vancouver B.C., August 5, 2004 (poster session; paper published in peer-reviewed proceedings).
- Pond, R., J.H. Kucklick, A.H. Walker, A. Bostrom, P. Fischbeck, and D. Aurand. 1997. Bridging the Gap for Effective Dispersant Decisions Through Risk Communication. In: Proceedings of the 1997 International Oil Spill Conference, April 7-10, Ft. Lauderdale, FL. American Petroleum Institute, Washington, DC. pp. 753-759 (presented by Bob Pond).

#### **Conference Presentations without Proceedings**

- Morss, Rebecca E. (NCAR, presenter), J. K. Lazo, K. Mulder, J. L. Demuth, and A. Bostrom, How do people perceive and respond to flash flood risk and warnings? Risk Communication of Weather and Climate Information (Themed Joint Session), 91st American Meteorological Society Annual Meeting, 26 January 2011, Sheraton, Seattle, Washington.
- Bostrom A., T. W. Reynolds (presenter) and R. Hudson. Now what do people know about global climate change? A mental models approach. Risk Communication of Weather and Climate Information (Themed

- Joint Session), 91st American Meteorological Society Annual Meeting, 26 January 2011, Sheraton, Seattle, Washington.
- Bostrom A, Hudson R, Scharks T and Gilliland R, Characterizing mental models of emerging nanotechnologies: A nano sunscreen study. Society for Risk Analysis Annual Meeting Dec 5-8, 2010, oral presentation December 7, 2010, Salt Lake City, Utah.
- Scharks T, Bostrom A (presenter), Reimann-Garretson L, Rix G, Seismic risk perception, planning, and management in North American seaports. Society for Risk Analysis Annual Meeting Dec 5-8, 2010, poster, December 6, 2010, Salt Lake City, Utah.
- Lazo, J. (presenter), Morss, R., Demuth, J. and Bostrom, A. Forecasters' mental models of flash flood forecasts and warnings. American Meteorological Society annual meetings, Atlanta, GA January 25, 2010.
- Bostrom A. (presenter), Reynolds T., Hudson R., Read, D. Now What Do People Know About Global Climate Change? A Mental Models Approach. Society for Risk Analysis annual meetings, Baltimore, Maryland, December 7, 2009.
- Bostrom, A. (presenter), Lofstedt, R.E. "Nanotechnology risk communication: Big risk communication challenges from small things" Society for Risk Analysis annual meetings, Boston, Massachusetts, December 8, 2008.
- Butte, G., Thorne, S. (presenter) and Bostrom, A."Are we safe? can we trust you: Expert Model/Mental Models Approach Applied." Society for Risk Analysis annual meetings, Boston, Massachusetts, December 8, 2008.
- Bostrom, A. (presenter), Turaga, R.M., Catrambone, R., Gane, B. and Wood, S.K. "Effects of viewing seismic risk maps on subjective probabilities and risk perceptions." Presentation at the Foundations and Applications of Risk, Utility and Decision Theory (FUR XIII) international conference, Barcelona, Spain, July 5, 2008 (online proceedings accessible only to participants).
- Bostrom, A. "Probabilities and Panic." Invited presentation at the Public Communication of Science and Technology (PCST-10) conference, session on Numbers, Pictures and Words: Communication of risk and Uncertainty. Malm , Sweden, June 27, 2008.
- Gane, B. Bostrom, A. (presenter), Catrambone, R. and Turaga, R.M. "Investigating how seismic maps affect risk perception." Poster presentation at the 2<sup>nd</sup> World Risk Congress, Guadalajara, Mexico, June 8-11, 2008.
- Bostrom, A., Gane, B. D., Wood, S. K., Catrambone, R., Samanci, O., DiSalvo, C., & Gunter, G. "Visualizing seismic risks and losses: Can maps change perceptions?" Poster presented at the 2008 National Earthquake Conference, Seattle, Washington, April 22-26, 2008.
- Bostrom, A. (presenter), Catrambone, R., Murray, J., Riggieri, A., Wood, K., Gane, B., Samanci, O., Gunter, G., Ng, M. Society for Risk Analysis Annual Meetings, "The Effects of Risk Maps on Risk Perceptions and Decisions: Evidence from an Earthquake Map Experiment," San Antonio, Texas. December 11, 2007.
- Gane, Brian D., Turaga, Rama Mohana R, Bostrom, Ann, Catrambone, Richard, Riggieri, Alison, Wood, Sara K. "Manipulating Maps to Affect Risk Perception: The Effects of Landmarks and Dimensionality."

- Poster presentation at the Society for Judgment and Decision Making annual meetings, Long Beach, CA, November 18, 2007.
- Bostrom A, Hoffmann S, Krupnick A, Adamowicz V; "Parental mental models of lead paint hazards: Toward improved communications about environmental health risks to children." Oral presentation at the Society for Risk Analysis annual meetings, Baltimore MD, December 6, 2006.
- Hoffmann S, Bostrom A, Krupnick A, Adamowicz V (Sandra Hoffmann lead) "Parental decision making about children's health: Using mental models research to inform contingent valuation surveys." Poster presentation at the Society for Risk Analysis annual meetings, Baltimore MD, December 4, 2006.
- Turaga, Rama Mohana R, R. A. Gesser, M. E. Chang, A. G. Russell, and A. Bostrom. (presentation made by Turaga) "The Partnership for Environmental Research and Community Health (PERCH) Phase III, Part 1: Community-scale risk assessment in greater Pensacola, Florida." American Meteorological Society annual meeting, Atlanta, January 31, 2006.
- Anselin, L. Bostrom, A. Galvez, L. and Gao, J. Poster-Platform Presentation (made by Bostrom), "Visual Communication of Risk and Uncertainty for Spatial Data." Society for Risk Analysis annual meetings, Orlando Florida Dec 4-7, 2005.
- Turaga, R.M. and A. Bostrom, "Assessment Endpoints and Comparative Risk Analysis: The Case of Air Pollution." Oral presentation, (by Mohan Turaga). Association for Public Policy Analysis and Management meetings, Atlanta, October 30, 2004.
- Burns, S. and Bostrom, A., 2004, "Barriers to implementation of performance based engineering: Lessons from the Tennessee 2003 international building code hearings." 2004 ANCER Annual Meeting, Honolulu, HI, July 28-30. (presentation made by Steve Burns).
- Bostrom, A. and Atkinson, E. Poster presentation session, "Smallpox Vaccine mental models and risk perceptions." Society for Risk Analysis annual meetings, Dec 7-10, 2003 (was not present due to illness, but a colleague posted the poster and introduced it orally).
- Invited discussant, session on risk comparisons, Annual meetings of the Society for Risk Analysis, December 5-7, 2002, New Orleans, LA.
- Invited discussant, session on Simulation Modeling and Decision Making, Annual meetings of the Association for Public Policy, Analysis and Management, November 7-9, 2002, Dallas, TX.
- Bostrom, A. (with Branco Ponomariov) Presentation on "Acceptable Risk" at the Mid-America Earthquake Center coordination meetings, June, 2002, UIUC.
- Bostrom, A. (with Brown, N.R., Hibbs, B., Chen, R.) Does the Community Risk Scale Improve Probability Estimates? Presentation at the Society for Risk Analysis, Annual meetings, Tuesday December 4, 2001, Westin Hotel, Seattle, Washington.
- Bostrom, A (with contributions from Stephanie Byram), "Testing for BRCA1/2" Brief talk about work in progress, at the symposium "Celebrating the Research of Stephanie Byram." November 10, 2001, Carnegie Mellon University, Pittsburgh, PA.
- Bostrom, A. (invited speaker), "Vaccine and Disease Risk Communications," American Public Health Association 129th annual meeting, Atlanta, GA, October 22, 2001.

- Bostrom, A. "Measuring Mental Models", International conference on "Model-Based Reasoning: Scientific Discovery, Technological Innovation, Values," Pavia, Italy, May 18, 2001. Co-authored with Stephanie Byram.
- "Decision-makers' mental models of ecological issues associated with marine oil spills: Guidelines for risk communication on chemical dispersant use." Co-authors Paul Fischbeck, Ann-Hayward Walker, Jan Kucklick and Bob Pond. Prepared and presented by Bostrom at the Annual Meeting of the Society for Risk Analysis, December 4, 2000, Crystal Gateway Marriott, Arlington, Virginia.
- Bostrom, A, presenter in session on "What's New in Vaccine Risk Communication" at the 34th National Immunization Conference, July 7, 2000, Washington, DC. (Invited)
- Bostrom, A. "Does Trust Affect Judgments of Risk Acceptability? A Survey-Based Case Study from Burgas, Bulgaria." Collaborators: Kobi Ako Abayomi, Richard Barke, Sheldon Gen, Shira Kapplin, Krassimira Paskaleva, and Poli Roukova. International Symposium on Society & Resource Management 2000 Bellingham, WA June 19, 2000.
- Bostrom, A. "Evaluation of a Risk Communication on Vaccine-Related Misperceptions." Presented in session on "Vaccine Risk Communication and Management for the Next Century" which I organized. Society for Risk Analysis annual meetings, Atlanta, GA, December 8, 1999.
- Bostrom, A. "Vaccine policy in practice: Doctors' beliefs and experiences." Association for Public Policy, Analysis and Management annual meetings, Washington DC November 6, 1999.
- Bostrom, A. "Communicating health effects of global environmental change with policy makers: the example of cryptosporidium in drinking water." Society for Risk Analysis annual meetings, Phoenix, Arizona, December 9, 1998.
- Bostrom, A., R. Barke and K. Paskaleva, "Trust, the economy, and environmental risk: an exploratory study of risk perceptions in Bourgas, Bulgaria." Society for Risk Analysis annual meetings, Phoenix, Arizona, December 8, 1998.
- Bostrom, A. "Risk perceptions and decision making: A case for "thick" descriptions in risk policy. Annual Association for Public Policy, Analysis and Management Research Conference, New York City, October 31, 1998.
- Bostrom, A. "Characterizing mental models to inform policy design" SOGR meeting in Le Lavandou, France, June 14-17, 1998.
- Bostrom, A. "Trust in a Changing Society: A preliminary study of environmental risk and management in Burgas, Bulgaria." The second Bellingham International Conference on Social Trust in Risk Management, Bellingham, Washington, July 13-15, 1997.
- Bostrom, A. "Local Perceptions of Local Environmental Risks." Society for Risk Analysis annual meetings, New Orleans, Louisiana, December 10, 1996.
- Bostrom, A. "Who calls the shots?: Credible vaccine risk communication." Bellingham International Conference on Social Trust in Risk Management, Bellingham, Washington, July 14-16, 1996.

- Bostrom, A. "Vaccine Risk Communication." National Immunization Conference, Washington, D.C. April 9, 1996. (Invited)
- Bostrom, A. "Correcting Misconceptions with Risk Communication Texts: Is a Myth-Fact box a good idea?" Paper presented at the Society for Risk Analysis and the Japan Section of SRA annual meetings in Honolulu, Hawaii, December 3-6, 1995.
- Bostrom, A. "Global Environmental Risk: A brief history of perceptions." Paper presented at the 17th Annual Association for Public Policy and Management Research Conference, Washington, D.C., November 2-4, 1995.
- Bostrom, A. Presentation on how junior faculty can obtain funding, Academy of Management Workshop, Vancouver BC, August 5, 1995. (Invited).
- Bostrom, A. "Warming up to Decisions about Risk: A Mental Models Study on Correcting Misconceptions about Global Climate Change." Poster presentation at the Society for Risk Analysis annual meetings in Baltimore, Maryland, December 4-7, 1994.
- Bostrom, A. "A Public View of Risk." Presentation at the Society of Environmental Toxicology and Chemistry 15th annual meeting in Denver, Colorado, special symposium on risk communication. October 30-November 3, 1994 (Invited).
- Bostrom, A. "Decision making about global climate change: the role of risk perceptions in risk control." Poster presentation at the Society for Probability, Utility and Decision Making (SPUDM-14), Aix-en-Provence, France, August, 1994.
- Bostrom, A. "Cognitive Strategies for Estimating Hours at Work," Presentation at the Third Practical Aspects of Memory (PAM) conference in College Park, Maryland, July 30-August 5, 1994 (Invited by session organizer).
- Bostrom, A. "Will mental models based risk communications affect attitudes and decision making about environmental risks?" Presentation at the Foundations of Utility theory, Decision making and Risk (FUR) VII conference in Oslo, Norway, June 28-July 3, 1994.
- Bostrom, A. "Research on efforts to provide the public with the information they need to make decisions about exposure to risks." Presentation at the Department of Energy National Low-Level Waste Management Program Communication Working Session in Atlanta, Georgia, March 9-10, 1994 (Invited).
- Bostrom, A. "Addressing public perceptions and misconceptions about Electric and Magnetic Fields," Presentation at the 1993 Annual Meetings of the Society for Risk Analysis in Savannah, Georgia, December 5-8, 1993.
- Bostrom, A. and Atman, C.J. "Risk Communication Evaluation." Paper presented at the 1992 Annual meeting of the Society for Risk Analysis, San Diego, California, December, 1992.
- Bostrom, A. "Some Lay Perceptions of Global Climate Change." Presentation at Oak Ridge National Laboratories, Oak Ridge, Tennessee, October, 1992. (Invited).
- Bostrom, A. "Validity and Accuracy in Estimates of Hours at Work." Paper presented at the Joint Statistical Meetings, Boston, Massachusetts, August, 1992.

