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EDUCATION

Ph.D., Geography, Clark University, 1978-1980 (awarded 1981)M.A., Environmental Affairs, Clark University, 1976-1978B.A., Liberal Studies (Environmental Values & Behavior), Univ. of Hawaii-Manoa, 1971-1975

EMPLOYMENT

Senior Research Scientist, Decision Research, 2010-present
Research Scientist, New Jersey Department of Environmental Protection, 1987-2013
Associate Professor (tenured), Science, Technology, & Society Program, Department of Social Sciences, Michigan Technological University, 1988-1989
Assistant Professor, STS Program, Michigan Technological University, 1984-1988
Assistant Professor of Geography, University of Pittsburgh, 1980-1984

BOOKS

<u>The Social and Cultural Construction of Risk: Essays on Risk Selection and Perception</u>, Dordrecht, Holland: Reidel [now Kluwer], 1987 (senior editor, with V.T. Covello).

REFEREED ARTICLES

- "Affect Toward the Policy Option Versus the Hazard Differentially Mediates Cultural Effects on Americans' Zika Risk Perceptions and Policy Support: Comparing the Solution Aversion-Based Model and the Affect Heuristic-Cultural Cognition Theory Model," <u>Human and Ecological Risk Assessment: An International Journal</u>, 2022, advance online publication, https://doi.org/10.1080/10807039.2022.2048354.
- "Information Effects on Lay Tradeoffs Between National Regulatory Costs and Benefits," <u>Risk</u> <u>Analysis</u>, 2022, advance online publication, https://doi.org/10.1111/risa.13886 (first author, with A. M. Finkel).
- "Americans' Early Behavioral Responses to COVID-19," <u>Human and Ecological Risk</u> <u>Assessment: An International Journal</u>, 2021, 27(7), 1733-1746,

https://doi.org/10.1080/10807039.2021.1884842 (first author, with M. Mayorga). "Conservatives' Moral Foundations Are More Densely Connected than Liberals' Moral

- Foundations," <u>Personality and Social Psychology Bulletin</u>, 2021, 47(2), 167-184, https://doi.org/10.1177/0146167220916070 (second author, with F. M. Turner-Zwinkels, C. G. Sibley, and M. J. Brandt).
- "Cultural Theory's Contributions to Risk Analysis: A Thematic Review with Directions and Resources for Further Research," <u>Risk Analysis</u>, 2021, 41(3), 429-450 (first author, with B. Swedlow).