- Bostrom, A., "Response Errors in Hours at Work: Remembering what happened week after next." Presentation at the U.S. Bureau of the Census, Suitland, Maryland, research seminar series February, 1992. (Invited). Also presented at the 1992 Annual meeting of the American Association for Public Opinion Research, St. Petersburg Beach, Florida, May, 1992.
- Bostrom, A., "Lay Mental Models of Risk Control: What about hairspray, styrofoam cups and global warming?" Paper presented at the 1991 Annual meeting of the Society for Risk Analysis, Baltimore, Maryland, December 8, 1991.
- Bostrom, A.. "Assessing Risk Communication Documents: Completing and Correcting Mental Models of Hazardous Processes." Paper presented at the Society for Probability, Utility and Decision Making (SPUDM-13), Fribourg, Switzerland, August, 1991.
- Bostrom, A., "Mental Models of Hazardous Processes." Presentation at the National Institute for Occupational Safety and Health, Division of Surveillance, Hazard Evaluation and Field Studies, Cincinnati, Ohio, April 26, 1991. (Invited)
- Bostrom, A. "A Mental Models Approach to Exploring Perceptions of Hazardous Processes."

  Presentation at Battelle Pacific Northwest Laboratories, Richland, Washington April 23, 1991.
  (Invited)
- Bostrom, A. Moderator for panel session at the 1991 EPA International Symposium on Radon and Radon Reduction Technology, Philadelphia, Pennsylvania, "Risk Communication." April 2, 1991. (Invited)
- Bostrom, A., and Atman, C.J. "Public Knowledge About Indoor Radon: The Effects of Risk Communication." (Revised version) presented at the annual ORSA/TIMS conference, Philadelphia, October 29-31, 1990.
- Bostrom, A. "Mental Models of Hazardous Processes." Presentation at HSFR (Swedish Social Science Research Council: Area meeting for cognition and decision-making), Umeå, Sweden, May 21-22, 1990.
- Bostrom, A. "Risk Perception and Decision Making" Guest lecture, University of Stockholm, Stockholm, Sweden, May 3, 1990. (Invited)
- Bostrom, A. "Applying a mental models methodology to perceptions of indoor radon." Presentation at the Cognition Seminar, University of Lund, Lund, Sweden, March 21, 1990. (Invited)
- Bostrom, A. "Mental Models theory from an applied perspective." Presentation at the Cognition Seminar, University of Stockholm, Stockholm, Sweden, January 12, 1990. (Invited)
- Bostrom, A. "On Communicating the Risk of Indoor Radon," Proceedings of the 1993 Annual Meeting of the National Council on Radiation Protection and Measurements, Crystal City, Virginia, April 7-8, 1993 (Invited speaker, Case study panel on radon).

Note: Except where specified, Bostrom prepared and made the presentation.

# **TEACHING**: **COURSES TAUGHT** \*Note Course evaluations available separately

Term	Course No.	Course Title	No. enrolled
Winter 2011	PBAF595A	Communicating Climate Change	15
Winter 2011	PBAF599	Prize Philanthropy, co-taught with Kevin DeSouza, Sandra Archibald	6
Fall 2010	PAEX502	Decision Making	42
Winter 2010	PBAF608	DP (degree project) Environment Seminar	13
Fall 2009	EMPA502	Decision Making	43
Fall 2009	PBAF595A	Communicating Climate Change	19
Fall 2008	EMPA502	Decision Making	37
Spring 2008	PBAF597	The Role of Science in Environmental Decision Making	25
Winter 2008	PBAF527	Quantitative Analysis I	39
Spring 2007	PUBP8500	Research Seminar	9
Fall 2006	PUBP4113	Statistical Analysis in Public Policy	14
Spring 2006	PUBP3600	Sustainability, Technology & Policy	28
Spring 2005	PUBP8803	Qualitative Research Methods	5
Fall 2004	PUBP6324	Environmental & Technological Risk Management	8
Spring 2004	PUBP8500	Research Seminar	7
Spring 2004	PUBP6114	Applied Policy Methods and Data Analysis	25
Spring 2003	PUBP8813	Risk Assessment, Perception and Communication	2
Fall 2002	PUBP8803	Qualitative Research Methods (co-taught)	8
Fall 2002	PUBP4113	Statistical Analysis in Public Policy	27
Spring 2002	PUBP8500	Research Seminar	9
Spring 2002	PUBP6114	Applied Policy Methods and Data Analysis	15
Fall 2001	PUBP4113	Statistical Analysis in Public Policy	18
Fall 1999	PUBP8600 (8803)	Qualitative Research Methods (co-taught w/Kingsley)	16
Spring 1999	PUBP8170	Risk Perception, Communication and Management	6
Spring 1999	PUBP4314	Environmental Regulation	16
Winter 1999	PUBP6114	Data Analysis in Policy Science	17
Fall 1998	PUBP6110	Statistical Analysis	17
Spring 1998	PUBP4314	Environmental Regulation	23
Spring 1998	PUBP6114	Data Analysis in Policy Science	16
Winter 1998	PUBP6110	Statistical Analysis	15
Fall 1997	PUBP6114	Data Analysis in Policy Science	18
Spring 1997	PUBP8120	Risk Communication	4
Fall 1996	PUBP8600	Quantitative Thinking and Policy Problems	5
Spring 1996	PUBP6114	Data Analysis in Policy Science	16
Winter 1996	PUBP6310	Environmental Issues	8
Winter 1996	PUBP8160	Risk Communication	6
Fall 1995	PUBP6110	Statistical Analysis	19
Spring 1995	PUBP6114	Data Analysis in Policy Science	13
Spring 1995	PUBP 6218	Quantitative Modeling	3
Winter 1995	PUBP 6310	Environmental Issues (co-taught w/ Rodgers)	6

### TEACHING: COURSES TAUGHT (continued) \*Note Course evaluations available separately

Term	Course No.	Course Title	No. enrolled
Fall 1994	PUBP8100/LCC6204	Risk Communication (co-taught w/ Bill Evans/LCC)	4
Fall 1994	PUBP6110	Statistical Analysis	19
Spring 1994	PUBP6324	Environmental and Technological Risk Management	5
Spring 1994	PUBP6114	Data Analysis in Policy Science	16
Winter 1994	PUBP6310	Environmental Issues (co-taught w/ Norton)	12
Fall 1993	PUBP6110	Statistical Analysis	11
Spring 1993	PUBP6114	Data Analysis in Policy Science	14
Fall 1992	PUBP6110/CP6215	Statistical Analysis	28
Fall 1992	PUBP6114	Data Analysis in Policy Science	14

#### INDIVIDUAL STUDENT GUIDANCE

### Ph.D. students (Thesis committee Chair or Co-Chair):

Joonam Park, Civil and Environmental Engineering (Co-Chair with Barry Goodno, CEE, Chair, and Jim Craig, AE Co-Chair). "Development and Application of a Probabilistic Decision Support Framework for Seismic Rehabilitation of Structural Systems." Defended successfully August 19, 2004. Currently employed with Korean Railways.

Rama Mohana Turaga, Public Policy (Chair Bostrom, co-chair Douglas Noonan), "Spatial Resolution, Costs, and Equity in Air Toxics Regulation." Defended successfully June 28, 2007. Currently a postdoctoral scholar at Dartmouth.

Nicole Fehrenbach, Joint GSU-GT Public Policy program (ABD; advised 2003-2007).

### Ph.D. and M.S. Special Problems students:

Supervised Tim Scharks (PhD student, Evans School) in independent study of qualitative research methods, Fall, 2009.

Supervised Heather Walker in her Program on the Environment capstone experience with the City of Seattle (Car-free Days and Environmental Management Systems), Winter 2009.

Supervised Travis Reynolds (PhD student, Evans School) in independent study on analyses of climate change risk perceptions, communication, management and policy, Fall 2008, Spring 2009.

Supervised an MS student in Management, PhD and undergraduate students from ISYE in a readings course version of Survey Research Methods (PUBP4120), Spring 2006.

Supervised MSPP student Liam Klein in an independent reading of The Risk of Air Pollution for Athletes, PUBP8900, Fall 2005.

- Supervised MSPP student MegAnn Powell in an independent reading of Applied Policy Analysis, Summer 2004.
- Supervised a Ph.D. student in Chemical Engineering (Ibrahim Ozkan) for an independent graduate studies course in Environmental and Technological Risk Management, Spring 2002.
- Supervised a Ph.D. student in Public Policy (Kathy Bass) for a one credit independent graduate studies course in survey research methods, Spring quarter 2002 (finished Fall 02).
- Supervised joint Ph.D. student Craig Gordon in a readings course on risk and political communications, Fall quarter 1998.
- Supervised a Ph.D. student in Architecture (Craig Piper) for an independent graduate studies course in Nonparametric Statistics, Winter quarter 1994.

### M.A. Degree Projects supervised (University of Washington)

- Adams, Jason D. MPA Spring 2010. Life-Cycle Costing at Seattle Parks and Recreation. Public Service Clinic client: Seattle Department of Parks and Recreation.
- Buick, Adam. MPA Spring 2010. Incorporating Climate into State Environmental Policy Act Review Process in King County. Public Service Clinic client: King County of Transportation and Roads.
- Cortese, Dianna Lynn. MPA Spring 2010. Mapping Children's Health: Using Data Sources to Locate Children at Risk from Environmental Exposure. Public Service Clinic client: US Environmental Protection Agency Region 10.
- Goldstein, Allyson. MPA Spring 2010. Land tenure implications of the UN REDD program and progress in Mozambique and Liberia. For the Rural Development Institute.
- Humphries, Eleanore C. MPA Spring 2010. Seattle Public Utilities and the Greening of Immigrant and Refugee Businesses. Public Service Clinic client: Seattle Public Utilities.
- Kinsella, Ryan Christopher. MPA Spring 2010. Surveying the Public Value of Seattle's Parks and Recreation Centers. Public Service Clinic client: Seattle Department of Parks and Recreation.
- Lisiewski, Jessica A. MPA Spring 2010. Incorporating Climate into State Environmental Policy Act Review Process in King County. Public Service Clinic client: King County of Transportation and Roads.
- Makhija, Neena K, MPA Spring 2010. Capturing the Impact of Gathering Places & Community-Based Planning Projects: Creating an Evaluation Guide for Pomegranate Center. Public Service Clinic client: Pomegranate Center.
- Miccio, Claire E, MPA Spring 2010. Barriers to Implementing Low Impact Development Approaches in Washington State Roadways and Highways. Public Service Clinic client: Washington State Department of Transportation.
- Pond, Christian D, MPA Spring 2010. An Evaluation of the city of Lake Forest Park's Automated Traffic Safety Camera Program.

- Prothman, Jana E, MPA Spring 2010. Housing: Health and Code Enforcement. Public Service Clinic client: Columbia Legal Services.
- Zimmer, Elizabeth A, MPA Spring 2010. Seattle Public Utilities and the Greening of Immigrant and Refugee Businesses. Public Service Clinic client: Seattle Public Utilities.
- Zimmerly, Elizabeth (Liz) C, MPA Spring 2010. Strategies for Preventing Elemental Mercury Exposure in Homes and Schools. Public Service Clinic client: US Environmental Protection Agency Region 10.

Albert Chang, MPA Spring 2009.

Joanna Ekrem, MPA Spring 2008. Sustainable Biofuels?: Innovative Policy Approaches and Scientific Assessment in the U.S. and the U.K. (now employed by Washington Department of Ecology)

### M.S. Thesis Students supervised (Georgia Institute of Technology)

Francisco Dòñez (1996). "Sustainability indicators for rural industrialization in Latin America." Mr. Dòñez worked for several years on policy issues for the U.S. EPA, and is now a doctoral student at UC Berkeley.

Rob Cleveland, (1995). "The Role of Communication in the Policy Dilution of ASHRAE Standard 62-89 'Ventilation for Acceptable Indoor Air Quality." Mr. Cleveland was for many years a control systems engineer for HI Solutions, on indoor air quality control issues, but is now a computer systems analyst.

### Supervised professional papers for MS students (Georgia Institute of Technology)

Margaret Ann Herston-Powell (2005 graduate) now working for a California water utility.

Kristen Adkins (2003 graduate) now at University of Texas, Austin.

Shira Kapplin (2000 graduate) Kirkland & Ellis LLP, Chicago.

Lisa Novak (1999 graduate).

Emily Fort (1999 graduate, double MS degrees in Public Policy and Health Physics), now working at the National Science Foundation. Ms. Fort completed both a professional paper under my supervision in Public Policy and a Masters thesis in Health Physics, which Nolan Hertel advised, and another ME faculty member and I co-advised.

Tina Nagpaul (1998 graduate), now at Citibank, Los Angeles.

Rebecca Morley (1997 graduate) Executive Director of the National Center for Healthy Housing. Anna Williams (1997 graduate).

Eric Meyer (1995 graduate) Georgia Conservancy, then S.C. Conservation League.

#### OTHER TEACHING ACTIVITIES

2009	Contributed to development of X Prize collaboration on prize
	philanthropy and innovation courses for the Evans School.
2006	Redesigned and ran PUBP3600 Sustainability as a GT project-based
	course, with input from GT top administrators and ISTD Director.

2001 Redesigned PUBP4113 (applied statistics) to incorporate internet-based 1999 Developed new Ph.D. course in Qualitative Research methods (PUBP8210) together with Gordon Kingsley. Co-taught the course, though I was on leave from Georgia Tech at the National Science Foundation that term. (Took the lead in 2002). 1998 Developed new course in Environmental Regulation (PUBP4314). Active participant in semester conversion - proposed undergraduate course in Survey Design, helped redesign several MSPP courses. 1996 Revised the Risk Communication and Environmental Issues courses completely. (Both largely case-based, developed new cases). Developed new course in Quantitative Thinking and Policy Problems (PUBP 8600). 1995 Developed new course in Quantitative Modeling (PUBP6218) with an emphasis on quantitative decision models. Revised Environmental Issues (PUBP 6310) with Mike Rodgers. Contributed to developing the methods sequence descriptions for the 1994-95 proposals for Bachelor of Science and Ph.D. in Public Policy. 1994-95 Participated extensively in the Program on the Information Revolution and its Consequences. Participated in brown bag series (brown bag talk, summer 1995), in the fall seminar (panel participant multiple times, gave one lecture, co-authored two of the papers), and in the distinguished lecture series (panel participant, March 5, 1996). Revised Environmental Issues (PUBP 6310) with Bryan Norton in 1994. 1994 Developed the course on Environmental and Technological Risk Management (PUBP6324). Took lead in developing Risk Communication (PUBP8100/LCC6204) (with Bill Evans, LCC). 1993 Developed new computer labs (on Excel) for Statistical Analysis (PUBP 6110). Developed Data Analysis (PUBP 6114) in 1992, revised the course in 1992-93 1993, developed a set of computer labs to be taught with the course.

#### **SERVICE**

#### PROFESSIONAL CONTRIBUTIONS

#### Editorial and Reviewer Work for Technical Journals

Area editor for risk communication, Risk Analysis, April 2008 to present. Member of editorial board 1998 to present.

Senior editor for risk communication, Journal of Human and Ecological Risk Assessment, Fall 2006 to present.

Associate Editor for the Journal of Risk Research, Fall 2005 to present. Member of editorial board 1997 to present.

Invited participant and speaker on Risk Communication, Autism Risk Communications and Ethics Meeting, organized by Michael Yudell. Seattle Children's Research Institute, November 2, 2010.

Reviewer for European Science Foundation, Journal of Environmental Policy, Water Resources Research, 2010.

Site reviewer, National Science Foundation competition for Decision Making Under Uncertainty research centers under the Climate Change Research Initiative, December, 2009.

Review panel member, Decision Risk and Management Science Program, National Science Foundation, Fall 2005 to Spring 2007.

Reviewer for Risk Analysis, 1992-present.

Reviewer of proposals to Decision, Risk and Management Science program, National Science Foundation, 1992-present.

Reviewer for the Institute of Medicine, National Academy of Sciences, Spring 2001 to present.

Reviewer for the National Science Foundation-National Oceans and Atmospheric Administration program on communicating uncertainty in hurricane forecasts, Summer 2008.

Reviewer for the Journal of Risk Management, Fall 2007.

Reviewer for the National Institutes of Health, Spring 2007.

Reviewer for the Journal of the American Planning Association (JAPA), 2006-present.

Reviewed for the National Research Council, "Analysis of Global Change Assessments: Lessons learned" Fall 2006 [report published February 23, 2007]

Reviewed for Psychological Science, 2006.

Reviewed for Earthquake Spectra, 2004, 2005.

Reviewed for Health Psychology, special issue on communications, 2004.

National Science Foundation, Human and Social Dynamics panelist, Spring 2004, Spring 2005.

Special editor, special issue of Risk Analysis on risk communication, April 2003; special associate editor special Best Paper issue of Risk Analysis, December 2003

Reviewer for Journal of the National Medical Association, Spring 2002.

Reviewer for Environmental Science & Technology, Summer 2002, Fall 2004, summer 2005.

Reviewer for Risk: Health, Safety and Environment, 1995 to 1999

Reviewer for the Journal of Risk and Uncertainty, Spring 1998.

Reviewer for Transportation Research Board annual conference, Fall 1998.

Reviewer for National Political Science Review (NPSR), January/February 1995, March 1996

Reviewer for Ethics and Values Studies program, National Science Foundation, 1996

Reviewer for Division of International Programs, National Science Foundation, 1996

Reviewer for American Journal of Public Health, 1996, 2005.

Reviewed two grant proposals for the Environmental Institute of the University of Illinois, May 1992, two in June/July, 1995

Reviewer for a North-Holland volume of selected papers from the 14th Research Conference on Subjective Probability, Utility, and Decision Making (SPUDM-14) held in Aix-en-Provence, France, August 23-26, 1993

Reviewer for Child Development, September, 1993

Reviewer (consulting editor) for the Annals of the American Association of Geographers, September 1993

### Science Advisory Boards and National Academies/National Research Council work

- Member, National Advisory Board, Center for Climate and Energy Decision Making (Carnegie Mellon University, funded by National Science Foundation), January 2011-present
- Member, National Academies Standing Committee on Use of Emerging Science for Environmental Health Decisions, 2009 to present.
- Member, Committee on the Role of FDA in Food Safety, National Academies of Science, Institute of Medicine, appointed January, 2008-2010.
- Member, Applied Technology Council 58-1 Project Steering Committee (ATC-58 program for development of next-generation performance-based seismic design guidelines, phase 3 on development of seismic performance assessment). Fall 2008 to September 2010.
- Member, Committee on the Review of NOAA's Tsunami Warning and Forecast System and the Nation's Tsunami Preparedness, National Academies of Science, Ocean Studies Board, appointed May 15, 2008-December 31, 2009.
- Member, Center for Nanotechnology in Society Advisory Board, (NSF-Funded) 2006-present, co-Chair Fall 2009 to present.
- Member, National Center for Atmospheric Research (NCAR) Institute for the Study of Society and Environment Advisory Board, Fall 2005 to 2008.
- Member, Collaborative Large-Scale Engineering Analysis Network for Environmental Research (CLEANER) Advisory Board, 2005 to 2007.
- Member, Science Advisory Board Committee on Valuing the Protection of Ecosystems and Ecoservices, U.S. Environmental Protection Agency, Fall 2003 to present.

- Member, Committee on Nutrient Relationships In Seafood: Selections To Balance Benefits And Risks, Institute of Medicine, Spring 2005 to Fall 2006.
- Member, Executive Committee, Board of Scientific Counselors, advisory to the Office of Research and Development, U.S. EPA, Spring 1999 to May 2004.
- Member, Committee on Optimizing the Characterization and Transportation of Transuranic Waste Destined for the Waste Isolation Pilot Plant, National Research Council, October 2002 to April 2004.
- Member, Motor Vehicle Rollover Rating System Study Committee, National Academy of Sciences Transportation Research Board, April 2001 to February 2002.
- Member, Advisory Committee for the HRSA/Association of Teachers of Preventive Medicine Vaccine Risk/Benefit Communication Project, 1999.
- Member, Risk Reduction Options Subcommittee of the Integrated Risk Project for the U.S. EPA Science Advisory Board, June 1996 to 1998.
- Member of Advisory Committee for the Harvard Center for Risk Analysis, 1996-1998.
- Consultant to the Radiation Advisory Committee of the Science Advisory Board for the U.S. EPA, on the Radon Science Initiative Subcommittee, February, intermittently, 1993 to 1996.
- Member, Committee on the Study of Consumer Automotive Safety Information (CASI), Transportation Research Board, National Research Council, February 1995 to July 1996.
- Consultant to the Industrial Excess Landfill Ad hoc committee of the Science Advisory Board for the U.S. EPA, May, 1993 to September 1994.
- Consultant to the Radiation Subcommittee of the Science Advisory Board to the U.S. Environmental Protection Agency (EPA), on the topic of the EPA's revisions of the Citizen's Guide, September, 1991.
- Participant in the U.S. Environmental Protection Agency's Radon Review Panel, October 8, 1991.

#### Professional membership, guest lectures, and other professional contributions

- President-elect, Society for Risk Analysis, December 2010-December 2011. Member, Society for Risk Analysis, 1991 to present. Nominations committee member 1996, 2006; Annual meeting planning committee 1997 (and other years), Awards committee member 2000. Councilor, 2001-2004 (elected). Chair, Risk Communication Specialty Group, 2000-2001. Chair-elect, Risk Communication Specialty Group, Society for Risk Analysis, 1999-2000. Secretary-Treasurer of Risk Communication Specialty group, Society for Risk Analysis, 1993-1999, 2006-2008 (elected). Bostrom has helped organize the risk communication track and chaired multiple sessions at annual meetings.
- Member, Association for Public Policy Analysis and Management, 1990 to present. Member of Annual meeting planning committee 2000, 2004, 2005. Appointed to APPAM Policy Council Fall 2009-2011.

- Member, Society for Judgment and Decision Making, 1988 to present. Student poster judge at annual meetings, annually 2003-2006, 2008-2010. Hillel Einhorn award review committee member 2007-2009 (Committee Chair 2009).
- Member, American Association for the Advancement of Science (AAAS), 1995 to present. Elected to Nominating Committee for AAAS Section on Societal Impacts of Science and Engienering, Section X, October 2006.

Member, American Statistical Association, 1991 to present (intermittent).

Reviewed tenure package for Colorado State University, Fort Collins, 2010.

External examiner, Ph.D. thesis by Holly Ann Longstaff, "Linking risk communication and biomedical ethics: the case of pre-implantation genetic diagnosis." University of British Columbia, graduated September 18, 2009.

Reviewed promotion package for Northern Illinois University Department of Political Science, 2009.

Reviewed promotion package for Texas A&M, Bush School, 2008.

Invited participant, Workshop for the Identification of Missing Elements in Current Plans for the Development and Implementation of Performance-Based Seismic Design, sponsored by Project Management Committee, Building Seismic Safety Council (BSSC), National Institute of Building Sciences. San Francisco, June 5, 2008.

Member, Steering Committee for EERI's online Earthquake Mitigation Center, Fall 2006 to 2008.

Reviewed tenure package for Resources for the Future, Washington DC, 2007.

- Invited participant, Disaster Reduction—Theory and Practice. Workshop Sponsored by the National Science Foundation, May 24-25, 2007, Columbia, South Carolina. Hosted by Professor Susan Cutter, the Hazards Vulnerability & Research Institute, Department of Geography, University of South Carolina.
- "Parental mental models of lead paint hazards: Toward improved communications about environmental health risks to children." Invited presentation at the Southern Center for Communication, Health and Poverty, University of Georgia, April 26, 2007.
- "Parental valuation of children's environmental health: Does it matter who you ask?" Invited presentation at the Daniel J. Evans School of Public Affairs, University of Washington, January 31, 2007.
- Invited discussant, Joint AAPOR/WAPOR session on Public Opinion and the Environment, World and American Associations for Public Opinion Research annual meetings, Montreal, Canada, Thursday May 18, 2006.
- Invited external examiner for W.G.B. Smith, "Metaphors and Mental Models of Risk Expert Thinking about Ecosystems." Doctor of Philosophy, University of British Columbia, Resource Management and Environmental Studies, Dr. Timothy McDaniels. Research Supervisor (Oral exam passed February 9, 2006).
- Invited discussant for session on adolescent risk-taking, Annual Meetings of the Assocation for Public Policy and Management Nov 3-5, 2005, Washington D.C.

- Invited discussant for session on "Risk as Behaviour: Connecting the Individual with the Social" Society for Risk Analysis annual meetings, Orlando Florida, Dec 4-7, 2005.
- Invited chair, plenary session on "Risk Analysis: As other see us" Society for Risk Analysis annual meetings, Palm Springs, California, December 7, 2004.
- Annual Meeting Program Committee member and co-organizer of Science and Technology Policy track, Association for Public Policy Analysis and Management, for 2004 annual meeting in Atlanta, October 2004. Also chaired an environmental policy session at the meeting.
- Lead organizer for Association for Public Policy Analysis and Management opening night reception (Atlanta Botanical Garden, October 28, 2004), co-hosted by local APPAM meeting hosts Georgia Tech (Ivan Allen College, School of Public Policy), Georgia State (Andrew Young School of Policy Studies), UGA (ISPEA) and Emory University (Rollins School of Public Health, Dept of Health Policy and Management). [Additional committee members: Barry Bozeman, Greg Lewis, Larry O'Toole and Ken Thorpe].
- External examiner, Ph.D. thesis, Cynthia Jardine, University of Alberta, Edmonton, Fall, 2002.
- Invited speaker on 'Evaluation of the Science to Achieve Results program of the National Center for Environmental Research,' Committee to Review EPA's Research Grants Program, Board on Environmental Studies and Toxicology, National Academy of Sciences, March 18, 2002, Washington D.C.
- Reviewed tenure packages for Carnegie Mellon University in 2001 and 2002.
- Invited speaker, "Why use decision analysis and mental models to design risk communications? University of Washington Bothell, Interdisciplinary Arts and Sciences, May 24, 2001, Bothell, Washington.
- Reviewed a tenure package for Wake Forest University in 2000.
- Invited participant, Practical Strategies for Achieving Excellence in Health Communications Conference, sponsored by the Centers for Disease Control and Prevention (CDC), the Agency for Toxic Substances and Disease Registry (ATSDR), and the National Cancer Institute (NCI) at the National Institute of Health, July 11-12, 2000, Washington D.C.
- Invited panelist, workshop on Behavioral Science Research in Diabetes, National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda, MD, November 18-19, 1999.
- Presentation at the National Science Foundation, Directorate for Social, Behavioral and Economic Science. Brownbag on communicating increased risks of cryptosporidium in drinking water attributable to climate change, February 12, 1999.
- Presentation at Food Safety Initiative workshop at the Food and Drug Administration, "Practical theories for food risk communication." Washington, DC., July 28, 1998. (Invited).
- Guest lecturer for the Rollins School of Public Health of Emory University course EOH591, Risk Assessment, "Risk Perception and Communication." May, 1996 (Invited).