- "Evaluating the Effects of News-following, Volume and Content of News Coverage on Americans' Risk Perceptions During the 2014-2016 Ebola Outbreak," <u>Journal of Health</u> <u>Communication</u>, 2021, 26(5), 328-338, https://doi.org/10.1080/10810730.2021.1927257 (third author, with C. D. Wirz and M. Mayorga).
- "Lay Beliefs About Scientists' Relations with Their Employers," <u>Public Understanding of</u> <u>Science</u>, 2021, 30(1), 103-114, https://doi.org/10.1177/0963662520964931 (first author, with N. F. Dieckmann).
- "Perceived Characteristics of Hazard-Managing Organizations for Institutional Stereotypes and their Effects on Trust," <u>Journal of Risk Research</u>, 2021, 24, 148-166, https://doi.org/10.1080/13669877.2020.1749115.
- "Temporal Shifts in Americans' Risk Perceptions of the Zika Outbreak," <u>Human and Ecological</u> <u>Risk Assessment: An International Journal</u>, 2021, 27(5), 1242-1257,
- https://doi.org/10.1080/10807039.2020.1820852 (first author, with M. Mayorga). "A Longitudinal Analysis of Americans' Media Sources, Risk Perceptions, and Judged Need for Action During the Zika Outbreak," <u>Health Communication</u>, 2020, advance online publication, https://doi.org/10.1080/10410236.2020.1773707 (third author, with C. D. Wirz and M. Mayorga).
- "Americans' Views of Scientists' Motivations for Scientific Work," <u>Public Understanding of Science</u>, 2020, 29, 2–20, https://doi.org/10.1177/0963662519880319 (first author, with N. F. Dieckmann).
- "Comparing Cultural Theory and Cultural Cognition Theory Survey Measures to Each Other and as Explanations for Judged Risk," <u>Journal of Risk Research</u>, 2020, 23(10), 1278–1300, https://doi.org/10.1080/13669877.2019.1646310 (first author, with B. Swedlow).
- "Construct Validity of Cultural Theory Survey Measures," <u>Social Science Quarterly</u>, 2020, 101(6), 2332–2383, https://doi.org/10.1111/ssqu.12859 (sixth author, with B. Swedlow, J. T. Ripberger, L.-Y. Liu, C. L. Silva, and H. Jenkins-Smith).
- "Cultural Theory and Cultural Cognition Theory Survey Measures: Confirmatory Factoring and Predictive Validity of Factor Scores for Judged Risk," <u>Journal of Risk Research</u>, 2020, 23(11), 1467–1490, https://doi.org/10.1080/13669877.2019.1687577 (first author, with B. Swedlow and M. W. Mayorga).
- "Probing the Role of Institutional Stereotypes in Americans' Evaluations of Hazard-Managing Institutions," Journal of Risk Research, 2020, 23, 313–329, https://doi.org/10.1080/13669877.2019.1569095.
- "A Longitudinal Study of Concern and Judged Risk: The Case of Ebola in the United States, 2014–2015," Journal of Risk Research, 2019, 22, 1280–1293,
- https://doi.org/10.1080/13669877.2018.1466827 (second author, with M. W. Mayorga). "Americans' Views of Voluntary Protective Actions Against Zika Infection: Conceptual and
 - Measurement Issues," <u>Risk Analysis</u>, 2019, 39, 2694–2717, https://doi.org/doi:10.1111/risa.13378.
- "Experiments in Lay Cues to the Relative Validity of Positions Taken by Disputing Groups of Scientists," <u>Risk Analysis</u>, 2019, 39, 1657–1674, https://doi.org/10.1111/risa.13298.
- "Hazard Avoidance, Symbolic and Practical: The Case of Americans' Reported Responses to Ebola," <u>Journal of Risk Research</u>, 2019, 22, 346–363, https://doi.org/10.1080/13669877.2017.1378252.

"Why Do Scientists Disagree? Explaining and Improving Measures of the Perceived Causes of Scientific Disputes," <u>PLOS ONE</u>, 2019, 14(2), e0211269,

https://doi.org/10.1371/journal.pone.0211269 (second author, with N. F. Dieckmann).