- Guest lecturer for the Rollins School of Public Health of Emory University course EOH591, Risk Assessment, "Risk Perception and Communication." April 5, 1995 (Invited).
- Discussant at the American Association for the Advancement of Science (AAAS) annual meetings in Atlanta, Georgia, session on "Risk Assessment for Unavoidable Exposures." February 20, 1995 (Invited).
- Participant, Addressing Agencies' Risk Communication Needs: A Symposium to Discuss Next Steps, Annapolis, Maryland, June 6-8, 1994 (Invited).
- Organized the Atlanta Health and Risk Communication Symposium, 1994-95. The Agency for Toxic Substances and Disease Registry (ATSDR) committed \$5,000 to this symposium, based on Bostrom's proposal for the series. Dr. Tim Tinker of ATSDR was co-organizer. It was co-sponsored by ATSDR, several entities at Georgia Tech including the School of Public Policy, as well as by the School of Public Health at Emory University.
- Presentation at the Department of Energy National Low-Level Waste Management Program Communication Working Session in Atlanta, Georgia, "Research on efforts to provide the public with the information they need to make decisions about exposure to risks," March 9-10, 1994 (Invited).
- Participant, Institute of Medicine workshop, "Health Risk Communication and Health Professionals, Washington, D.C., November 4-5, 1993 (Invited).
- Bostrom, A. "Risk Perceptions and Communications," Invited guest lecture at the School of Public Health, Division of Environmental Sciences, Columbia University, October 12, 1993.
- Guest lecture at the School of Public Health, Division of Environmental Sciences, Columbia University, "Risk Perceptions and Communications," October 12, 1993 (Invited).

#### Campus contributions at the University of Washington

Co-Chair, Faculty Search Committee for senior faculty member, Fall 2010.

Chair, Program review committee, UW School of Social Work 2009-2010.

Member, Faculty Search Committee, Fall 2008.

Member, MPA Admissions Committee, 2008-2010.

Member, PhD Financial Aid committee, March 2008-present.

Participated in drafting the white paper on the role of the social sciences in the College on the Environment, Spring 2008.

Member, Ph.D. Committee, 2007-2008.

Member (ex-officio), Faculty Council, 2007-present.

Committee Chair, Research Committee, 2007-2010 (ex-officio), ex-officio member fall 2010 to present.

### Campus contributions at Georgia Institute of Technology

Reader, Ph.D. committee for Jamie E. Padgett (CEE, Chair Reginald DesRoches), "Seismic Vulnerability Assessment of Retrofitted Bridges Using Probabilistic Methods." May, 2007.

Member, Georgia Tech Faculty Research Awards Committee, January, 2007.

Member, Faculty search committee, School of Public Policy, Fall 2006-Spring 2007.

Member, promotion and tenure specialty reading committee for third year critical review for Marco Castillo, School of Public Policy, Fall 2006.

Member, GT Women's Resource Center advisory board, January-June 2007.

Reader, Ph.D. committee for Michelle Bergin (CEE, Chair Armistead Russell), "Regional Air Quality: Photochemical Modeling for Policy Development and Regulatory Support" Defended successfully November, 2006.

Reader, Ph.D. comprehensive exam committee (passed fall 2007) and dissertation committee for Andy Mienaltowski (passed spring 2008), "Age Differences in Interpersonal Problem Solving: Examining Interpersonal Conflict in an Iterated Prisoner's Dilemma Game." Psychology (Advisor Fredda Blanchard-Fields), 2006-2008.

Member, Energy Policy Chair search committee, School of Public Policy, Fall 2005-Spring 2006.

Member, Health Systems Institute Steering Committee, 2005 to present.

Member, Institute Nominations committee for faculty elections, Fall 2005.

Member, Strategic Energy Initiative council, 2005 to 2006.

Reader, Ph.D. committee for Leonardo Dueñas-Osorio (Chairs James Craig and Barry Goodno), "Interdependent Response of Networked Systems to Natural Hazards and Intentional Disruptions." Defended successfully November 23, 2005.

Reader, Ph.D. committee for Eliesh Lane (Chair Richard Barke). "Decision-making in the human subjects review system." (defended successfully in January 2005)

Reader, Ph.D. committee for Thitima Kongnakorn (ISYE, Chair Francois Sainfort). "Development and Test of a New Method for Preference Measurement for Multistate Health Profiles." Defended successfully October 11, 2004.

Reader, Ph.D. committee for Sharon Mills (Chair Bryan Norton). Proposal defended Fall 2004.

Reader, Ph.D. committee for Debajyoti Pati (Architecture, Chair Craig Zimring). "Maximizing the benefits of courtroom POEs in design decision support and academic inquiry through a unified conceptual model." Defended successfully Fall 2004 (minor revisions in progress, dissertation to be submitted spring 2005).

- Reader, M.S. committee for Michelle Horhata (Psychology, Chair Fredda Blanchard-Fields), "Age Differences in the Correspondence Bias: An Examination of the Influence of Personal Belief." Defended successfully November 15, 2004.
- Organized and ran Evaluation Research workshop for joint doctoral program students and faculty, June 24, 2004, Wardlaw Center Gordy Room, speakers Barry Bozeman and Gary Henry (funded by GTF proposed and funding awarded when I was Doctoral program director, fall 2004).
- Chair, School of Public Policy Promotion & Tenure Reading committee for Douglas Noonan's 3<sup>rd</sup> year review, Fall 2004.
- Member, School of Public Policy Promotion & Tenure teaching evaluation committees for Douglas Noonan, Monica Gaughan, Fall 2004.
- Member, School of Public Policy Graduate Committee, 2004-present (also participated in grading comprehensive exams 2004-2006, chaired the environmental policy comprehensive exam in spring 2004, and was responsible for the posting the environmental policy reading list for doctoral students to the School's website in 2004).
- IAC-ADVANCE grants workshops April 2004, January 2005, February 3, 2006 organized and ran workshop (with Mary Frank Fox, assistant Karyn Lu 2004-2005, Allison Saul 2006).
- Chair, Committee on IAC Center Guidelines convened and chaired committee, submitted report to IAC Dean Rosser Fall 2004.
- Member, School of Public Policy faculty search committee (quantitative methods), Spring 2004.
- Member, School of Public Policy faculty search committee (environmental politics and policy), Fall 2004.
- Member, GSU/Tech Admissions and Coordinating committee for the joint Ph.D. in Public Policy, Spring 1998 to present (was ex-officio while director of the program in 2001-2002)
- Member (elected), Faculty Senate's Institute Graduate Curriculum committee, Fall 1998 to present.
- Reader, Ph.D. committee for Craig S. Gordon (Joint GT-GSU PhD, Chair Gary Henry) "Mediating and Moderating the Agenda-Setting Process: Three Studies of the Air Quality Issue." Defended successfully January 10, 2004.
- Representative for the School of Public Policy on the Ivan Allen College Promotion and Tenure Committee, Fall 2001 to 2004.
- Member, School of Public Policy faculty search committee, Fall 2003 to Spring 2004.
- Director, School of Public Policy doctoral programs, Fall 2001 to Fall 2003.
- Co-Chair, School of Public Policy Graduate Committee, Fall 2001-Spring 2002. Chair 2002-2003.
- Reader, Ph.D. committee for Angela Blair-Hutchinson. Defended successfully May, 2003.
- Chair, School of Public Policy School Chair Search Committee, Fall 2002 to Spring 2003.

Member, School of Public Policy environmental policy Ph.D. comprehensive exam committee, Spring 2000, Fall 2000, Spring 2001, Fall 2002.

Chair, Environmental Policy faculty search committee, Fall 2001 to Spring 2002.

Reader, Ph.D. committee for Elizabeth Corley, Public Policy, Defended successfully May, 2002.

Member, Ivan Allen College founder's day committee, Fall 2002.

Member, School of Public Policy Methods and Environmental Policy faculty search committee, Fall 2000-Spring 2001.

Reader, Ph.D. committee for Saif Ul-Haq, Architecture, "Expectation of Exploration: Evaluating the Effects of Environmental Variables on Wayfinding." Defended April 9, 2001.

Member, School of Public Policy information committee, Spring 1998 to Fall 1999.

Member, School of Public Policy undergraduate and graduate committees, Fall 1998 to Summer 1999.

Member, Ph.D. comprehensive exam committee, and specialty exam committee for Leisha Dehart-Davis, Spring 1999.

Member, Ivan Allen College Undergraduate Committee, Spring 1999.

Chair, Information Resources Committee, School of Public Policy, Summer 1995 to 1998.

Member, Institute Undergraduate Curriculum Committee, Fall 1995 to 1998.

Co-Chair, School of Public Policy Strategic Planning Committee, Spring 1997 to Spring 1998.

Member, Ivan Allen College Dean's search committee, Fall 1997-Winter 1998.

Member, MSPP curriculum review Committee, School of Public Policy, Summer 1995 to March 1997.

Member, Faculty Executive committee, School of Public Policy, Spring 1994 to Spring 1996.

Chair, School of Public Policy committee for GSU/Tech proposal for joint Ph.D. in Public Policy, Fall 1996 (program approved by Board of Regents Summer, 1997).

Member, Institute-wide Taskforce on Semester Conversion, Fall 1996.

Member, Ivan Allen College Diversity Task Force, Spring 1994 to 1995.

Reader, Ph.D. committee for John Roach, Psychology, "Beliefs about Racial Differences." Defended successfully February 13, 1995.

Presentation for the AAAS-NATO Advanced Research Workshop at the Environmental Resources Center, Georgia Tech, "Public Participation and Risk Management." February 18, 1995 (Invited).

Member, Ivan Allen College Computer Task Force, Spring 1993 to Fall 1994.

Member, Search committee for position in Environmental Economics, School of Public Policy, Fall 1993 to Spring 1994.

Member, Admissions committee, School of Public Policy, Spring 1994.

Participant, Lilly Endowment workshop on the Liberal Arts, Colorado Springs, Colorado, June 11-25, 1994 (and co-author of Report on Assessment of General Education). Bostrom was one of four faculty to attend this workshop as representatives of Georgia Tech. All four reported to the Institute-wide Assessment Seminar in the Fall of 1994.

Reader, Ph.D. committee for Showline Yi-Yun Chang, Psychology, "Personality Trait as a moderator in the Relationship Between Gender Stereotype and Gender bias in Initial Selection Decisions: A Cross-Cultural Study." Defended successfully August 17, 1994.

Guest lecturer for the Georgia Institute of Technology Nuclear Engineering Seminar (NE 4011 and 8011), "From Alpha to X-rays: Risk Perceptions of Radiations." September 30, 1994 (Invited).

Co-chair (with Phil Shapira) student recruitment committee, School of Public Policy, Fall 1993.

Member, Search committee for Smith Chair in Entrepreneurship, School of Management, Fall 1993.

Currently reader on committees for the following doctoral students: Sharon Mills (Public Policy), and Jamie Padgett (CEE).

Note: Bostrom also contributed to the development of the proposals for the BSPP, Ph.D. and Joint Ph.D. in Public Policy at Georgia Institute of Technology..

#### **OTHER CONTRIBUTIONS**

#### Consulting

Consultant to Pfizer, December 2006.

Consultant to CARA, Penn State University (PI Ann Fisher) in May, 2004 (rapporteur for climate change workshop, funded by U.S. EPA).

Consultant to Scientific Environmental Associates, Inc, SC. Research on the implementation of Incident Command System at PSE&G. Summer and Fall 2002.

Consultant to Scientific Environmental Associates, Inc., SC.. Continuation of research on risk perception and risk communication of ecological issues associated with chemical dispersant use on marine oil spills, 1998-99.

Consultant to Jenner & Block, Chicago IL, 1996-97 (for General Dynamics) on issues related to estimation of past overtime hours.

- Consultant to Gibson, Dunn & Crutcher, Los Angeles, CA, October 1994 (for General Dynamics). Prepared "Comment on estimated overtime hours for Albert N. Sena, et al., v. General Dynamics Corporation, Case No. 91-0965-B (M).
- Videotaped presentation for Kentucky Educational Television Radon in Schools Broadcasts, "Risk Communication." May, 1991. (Invited)
- Consultant to the Department of Justice on the Exxon Valdez case, through Walcoff & Associates (research on the use of contingent valuation in assessing the value of environmental damages), 1991.

### **Other Science Policy Contributions**

While at NSF 1999-2001 Bostrom participated in and made presentations at national and international meetings on research and science policy, including but not limited to the Subcommittee on Natural Disaster Reduction (a subcommittee of the Committee on Environment and Natural Resources of the National Science and Technology Council), the National Earthquake Hazard Reduction Program, and the US Weather Research Initiative. Bostrom also helped organized several meetings, including a workshop on Community Based Environmental Decision Making that was co-sponsored by NSF and the U.S. EPA, and two workshops on potential research collaboration between the Engineering Directorate and the Directorate for Social, Behavioral and Economic Sciences.

#### **Civic Activities**

Parent volunteer for Seattle Country Day School, Fall 2007-present (auction, book fair).

- Participant in 4K-5K Atlanta International School Science Fair (demonstration 2003-2004) and volunteer with AIS parents organization, 2003-2006.
- Participant in VARICO, a VAccine RIsk COmmunication group affiliated with the National Immunization Program, meeting at the Centers for Disease Control and via teleconference, Fall 1995-Spring 2003.
- Environmental Equity subcommittee member, Atlanta Environmental Priorities Project, Spring 1993 to Fall, 1994.

Information systems consultant (volunteer) to the Greater Pittsburgh Literacy Council, 1988-1989

#### RESEARCH PROPOSALS AND GRANTS

### AS PRINCIPAL AND CO-PRINCIPAL INVESTIGATOR

- Co-PI on "Warning Decisions in Extreme Weather Events: An integrated multidisciplinary approach" (National Science Foundation, award to UW \$145,850 (of \$750k total), April 1, 2008 2011, collaborative with lead PI Jeff Lazo, Julie Demuth and Rebecca Morss at NCAR; and with Co-PI Kathleen Tierney at U. Colorado at Boulder).
- Co-PI on "Seismic Risk Mitigation in Port Systems" NEES Research Grand Challenge award., National Science Foundation. Other Principal investigators: PI Glenn Rix) Co-PIs Reginald DesRoches, Alan Erera, Stu Werner.

- Funding level: \$3.7 million total; \$1.35 million to date for 2005-2007. Expected project performance period is Oct 1, 2005-Sep 30, 2009 (subaward to University of Washington September 2007-August 2010, \$167,908).
- PI on "Risk Perception and Decision Analysis" Mid-America Earthquake Center, National Science Foundation (through University of Illinois Urbana-Champagne), and co-director of Social Sciences for the Center (on Leadership Team). Center Renewal awarded October 2004, for 2004-2008. Total funding for this subproject to GT in 2004-2007 is ~\$150k (exclusive of matching funds). Total funding awarded for the MAE Center is \$6million for 2004-2007, PI Amr Elnashai at UIUC.
- PI on "Risk Assessment Workshop" Mid-America Earthquake Center, National Science Foundation (through University of Illinois Urbana-Champagne). Funded 2004-2006. Total funding to GT for workshop 2004-2006 \$50,000 (exclusive of matching funds).
- PI, Subcontract to Resources for the Future for mental models research on "Family Decision Making and the Value of Preventing Childhood Developmental Impairment" U.S. Environmental Protection Agency. Submitted in 2001, resubmitted in 2002. Funded for 2003-2007 (Total award to Resources for the Future \$344,698, to PI Alan Krupnick. Subcontract from RFF to GT \$44k).
- Co-PI on "PERCH Air Quality Study, Phases I and II" Partnership for Environmental Research and Community Health (subcontract through University of West Florida), U.S. Environmental Protection Agency. (Michael Chang, EAS lead PI) Funded 2002-2003 ~\$300k. \$150k in continuation funding awarded for 2004-2007.
- Co-PI on "Consequence Minimization: Decision Support Systems". Mid-America Earthquake Center, National Science Foundation. Funded for 2002-2004 (MAE Center is a multi-year multi-million dollar center. Project funds are ~\$80k annually, excluding matching funds from GT, continuation funding awarded for 2004-2005 in October, 2004).
- IPA, Director, Decision, Risk and Management Science Program, National Science Foundation, Funded for August 1999-August 2001, ~\$220k.
- Co-PI on "Follow-up Study of Reports of Autism Spectrum Disorder to VAERS: Clinical Description of Adverse Events and Characterization of Vaccine Risk Perception of Parents." Principal Investigators are Miles Braun and Robert Ball. Amount requested: None (due to my position at NSF). Result: Funded, 2000-2001.
- PI on "Improving vaccine risk information: metrics and mappings for probabilities." Seed grant from the Centers for Disease Control and Prevention and Georgia Tech, subcontract awarded to Norman Brown, University of Alberta, Edmonton CA. Result: Funded for June 2000 to May 2001. (\$15k, no money for PI due to NSF position)
- Co-PI on "Economic and environmental risk perceptions in transitional societies: Survey research" (Revision of Item 9 above, remaining research, PI Richard Barke). National Science Foundation, Decision, Risk and Management Science. Submitted August, 1997. Amount requested: \$ 226,075 Result: Funded (summer 1998).
- Proposal for subcontract on grant through Research Triangle Institute to the National Cancer Institute/National Institutes of Health for risk communication research on informed consent statements "Evaluating informed consent for BRCA1/2 screening." Submitted March, 1997. Amount requested: ~\$50k Result: Funded.

- IPA with the Centers for Disease Control (~ \$15,000) for 2 months, summer 1996. Result: Funded (summer 1996).
- Proposal for subcontract to Johns Hopkins for "Integrated Assessment of the Public Health Effects of Climate Change for the U.S.: Risk Characterization and Communication." Submitted to Johns Hopkins University for inclusion in proposal to the US EPA, submitted March 15, 1996. (Subcontract for ~\$128,000). Result: \$58k awarded (funding for 1996-98).
- "Economic and Environmental Risk Perceptions: Determinants of environmental policy in transitional societies." Revision of proposal listed in (8) with Krassimira Paskaleva and Richard Barke (co-principal investigators). Submitted to Decision, Risk and Mng. Science, National Science Foundation. Amount requested: \$280,000, February, 1996. Result: \$84k awarded, partial funding for first year.
- IPA with the Centers for Disease Control (~ \$4000) for a month, summer 1995. Result: Funded (summer 1995).
- "Risk Communication of Ecological Issues Related to Dispersant Use" Marine Spill Response Corporation, Washington DC (through Scientific and Environmental Associates, Inc. (SEA), Alexandria VA. Amount requested: Approximately \$22,000 (SEA received the award based on a proposal in which Bostrom is one of the key investigators named), March 1995 Result: Funded (1995-1996).
- "Assessing the Risk Perceptions and Priorities of the Atlanta Public." City of Atlanta. Amount requested: \$5,000, September 1993. Result: Funded (1994-1995).
- "ORAU Junior Faculty Enhancement Award 1993" (Perceptions of risks from cellular phones) Oak Ridge Associated Universities. Amount requested: \$5,000 Result: Designated as "runner-up."
- "Risk Communication Evaluation: Focusing on the Readers' Needs." National Science Foundation and the Electric Power Research Institute. Amount requested: \$102,000 January 1992 (approximate amount, including 2 REU supplemental grants and supplemental grant for GRA requested at later dates, as well as a later reduction in funding from EPRI after the initial award). Result: Awarded for 1992-94, extended to June, 1995.

#### **Honors and Awards**

Fellow of the Society for Risk Analysis, awarded December 2007.

Chauncey Starr award for a young risk analyst, from the Society for Risk Analysis. Awarded December, 1997.

American Statistical Association/National Science Foundation/Bureau of Labor Statistics Research Associateship, 1991-92 (listed under employment also).

Fulbright Graduate Research Fellowship and Lois Roth Endowment Fund grant, Carnegie Mellon University/University of Stockholm, 1989-90 (listed under employment also).

Patricia Roberts Harris Fellowship, Carnegie Mellon University, 1988-89.

Wall Street Journal Student Achievement Award, Master of Business Administration program, College of Business and Economics, Western Washington University, 1986

Updated January 2011.

### **CURRICULUM VITAE**

#### PERSONAL DETAILS

Name: Irasema Alcántara-Ayala

**Gender:** Female **Nationality:** Mexican

Date of birth: November 29th 1970

Marital Status: Single

**Present position:** Director (Head of Institute)

Professor (Research)

Address: Institute of Geography

National Autonomous University of Mexico, UNAM

Circuito Exterior, Ciudad Universitaria

Coyoacan, 04510 Mexico City, Mexico irasema@igg.unam.mx

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## ACADEMIC RECORD

E-mail:

First degree: 1993

BSc, Geography (First class, Honours)

National Autonomous University of Mexico (UNAM)

**Ph.D. degree:** 1997

PhD, Geography/Geomorphology

University of London, King's College London, UK Thesis: Modelling mass movement risk under semi-arid mountainous conditions: the Alpujarride Complex, Spain

Postdoctoral Fellow: 1998, 1999

Massachusetts Institute of Technology

Department of Civil & Environmental Engineering Natural Hazards, Risk, Geomorphology and Landsliding

#### PROFESSIONAL EXPERIENCE

Assistant Professor
Institute of Geography
National Autonomous University of Mexico, UNAM
Circuito Exterior, Ciudad Universitaria
Coyoacan, 04510, Mexico City
January, 2000-2005

Professor

### Institute of Geography

National Autonomous University of Mexico, UNAM Circuito Exterior, Ciudad Universitaria Coyoacan, 04510, Mexico City 2005- to present

Director

Institute of Geography

National Autonomous University of Mexico, UNAM Circuito Exterior, Ciudad Universitaria Coyoacan, 04510, Mexico City February, 2008- to present

Collaborator Researcher

National Centre for Disasters Prevention
Cenapred
2000- to present

# **JOURNAL PUBLICATIONS (peer reviewed)**

Thornes, J.B. and **Alcántara-Ayala, I.** 1998. Modelling mass failure in a Mediterranean mountain environment: climatic, geological, topographical and erosion controls, *Geomorphology*, 24, 87-100.

**Alcántara-Ayala, I.** 1999. Modelling deep-seated failures under semi-arid climatic conditions, *Geofísica Internacional*, 38, 1, 49-59.

**Alcántara-Ayala, I.** 1999. The Torvizcón, Spain, landslide of February 1996: the role of lithology in a semi-arid climate. *Geofísica Internacional*, 38, 3, 175-184.

**Alcántara-Ayala, I.** 2000. Índice de susceptibilidad a movimientos del terreno y su aplicación en una región semiárida (Landslide's susceptibility indicators in semiarid environments). *Revista Mexicana de Ciencias Geológicas, Instituto de Geología, UNAM,* 17, 1, 66-75.

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### POPULAR SCIENCE PUBLICATIONS

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### RESEARCH PROJECTS

2001-2003, National strategy to mitigate landslides risks. National Centre for Disaster Prevention.

2001-2004, Hillslope instability and associated risks: disaster prevention strategies in the Puebla-Veracruz region. National Council of Science and Technology (Conacyt).

2003-2005, Spatial-temporal effects of deforestation on landsliding: a disaster prevention approach. National Autonomous University of Mexico, PAPIIT.

2004, Deforestation, landslides and disasters: from monitoring to prevention. National Autonomous University of Mexico, PAPIIT.

2004-2005, Weathering and mass movement processes in tropical zones: geomorphological hazards assessment. Scientific cooperation between Poland-Mexico.

2005-2006, Unstable slopes: human or natural causes? Scientific cooperation between India-Mexico.

2006-2008, A puzzle called risk: disaster prevention in indigenous communities of the Sierra Norte de Puebla. National Autonomous University of Mexico, PAPIIT.

2006-2010, Landsliding: instrumentation and monitoring. National Council of Science and Technology (Conacyt).

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**Alcántara-Ayala, I.** 1992. Geomorfología de Aguascalientes (Geomorphology of Aguascalientes). XIII Congreso Nacional de Geografía, INEGI, Aguascalientes, Mexico.

**Alcántara-Ayala, I.** 1995. Impact of physical, chemical and structural properties of phyllites on mass failure. 17<sup>th</sup> Postgraduate Symposium, BGRG, University of Leeds, England.

**Alcántara-Ayala, I.** and Thornes, J.B. 1996. The environmental dimensions of mass failure in semi-arid Spain. 7<sup>th</sup> International Symposium on Landslides, Trondheim, Norway.

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**Alcántara-Ayala, I.** 1997. Slope stability in semi-arid mountainous terrains: modelling controlling factors. 4<sup>th</sup> International Conference on Geomorphology (IAG), Bologna, Italy.

**Alcántara-Ayala, I.** 1998. What can earth scientists do to prevent natural disasters beyond researching in the mountains? II International Workshop on Documentation of Mountain Disasters (DOMODIS), Barcelona, Spain.

**Alcántara-Ayala, I.** 1999. Vulnerability and natural disasters in developing countries: a new geomorphological approach. 30<sup>th</sup> Binghamton Geomorphology Symposium, Geomorphology in the Public Eye. Binghamton NY, USA.

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susceptibility in the Sierra Norte de Puebla by using ETM Landsat images). VI Reunión Nacional de Geomorfología, Instituto de Geografía, UNAM, Mexico City, Mexico.

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Rojas Hernández, I. and **Alcántara-Ayala, I.** 2001. Tsunamis en la costa de Colima: estudio de peligro y vulnerabilidad (Tsunamis in the coast of Colima: hazards and vulnerability). *VI Reunión Nacional de Geomorfología, Instituto de Geografía, UNAM*, Mexico City, Mexico.

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**Alcántara-Ayala, I.** 2002. Inestabilidad de laderas en Teziutlán, Puebla (Hillslope instability in Puebla), 10 de septiembre. *Reunión del Sistema Estatal de Protección Civil del Estado de Puebla*. Puebla, Mexico.

**Alcántara-Ayala, I.** 2002. Inestabilidad de laderas en la Sierra Norte Puebla (Hillslope instability in Puebla), *Foro Regional de Protección Civil para la Adecuación del Marco Regulatorio en el Ámbito de Protección Civil, Puebla*, Mexico.

**Alcántara-Ayala, I.** 2002. Definiciones, tipos y características de la inestabilidad de laderas (Definitions, types and characterisation of mass movement processes). (Project "Disasters Prevention in Central America), Cenapred (National Centre for Disasters Prevention), Taller Internacional sobre Aspectos Hidrometeorológicos y Geotécnicos para Mitigación del Riesgo por Inestabilidad de Laderas. *Proyecto Prevención de desastres en Centroamérica*, Mexico City, Mexico.

**Alcántara-Ayala, I.** 2002. Mecanismos básicos de inestabilidad (Basic mechanisms of slope instability). (Project "Disasters Prevention in Central America), Cenapred (National Centre for Disasters Prevention), Taller Internacional sobre Aspectos Hidrometeorológicos y Geotécnicos para Mitigación del Riesgo por Inestabilidad de Laderas. *Proyecto Prevención de Desastres en Centroamérica*, Mexico City, Mexico.

**Alcántara-Ayala, I.**, 2002. Rainfall induced landsliding associated to deforestation: a Mexican portrait. International Geographical Union, Regional Conference, Durban, South Africa.

Carrascal-Galindo, I.E. and **Alcántara-Ayala, I**. 2003. Turismo, vulnerabilidad y peligros naturales: una perspectiva de riesgo en Acapulco, Mexico (Tourism, vulnerability, and natural hazards: a risk perspective in Acapulco, Mexico). 9 Encuentro de Geógrafos de América Latina, Merida, Yucatan, Mexico.

Marcos-López, J., Esteban-Chávez, O., Alcántara-García, D.A. and **Alcántara-Ayala, I.** 2003. Análisis espacial de procesos de remoción en masa y su relación con la deforestación (Spatial analysis of mass movement processes and deforestation). 9 Encuentro de Geógrafos de América Latina, Merida, Yucatan, Mexico.

Lugo-Hubp, J., Zamorano-Orozco, J.J., **Alcántara-Ayala, I.**, Melgarejo-Palafox, G. and Inbar, M. 2003. Remoción en masa en las montañas plegadas del estado de Puebla, México en octubre de 1999 (Mass movement processes in the folded mountains of Puebla, Mexico). Simposio Internacional de Degradación y Desertificación, Comland, El Rodeo-Ambato-Catamarca, Argentina.

**Alcántara-Ayala, I**. 2003. Vegetación y estabilidad de laderas: una perspectiva de evaluación de los peligros asociados a procesos de remoción en masa (Vegetation and slope stability: an evaluation approach for landslides hazards). *9 Encuentro de Geógrafos de América Latina*, Merida, Yucatan, Mexico.

**Alcántara-Ayala, I.**, Alcántara-García, D. and Thornes, J.B. 2003. Erosion, deforestation and landsliding: a geomorphological modelling approach. *International Geographical Union, IGU* 

Conference: Society and Environment Interaction under Conditions of Global and Regional Changes, Moscow and Barnaul, Russia.

**Alcántara-Ayala, I.**, Zamorano-Orozco, J.J., Lugo-Hubp, J. and Melgarejo-Palafox, G. 2003. Mass movement processes in the Sierra Norte, Puebla; dynamics, impact and social effects. *International Geographical Union, IGU Conference: Society and Environment Interaction under Conditions of Global and Regional Changes*, Moscow and Barnaul, Russia.

Domínguez-Morales, L., Borja-Baeza, R.C., Esteban-Chávez, O., Garnica-Peña, R.J., López-Mendoza, M., Marcos-López, J., Villarreal-Lugo, P.A. and **Alcántara-Ayala, I.** 2003. Hazard and vulnerability: an evaluation of risk associated to landsliding. *International Geographical Union, IGU Conference: Society and Environment Interaction under Conditions of Global and Regional Changes*, Moscow and Barnaul, Russia.

Esteban-Chávez, O., **Alcántara-Ayala, I.** and Parrot, J.F. 2004. Impacto espacio temporal de la deforestación en la ocurrencia de procesos de ladera en la Sierra Norte de Puebla, México (Temporal impact of deforestation in mass movement processes, Sierra Norte de Puebla, Mexico). *III Seminario Latinoamericano de Geografía Física*, Puerto Vallarta, Jalisco, Mexico.

Garnica-Peña, R.J., Borja-Baeza, R.C., Marcos López, J. Esteban Chávez, O., Mendoza López, M. and **Alcántara-Ayala, I.** 2004. Riesgos por inundación en el municipio de Tecolutla, Veracruz, México (Floods risks in Tecolutla, Veracruz, Mexico). *III Seminario Latinoamericano de Geografía Física*, Puerto Vallarta, Jalisco, Mexico.

Alcántara-Ayala, I., Borja-Baeza, R.C., Marcos-López, J., Mendoza-López, M., Esteban-Chávez, O., Garnica-Peña, R.J. and Sánchez-Titla, E. 2004. Valoración de riesgos por procesos de remoción en masa a escala municipal en la Sierra Norte de Puebla (Mass movement risks at municipal scale in the Sierra Norte de Puebla), *III Seminario Latinoamericano de Geografía Física*, Puerto Vallarta, Jalisco, Mexico.

Delgado-Campos, J., Angeles-Serrano, G. and **Alcántara-Ayala, I**. 2004. Vulnerability and risk of peripheral areas in the rural-urban dynamic and its effect on city region sustainability. *30 Congress of the International Geographical Union, IGU*, Glasgow, Scotland.

Bendimerad, F., Wenzel, F. and **Alcántara-Ayala, I**. 2004. An integrated disaster management model for large cities. *30 Congress of the International Geographical Union*, IGU, august 15-20, Glasgow, Scotland.

**Alcántara-Ayala, I.**, López-Mendoza, M. and Melgarejo-Palafox, G. 2004. Enhancing disaster prevention culture among indigenous communities: an aid tool from the words of the Aztecs. 30 Congress of the International Geographical Union, IGU, august 15-20, Glasgow, Scotland.

**Alcántara Ayala, I.,** Delgado Campos, J.G. and Parrot, J.F. 2004. Geomorphic hazards and associated disasters: key issues towards the achievement of sustainability. *32 International Geological Congress,* Florence, Italy.

López-Mendoza, M., Melgarejo-Palafox, G. and **Alcántara-Ayala, I**. 2004. *Tepet, Tepekonet Amo Xik Pacho No Kalltsi Taxixitika...Tejuan Tikpia Nentajtol* (Hillslopes do not buried my little house- in Nahuatl, an autochthonous Mexican language). *3<sup>er</sup> Seminario Taller Internacional sobre Desastres: Prevención, Mitigación, Tecnología, Gestión, Educación, IPN,* Mexico City, Mexico.

Hernández-Madrigal, V.M., Garduño-Monroy, V.H. and **Alcántara-Ayala, I**. 2004. Modelización de inestabilidad de laderas por efecto de lluvias en base a la curva característica de los materiales: caso de estudio de laderas del depósito de ignimbrita Xaltipan, en la región de Zacapoaxtla, Puebla, México (Rainfall triggered landslides modelling on ignimbritic materials). *IV Reunión Nacional de Ciencias de la Tierra*, Juriquilla, Querétaro, Mexico.

**Alcántara-Ayala, I.** and Migoń, P. 2005. Modelling slope instability on weathered granite, Acapulco, Mexico. 6<sup>th</sup> International Conference on Geomorphology, Zaragoza, Spain.

Migoń, P. and **Alcántara-Ayala, I.** 2005. Granite weathering, slope instability and associated hazards in subtropical hilly terrain, Acapulco, Mexico. *European Geosciences Union General Assembly* 2005, Session NH3.07: Slope movements in weathered materials: recognition, analysis, and hazard assessment, Vienna, Austria.

**Alcántara-Ayala, I.** and Thornes, J.B. 2005. Landslides and hillslope hydrology under varying land-use in the Sierra de Norte de Puebla, Mexico. 6<sup>th</sup> International Conference on Geomorphology, Zaragoza, Spain.

Oliva-Aguilar, V.R. and **Alcántara-Ayala**, I. 2005. Los diferentes enfoques de los desastres en zonas rurales (The different approaches of disasters in rural zones). Conferencia de Geógrafos Latinoamericanistas CLAG, Morelia, Michoacan, Mexico.

Mendoza-López, M. and **Alcántara-Ayala, I**. 2005. Percepción de comunidades indígenas sobre procesos de remoción en masa en la Sierra Norte de Puebla (Perception of mass movements by indigenous communities in the Sierra de Norte de Puebla). *Conferencia de Geógrafos Latinoamericanistas CLAG*, Morelia, Michoacan, Mexico.

**Alcántara-Ayala, I.** 2006. Vulnerability and risk. Research Symposium on Global Changes, IIASA-SER-Instituto de Geografía, UNAM, Mexico City, Mexico.

**Alcántara-Ayala, I.** 2006. Desastres naturales y globalización (Natural disasters and globalization). *Seminario organizado por el CISAN-UNAM*, Mexico City, Mexico.

Migoń, P. and **Alcántara-Ayala, I**. 2006. Weathering and landform development in a subtropical hilly terrain, Acapulco, southern Mexico, *IAG - Regional Conference on Geomorphology*, Goiânia-GO, Brazil.

**Alcántara-Ayala, I.** 2006. ¿Se cae o no se cae? Laderas inestables- políticas deleznables (Does it fall or does it not fall? Unstable slopes- eroded politics). *Foro sobre Prevención de Desastres en México 2006*, La Gestión del Riesgo de Desastres en el Marco de la Política Social. Reflexiones y Perspectivas, CIESAS-Sedesol, Mexico City, Mexico.

**Alcántara-Ayala, I.** 2007. Evaluación de riesgos y manejo de geomorfositios (Risk evaluation and geomorphosites management), *VII Reunión Nacional de Geomorfología*, Sociedad Mexicana de Geomorfología, CIGA, Morelia, Michoacan, Mexico.

Evans, S.G. and **Alcántara-Ayala, I**. 2007. Disasters resulting from landslides, snow avalanches, and geotechnical failures in North America (Canada, United States, and Mexico) 1841-2006: A first assessment. 1<sup>st</sup> International Conference Landslides in North America, American Society of Civil Engineers, Vail, Colorado, USA.

**Alcántara-Ayala, I.** and Evans, S.G. 2007. Desastres por procesos de remoción en masa en América del Norte: un vistazo preliminar (Landslides disasters in North America: a preliminary view). *VII Reunión Nacional de Geomorfología*, Sociedad Mexicana de Geomorfología, CIGA, Morelia, Michoacan, Mexico.

**Alcántara-Ayala, I.** 2007. On the historical account of disastrous landslides in Mexico: the challenge of risk management and disaster prevention,  $2^{nd}$  EGU Alexander von Humboldt International Conference on The Role of Geophysics in Natural Disaster Prevention, Lima, Peru.

**Alcántara-Ayala, I.** 2007. Disaster prevention: a trans-disciplinarity approach, global scientific challenges: perspectives from young scientists (*An international conference celebrating 75 years of the International Council for Science, ICSU*), Lindau, Germany.

**Alcántara-Ayala, I.** 2007. Magnitude and frequency of landslides: does size matter? *Regional Geomorphology Conference*, Kota Kinabalu, Malaysia.

**Alcántara-Ayala, I.** and Vera Sánchez, P. 2007. Riesgos de desastre por procesos de remoción en masa desencadenados por sismicidad en la Ciudad de México (Landslides disasters triggered by seismicity in Mexico City). *Americas Megacities Forum- (EMI)* Earthquakes and Megacities Initiative, Mexico City, Mexico.

**Alcántara-Ayala, I.,** Ortiz Álvarez, M.I., Ibarra-García, M.V. and Ángeles Serrano, G. 2007. Un rompecabezas llamado riesgo: prevención de desastres en comunidades indígenas de la Sierra Norte de Puebla (A puzzle called risk: disaster prevention in indigenous communities of the Sierra Norte de Puebla). *IV Encuentro Participación de la Mujer en la Ciencia, CIO and CIATEC*, Leon, Guanajuato, Mexico.

**Alcántara-Ayala, I.** 2007. Geomorphosites: risk assessment and management. *Workshop Geomorphosites, Geoparks and Geotourism*, Lesvos, Greece.

**Alcántara-Ayala, I.**, Dykes, A.P. and Garnica-Peña, R.J. 2009. Hurricane Earl, chronicle of a Mexican foretold landslide disaster. 7<sup>th</sup> International Conference on Geomorphology (ANZIAG), Melbourne Convention and Exhibition Centre, Melbourne, Australia.

Dykes, A. and **Alcántara-Ayala, I.** 2009. Geomorphological hazards in Southeast Mexico, Dykes, A. *Melbourne Convention and Exhibition Centre*, Melbourne, Australia.

## PARTICIPATION IN ACADEMIC CONFERENCES (INVITATION)

**Alcántara-Ayala, I.** 1999. Modelling slope instability in semi-arid Spain, mining engineering, Department of Middle East Technical University, Ankara, Turkey.

**Alcántara-Ayala, I.** 2005. Natural hazards and risk communication among indigenous communities: the role of women on disaster prevention, Department of Geography and Anthropology, Louisiana State University, USA.

**Alcántara-Ayala, I**. 2005. Geomorphology, natural hazards, vulnerability and prevention of natural disasters in developing countries, Department of Geography and Anthropology, Evelyn Pruitt Lecture, Louisiana State University, USA.

**Alcántara-Ayala, I.** 2005. Earth, surface, processes and ladies: from Gaea, Prithivi, and Coatlicue to contemporary women geomorphologists. 6<sup>th</sup> International Conference on Geomorphology, Zaragoza, Spain (Plenary Lecture).

**Alcántara-Ayala, I.** 2008. Líneas de trabajo en la temática de prevención de desastres naturales, necesidades y perspectivas: el caso de México (Agenda for natural disasters prevention: needs and perspectives in Mexico), Antigua, Guatemala.

**Alcántara-Ayala, I.** 2008. Rasgos geomorfológicos de los deslizamientos y síntomas característicos de inestabilidad (Geomorphological characterisation and symptoms for landsliding), National Centre for Disasters Prevention, Cenapred, Mexico City, Mexico.

**Alcántara-Ayala, I.** 2008. Tecnología y geografía. Perspectivas. (Perspectives on technology and geography), XVIII Congreso Nacional de Geografía, Zacatecas, Mexico (Plenary Lecture).

**Alcántara-Ayala, I.** 2008. Beyond science: geomorphology and disaster prevention, II Encuentro Latinoamericano de Geomorfología, Belo Horizonte, Brazil (Plenary Lecture).

**Alcántara-Ayala, I.** 2008. Geomorphology and disaster prevention: challenges to be faced, First joint congress of the Working Groups: Human Impact on the Landscape (HILS) and Geomorphological Hazards (IAGeomhaz), Bochum, Germany (Plenary Lecture).

**Alcántara-Ayala, I.** 2008. Landslides and extreme events in mountain regions of Mexico: climatic change or human induced? Regional Conference on Geomorphology; Landslides, Floods and Global Environmental Change in Mountain Regions, Brasov, Rumania (Plenary Lecture).

**Alcántara-Ayala, I.** 2008. Riesgos de origen natural en la Ciudad de México (Natural risks in Mexico City), 3<sup>er</sup> Diplomado Normas y Ordenamientos Legales para el Desarrollo Urbano y Construcción en el Distrito Federal, Facultad de Arquitectura-Secretaría de Desarrollo Urbano y Vivienda del Gobierno del DF, Mexico City, Mexico (Plenary Lecture).

**Alcántara-Ayala, I.** and Garnica Peña, R. 2009. Procesos de remoción en masa y su impacto en la población (Impact of mass movement processes on population), Coloquio conmemorativo: avances y retos a diez años del deslizamiento ocurrido en la colonia La Aurora, municipio de Teziutlan, Puebla, Mexico.

Alcántara-Ayala, I. 2009. Desastres por procesos de remoción en masa: ¿Cambio climático o globalización? (Landslides disasters: climatic change or globalization?), III Simposio Mexicano Colombiano de Investigación Geográfica, Universidad de Quintana Roo, Mexico (Plenary Lecture).

**Alcántara-Ayala, I.** 2009. Desastres por procesos de remoción en masa: ¿Cambio climático o globalización? (Landslides disasters: climatic change or globalization?), Universidad Pedagógica y Tecnológica de Colombia (UPTC) y el Instituto Geográfico Agustín Codazzi (IGAC), Bogota, Colombia (Plenary Lecture).

#### ORGANIZATION OF ACADEMIC EVENTS

2001, VI Reunión Nacional de Geomorfología (VI National Geomorphology Conference), Instituto de Geografía, UNAM, Mexico City, Mexico.

2001, International Symposium on Land Degradation and Desertification, International Geographical Union, IGU, Commission on Land Degradation and Desertification (Comland), Instituto de Geografía - Instituto de Ecología. UNAM, Mexico City and Patzcuaro, Michoacan, Mexico.

2001, 4º Seminario de Tesistas, Espacio, riesgo y sociedad (Space, risk and society), Instituto de Geografía, UNAM, Mexico City, Mexico.

2002, 5º Seminario de Tesistas, Territorios y larga duración (Territories and long duration), Instituto de Geografía, UNAM, Mexico City, Mexico.

2002, III Reunión Nacional de Ciencias de la Tierra y VII Reunión Nacional de Geomorfología (III National Earth's Science Conference and VII National Geomorphology Conference), Puerto Vallarta, Jalisco, Mexico.

2003, Regional Geomorphology Conference, Geomorphic hazards: towards the prevention of disasters, Mexico City, Mexico.

2006, Curso Geomorfología Fluvial y Manejo de Ríos (Course: Fluvial Geomorphology and Management of Rivers), Sociedad Mexicana de Geomorfología, Mexico City, Mexico.

2006, El Presagio de Gea (The presagious of Gaia), Ciclo de Conferencias para conmemorar el día de la Tierra, Instituto de Geografía, UNAM, Mexico City, Mexico.

2007, VIII Reunión Nacional de Geomorfología (VIII National Geomorphology Conference), Sociedad Mexicana de Geomorfología, Centro de Investigaciones en Geografía Ambiental (CIGA), Morelia, Michoacan, Mexico.

2008, Reunión Multidisciplinaria Interacciones del Planeta Tierra (Interactions of Planet Earth), Mesa: Efecto integral de la tierra y la vida en ella, Ciudad Universitaria, Mexico City, Mexico.

2008, International Year of Planet Earth, National Autonomous University of Mexico (UNAM).

### **EDITORIAL ACTIVITIES**

### **Journal Editorial Boards- Member**

2004-	Editorial Board of the Journal of Mountain Science
2005-	Editorial Board of the Singapore Journal of Tropical Geography
2008-	Editorial Board of the Journal Earth Surface Processes and
	Landforms
2009-	Editorial Board of Hungarian Geographical Bulletin, Hungarian Academy of
	Science

## **Edition of Special Volumes of Journals**

2006-	Co-Editor of a special volume of the journal Catena (Elsevier)	
	Volume 65, Issue 2, Pages 101-200 (28 February 2006)	
	Geomorphology and Land Degradation	
	Edited by Paul F. Hudson and Irasema Alcántara-Ayala	
2010-	Co-Editor of a special volume of the Singapore Journal of Tropical Geography	
	Environmental Dimensions of the Mexican Tropic	
	Edited by Irasema Alcántara-Ayala and Alan P. Dykes	

## Reviewer

Geografiska Annaler, Series A, Physical Geography
Geomorphology
Natural Hazards and Earth System Sciences
Engineering Geology
Geografia Física e Dinamica e Quaternaria
Landslides
Interciencia (Interscience)
Revista Mexicana de Ciencias Geológicas (Mexican Journal of Geological Sciences)
Investigaciones Geográficas (Geographical Research)
Boletín de la Sociedad Geológica Mexicana (Bulletin of the Geological Mexican Society)

## **SCIENTIFIC COLLABORATIONS**

Prof. Antonio Roldán Garrigós Centre of Edaphology and Applied Biology, CSIC, Spain Biologic factors associated to the regulation of soil erosion risk September, 2001

Prof. John B. Thornes Department of Geography, King's College London, UK Deforestation, slope stability, landslides hazards, disasters prevention

- 1. April, 2002
- 2. November, 2003 (sponsored by Royal Society/Mexican Academy of Sciences)
- 3. November, 2004
- 4. March, 2006

Prof. Frank Audemard Department of Earth Sciences, FUNVISIS, Venezuela Tectonic geomorphology November, 2003

Prof. Piotr Migon

Department of Geography and Regional Development, University of Wroclaw, Poland Weathering and mass movement processes December, 2004

Prof. Paul Hudson Department of Geography, University of Texas at Austin, USA Fluvial geomorphology for river management April, 2006

Prof. Stephen G. Evans Landslide Research Programme, Department of Earth and Environmental Sciences University of Waterloo, Canada Landslides and risk assessment December, 2007

#### **SOCIETIES MEMBERSHIPS**

1993-1997	British Geomorphological Research Group (BGRG), Member
1994-1997	Royal Geographical Society/Institute of British Geographers, Fellow
1997-	Mexican Society of Geomorphology, Member
2000-	Mexican Society of Geomorphology, President
2002-	International Geographical Union, Member
2002-2005	International Geographical Union, Earthquakes and Megacities
	Initiative, Representative
2002-2005	International Geographical Union, Hazards and Risk Commission,
	Representative for Latin America
2005-	International Association of Geomorphologists, Geomorphological
	Hazards Working Group, Chair
2006- 2008	International Geographical Union, International Year of Earth Planet,
	Deep Earth: from core to crust, Representative

## **SCIENTIFIC DISTINCTIONS**

Gabino Barreda Medal to the best student of the class, Bachelor in Geography, 1993, UNAM

BSc studies scholarship, UNAM, 1992-1993

PhD studies scholarship, UNAM, 1993-1997

PhD research and field studies scholarship, School of Humanities, King's College London, University of London, 1996

Young Geomorphologist Grant, IV International Conference on Geomorphology, Bologna, Italy, International Association of Geomorphologists, 1997

Postdoctoral research scholarships by Massachusetts Institute of Technology and National Council of Science and Technology-Mexico, 1998-1999

Grant from the United Nations University to participate in the international course: Analysis and Management of Geological Risks, University of Geneve, Switzerland, 2000

Grant from the United Nations University and the International Astronautical Federation to participate in the *UN/IAF Workshop on Operational Strategy for Sustainable Development Using Space*, INPE, Sặo José Dos Campos, Brazil, 2000

Young Geomorphologist Grant to participate in the V International Conference on Geomorphology, Tokyo, Japan. International Association of Geomorphologists, 2001

Member of the National System of Researchers, Mexico, 2001 -

International Association of Geomorphologists (IAG), Member of the Executive Committee, 2002-2005

Grant from the Royal Society/Mexican Academy of Sciences, for a research stay at the University of 2004

3rd Evelyn Pruitt Lecturer, Department of Geography and Anthropology, Louisiana State University, USA, 2005

Global Scientific Challenges: Perspectives from Young Scientists, An international conference celebrating 75 years of ICSU (International Council for Science), Young scientists representative of the International Geographical Union (IGU), Lindau, Germany, 2007

Vice-president, International Geographical Union (IGU), 2008-

University of Cologne, Member of the International Advisory Board, Cologne, Germany, 2009-

International Council for Science (ICSU), Member of the Committee on Scientific Planning and Review (CSPR), Paris, France, 2009-

Mexican Academy of Sciences, Member, Mexico, 2009-

TWAS Young Affiliate Fellow, The Academy of Sciences for the Developing World, 2009-

## **OUTSTANDING ACOMPLISHMENTS**

Irasema Alcántara-Ayala was born in Mexico City in November, 1970. In 1993, she got her first degree in Geography at the National Autonomous University of Mexico (UNAM), where she was the best student of her class. Afterwards, she was granted a scholarship by UNAM to undertake postgraduate studies; in 1997, she obtained her PhD in Geography from King's College London, University of London. Later on, she carried out a

postdoctoral stay in the Department of Civil and Environmental Engineering at the Massachusetts Institute of Technology, Boston.

Once in Mexico, in 2000 she was appointed as an Assistant Professor at the Institute of Geography, UNAM. Few years later, she was promoted to full Professor; and in the year 2008, the Government Board, after a thorough and wide process, was selected as Director of the same Institute, becoming the youngest Director of the Institute's history, and the youngest one at UNAM even at the present date.

Her research, from a geographical perspective is focused on mass movement processes, natural hazards, risks, vulnerability and prevention of disasters. Since geography itself is considered a social science, this kind of investigations is strongly related to solving critical problems of societies. As such, she has very actively collaborated in Mexico with the National Centre for Disasters Prevention –Cenapred- and published several bulletins and reports addressing, among other aspects, the significance of educating and promoting the culture of prevention. The latter involves visits, talks and workshops with indigenous communities.

She has published numerous peer reviewed papers and book chapters, as well as presented her work at several dozens of international meetings in the five continents; very frequently as an invited lecturer. Additionally, she has taught both formal and specialized courses at undergraduate and postgraduate levels in different countries; training of students has been one of her main interests and commitments.

Recently, she has co-edited a book on geomorphological hazards and prevention of disasters, with a well-known scientist from the University of Oxford, which was published by Cambridge University Press. This publication emphasizes the urgent need of establishing coherent strategies for disasters prevention and mitigation and the understanding and forecasting of their mechanisms. In view of the recent events in Latin America (i.e. Haiti and Chile earthquakes) and worldwide, this book may become a fundamental publication for risk assessment and management to Earth and social scientists, decision makers, and planners.

In 2005, she was awarded the 3<sup>rd</sup> Evelyn Pruitt Lecture by the Department of Geography and Anthropology, Louisiana State University, USA. Nowadays, she has become member of several Editorial Boards of internationally recognized scientific journals, such as Earth, Surface, Processes and Landforms; Journal of Mountain Science; Singapore Journal of Tropical Geography; among others. From 2002 to 2005, she belonged to the Executive Committee of the International Association of Geomorphologists (IAG). She was also appointed the International Geographical Union (IGU) Representative within the Earthquakes and Megacities Initiative (EMI), as well as for the conference: Global Scientific Challenges: Perspectives from Young Scientists (an international conference celebrating 75 years of the International Council for Science, ICSU). In addition to previous distinctions, she became the IGU theme leader for the International Year of Planet Earth (IYPE) related to the topic Deep Earth –from crust to core-. Since 2000, she has been President of the Mexican Society of Geomorphology; in 2005, Chair of the Geomorphological Hazards Working Group of the International

Association of Geomorphologists (IAG); and member of the International Consortium on Landslides in 2008.

Currently, she has been distinguished as Vice-President of the International Geographical Union; has also been elected to the Committee on Scientific Planning and Review of the International Council for Science (ICSU), and as a TWAS Young Affiliated member. Moreover, she has been invited to participate in the International Board of the University of Cologne, Germany.

Mexico City, December, 2010

#### **Curriculum Vitae**

## Mrs. Sisi Zlatanova, Dr. Eng.



Dr. Sisi Zlatanova is an associate professor and a leader of the theme group 'Geo-information for Crisis Response' at the GIS Technology section, at the Delft University of Technology, the Netherlands. She has graduated as a surveyor at the University of Architecture, Civil Engineering and Geodesy, Sofia, Bulgaria in 1983 and has obtained her PhD degree on '3D GIS for urban modelling' at the Graz University of Technology, Graz, Austria in 2000. She worked as a software programmer at the Central Cadastre in Sofia, Bulgaria (1984-1989), an assistant-professor at UACG, Sofia, Bulgaria (1989-1995) and a researcher at the International Institute for Geo-information Science and Earth Observation (ITC), Enschede, The Netherlands (1995-1999).

She has been teaching various courses related to geo-information theory and its application. Recently she has been teaching '3D GIS', 'Spatial Information in Utilities' and 'Geo-information for disaster management' within the MSc program Geomatics (<a href="www.geomatics.tudelft.nl">www.geomatics.tudelft.nl</a>). She is also acting as a Msc coordinator in the MSc Course GIMA (<a href="http://www.msc-gima.nl">http://www.msc-gima.nl</a>).

Her research interests are in 3D geo-information technology and their applications in real time. Since 2003 she is actively involved in applying geo-information for emergency response. Many devastating disasters have motivated her towards promoting geo-information for risk and disaster management. Discussions and completed investigations within several national projects contributed to development of a model for maintenance of operational information, formal approaches for modeling of tasks and processes during emergencies and several prototypes for semantic search and filtering of information. Her research interests are now shifted towards utilization of 3D geo-information and indoor environments.

She is currently supervising several MSc and PhD students. The following students investigate topics related to risk and disaster management: Liu Liu (Indoor navigation for emergency response, started October 2010), Zhiyong Wang (Agent-based simulation for navigation of emergency responders, started October 2011) and Amin Mobasheri (Semantics for support of emergency operations, started December 2011). She has been invited give lectures on 3D GIS for disaster management by CUGB, Department of Land science, Beijing China (2010), SDAU, Taian, China (2010) and University of Venice, Italy (2007, 2008). She is chair of the ISPRS WP IV/8. 3D Spatial Data Integration for Disaster Management and Environmental Modeling (2004-2008). She initiated and is responsible for the annual symposium Gi4DM (<a href="https://www.gi4dm.net">www.gi4dm.net</a>). She was awarded the ISPRS Schermerhorn award (2004-2008) for her work in the group. She is advisor for the Security program of the EU FP7 program and reviewer for several projects.

### Workshop and summer schools:

- Geo-information for disaster management' at the '3S 2010' International Summer Student Seminar, 21-25 September 2010, Novosibirsk, Russia (<a href="http://ssga.ru/main/geo\_information\_for\_disaster\_management\_.html">http://ssga.ru/main/geo\_information\_for\_disaster\_management\_.html</a>) (lecturer)
- COST Training school '3D Geo-information for disaster management', 5-9 October 2009, Delft, The Netherlands (<a href="http://www.semcity.net/cms">http://www.semcity.net/cms</a>) (organizer)
- UDMS, Workshop on 3D for DM, 25th June 2009, Ljubljana, Slovenia (organizer)
- ISCRAM-TIEMS summer school, 20-27June, 2007, Tilburg, The Netherlands, (<a href="www.iscram.org">www.iscram.org</a>) (lecturer)
- Management and analysis of information for emergency response, 23, May 2007, at the 3rd Gi4DM, Toronto, Canada (organizer)
- Vespucci Summer School: Geo-Information technology for Emergency response, 4-8 June, 2005, Fiesole, Italy, <a href="http://vespucci.org/">http://vespucci.org/</a> (lecturer)
- Geo-informaion for disaster management, 2005, at GISPlanet, Estoril, Portugal (co-irganiser)

## Invited talks:

- Invited presentation at Workshop 4 Early Warning and Disaster Management, AGILE, 2 June, 2009, Hannover, Germany
- Invited talk, '3D navigation', 13-14 November, 2008, Seoul, Korea
- Invited presentation '3D Geo-ICT in DM', 11-12 August, 2008, Seoul, Korea
- Invited talk on Organisational aspects of Emergency responseat CHINA-EU workshop, 24-25 May, 2008, Beijing, China

## Projects:

- Participation in Marie Curie Initial Training Network Changing Hydrometeorological Risks as Analyzed By a New Generation of European Scientists CHANGES (start January, 2011)
- COST Action TU0801 'Semantic enrichment of 3D city models for sustainable urban development' (www.semcity.eu) (2008-2012)
- IP EU project HUMBOLDT (www.esdi-humboldt.eu) (2006-2011), WP Iwader on Harmonisation of data
- RGI-001 Geographical dimensions of Risk Managment (2006), Nationally funded problem definition study, member
- RGI-013 Virtual reality for urban planning and security (2006-2008), Nationally funded project, member
- RGI-128 Geo-information for riks mitigation (2006-2008), Nationally funded project, Member of the project. PhD supervisor.
- RGI-239 GDI4DM (2006-2008), Nationally funded project, Nationally funded project, Leader WG 'Data base modelling'

### Peer reviewed Journals:

- Girard, G., S. Côté, S. Zlatanova, Y. Barette, J. St-Pierre and P. van Oosterom, 2011, Indoor Pedestrian Navigation Using Foot-Mounted IMU and Portable Ultrasound Range Sensors, In: Sensors 2011, Volume 11, pp. 7606-7624
- Ogawa, K.,E. Verbree, S. Zlatanova, N. Kohtake and Y. Ohkami, 2011, Toward Seamless Indoor-Outdoor Applications: Developing Stakeholder-Oriented Location-Based Services, In: Geo-Spatial Information Science, Volume 14, 2, pp. 109-118
- Hijazi, I., M. Ehlers and S. Zlatanova, 2011, NIBU: a new approach to representing and analyzing interior utility networks within 3D geo-information systems, In: Digital World, iFirst, 2011, pp. 1-21
- Fan, Z. and S. Zlatanova, 2011, Exploring ontologies for semantic interoperability of data in emergency response, In: Applied Geomatics, Volume 3, 2, pp. 109-122
- Kang, Z., J. Li, L. Zhang, Q. Zhao and S. Zlatanova, 2009, Automatic Registration of Terrestrial Laser Scanning Point Clouds using Panoramic Reflectance Images Sensors 2009, 9(4), 2621-2646;
- Basta C., J.M.M. Neuvel, S. Zlatanova and B. Ale, 2007, Risk-maps informing land-use planning processes: A survey on the Netherlands and the United Kingdom recent developments, Journal of Hazardous Materials, Vol. 145, pp. 241-249
- Zlatanova, S., P.van Oosterom and E. Verbree, 2006, Geo-information supports management of urban disasters, Open House International, Vol. 31, No.1, March 2006, pp.62-79

# Editorship Books:

- Altan, O, R. Backhaus, P. Boccardo and S. Zlatanova, 2010, Geoinformation for Disaster and Risk Management: Examples and Best Practices, ISBN 978-b7-90907-88-4, Joint Board of Geospatial Information Societies (JB GIS) & United Nations Office for Outer Space Affairs (UNOOSA), Copenhagen, Denmark, 142 p.
- Konecny, M. S. Zlatanova and T bandrova, 2010, Geographic Information and Cartography for Risk and Crisis Management: Towards Better Solutions, 2010, ISBN 978-3-642-03442-8, Springer Heidelberg, Dordrecht, London, New York 446 p.
- Nayak and Zlatanova, 2008, Remote Sensing and GIS Technologies for Monitoring and Prediction of Disasters, 2008, ISBN 978-3-540-79258-1, e-ISBN: 978-3-540-79259-8, Springer-Verlag, Berlin Heidelberg, 271 p.
- Zlatanova and Li, 2008, Geospatial Information Technology for Emergency Response, 2008, ISBN 13: 978-0-415-42247-5 (hbk), ISBN 13: 987-0-203-92881-3 (ebook), Taylor & Francis Group, London, UK, 381 p. (ISPRS book series num. 6)
- Li, Zlatanova and Fabbri, 2007, Geomatics Solutions for Disaster Management, ISBN 10 3-540-72106-1 Springer-Verlag, Berlin Heidelberg, 444 p.
- Van Oosterom, P., S. Zlatanova nd E. Fendel, 2005, *Geo-information for Disaster Management*, ISBN 3-540-24988-5, Springer, Berlin, Heidelberg, New York, 1434 p.

## Book chapters:

- Schaap, J.,S. Zlatanova and P.J.M. van Oosterom, 2012, Towards a 3D geo-data model to support
  pedestrian routing in multimodal public transport travel advices, In: Zlatanova, Ledoux,
  Fendel&Rumor (Eds.), Urban and Regional Data Management, UDMS Annual 2011,
  CRCpress/Taylor and Francis Group, Boca Raton, London, pp. 63-78
- Liu, L. and S. Zlatanova, 2012, *Towards a 3D network model for indoor navigation*, In: Zlatanova, Ledoux, Fendel&Rumor (Eds.), Urban and Regional Data Management, UDMS Annual 2011, CRCpress/Taylor and Francis Group, Boca Raton, London, pp. 79-92

- Kemec, S., S. Zlatanova and H. S. Duzgun, 2010, *A Framework for Defining a 3D Model in Support of Risk Management*, In: Konecny, Zlatanova& Bandrova (Eds.), Geographic Information and Cartography for Risk and Crisis Management Towards Better Solutions, Springer, 2010, pp. 69-82
- Hofstra, H, H.J. Scholten, S. Zlatanova and A. Scotta, 2008, Multi-user tangible interfaces for effective decision-making in disaster management, In: S. Nayak and S. Zlatanova (Eds.); Remote Sensing and GIS Technologies for monitoring and prediction of disasters, Springer-Verlag, Berlin Heidelberg, pp. 243-266
- Lee, J. and S. Zlatanova, 2008, A 3D data model and topological analyses for emergency response in urban areas, in: Zlatanova & Li (Eds.), Geospatial information technology for emergency response (ISPRS book series) (pp. 143-168). Taylor & Francis Group, London, UK
- Kang, Z., Z. Zhang, J. Zhang & S. Zlatanova, 2007, Rapidly realizing 3D visualisation for urban street based on multi-source data integration, in: Li, Zlatanova&Fabbri (Eds.) Geomatics Solutions for Disaster Management, Lecture Notes in Geoinformation and Cartography, Springer-Verlag Berlin, Heidelberg, pp. 149-163
- Xu, W. and S. Zlatanova, 2007, Ontologies for Disaster Management, in: Li, Zlatanova&Fabbri (Eds.)
   Geomatics Solutions for Disaster Management, Lecture Notes in Geoinformation and Cartography,
   Springer-Verlag Berlin, Heidelberg, pp. 185-200

### Papers in conference proceedings:

(full list available at <a href="http://www.gdmc.nl/zlatanova/publications">http://www.gdmc.nl/zlatanova/publications</a>)</a>

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