- "Counting Votes' in Public Responses to Scientific Disputes," <u>Public Understanding of Science</u>, 2018, 27, 594-610, https://doi.org/10.1177/0963662517706451.
- "Effects of Acknowledging Uncertainty About Earthquake Risk Estimates on San Francisco Bay Area Residents' Beliefs, Attitudes, and Intentions," <u>Risk Analysis</u>, 2018, 38, 666–679, https://doi.org/10.1111/risa.12883 (second author, with K. Nakayachi and K. Koketsu).
- "Lay Americans' Views of Why Scientists Disagree with Each Other," <u>Public Understanding of Science</u>, 2018, 27, 824-835, https://doi.org/10.1177/0963662517738408 (first author, with N. F. Dieckmann).
- "The Limits of Self-Interest: Results from a Novel Stated-Preference Survey to Estimate the Social Benefits of Life-Prolonging Regulations," <u>Environmental Law</u>, 2018, 48, 453-476 (second author, with A. M. Finkel).
- "Residential Location and Psychological Distance in Americans' Risk Views and Behavioral Intentions Regarding Zika Virus," <u>Risk Analysis</u>, 2018, 38, 2561–2579, https://doi.org/10.1111/risa.13184.
- "Examining Associations Between Citizens' Beliefs and Attitudes About Uncertainty and Their Earthquake Risk Judgments, Preparedness Intentions, and Mitigation Policy Support in Japan and the United States," <u>International Journal of Disaster Risk Reduction</u>, 2017, 22, 37-45 (first author, with K. Nakayachi).
- "Explaining Americans' Responses to Dread Epidemics: An Illustration with Ebola in Late 2014," Journal of Risk Research, 2017, 20, 1338-1357.
- "Public Perceptions of Expert Disagreement: Bias and Incompetence or a Complex and Random World?" <u>Public Understanding of Science</u>, 2017, 26, 325-338 (second author, with N. F. Dieckmann, R. Gregory, M. Mayorga, P.K. Han, and P. Slovic).
- "Public Perceptions of Regulatory Costs, Their Uncertainty and Interindividual Distribution," <u>Risk Analysis</u>, 2016, 36, 1148-1170 (first author, with A. Finkel).
- "Fearing or Fearsome Ebola Communication? Keeping the Public in the Dark about Possible Post-21-Day Symptoms and Infectiousness Could Backfire," <u>Health, Risk, & Society</u>, 2015, 17, 458-471 (first author, with P. Slovic).
- "Modeling Retrospective Attribution of Responsibility to Hazard-Managing Institutions: An Example Involving a Food Contamination Incident," <u>Risk Analysis</u>, 2015, 35, 423-433 (first author, with W. Hallman and C. Cuite).
- "How Perceived Gains and Losses from Nature Trails Affect Trail Management Preferences," Journal of Environmental Psychology, 2014, 40, 430-439.
- "Q Method Can Identify Diverse Perspectives on 'Helpful' Information on Cancer Clusters and Inform Risk Communication Generally," <u>Journal of Risk Research</u>, 2014, 17, 1125-1145 (first author, with L. Waishwell).
- "Beliefs about Ecological Impacts Predict Deer Acceptance Capacity and Hunting Support," <u>Society & Natural Resources</u>, 2014, 27, 915-930 (first author, with L. Horowitz).
- "Communication Challenges for Complex Policy Issues: An Illustration with Multimedia Radon Mitigation," <u>Environmental Practice</u>, 2014, 16, 113-126.
- "Public Response to Official Communication on Cancer and Cancer Clusters," <u>Health &</u> <u>Ecological Risk Assessment</u>, 2014, 20, 839-871 (first author, with L. Waishwell).

- "Bases of Support Differ for Deer Reduction versus Behavior Change Options to Manage Deer Impacts," <u>Human Dimensions of Wildlife</u>, 2014, 19, 33-46.
- "Views on Black Bear Management in New Jersey," <u>Human Dimensions of Wildlife</u>, 2013, 18, 249-262 (first author, with J. Sciascia).
- "Climate Change Communication: A Provocative Inquiry into Motives, Meanings, and Means," <u>Risk Analysis</u>, 2012, 32, 973-991.
- "Experience with Urban Air Pollution in Paterson, New Jersey, and Implications for Air Pollution Communication," <u>Risk Analysis</u>, 2012, 32, 39-53.
- "Acculturation, Ethnicity, and Air Pollution Perceptions," Risk Analysis, 2011, 31, 984-999.
- "Trust and Terrorism: Citizen Responses to Anti-Terrorism Performance History," <u>Risk</u> <u>Analysis</u>, 2010, 30, 1328-1340.
- "The Intuitive Detection Theorist (IDT) Model of Trust in Hazard Managers," <u>Risk Analysis</u>, 2010, 30, 1196-1209 (second author, with M.P. White) **Best Paper, 2010.**
- "The Importance of Multiple Performance Criteria for Understanding Trust in Risk Managers," <u>Risk Analysis</u>, 2010, 30, 1099-1115 (first author, with M.P. White).
- "Public Views on Drinking Water Standards as Risk Indicators," <u>Risk Analysis</u>, 2008, 28, 1515-1530.
- "Local Officials' and Citizens' Views on Freshwater Wetlands," <u>Society and Natural Resources</u>, 2008, 21, 387-403 (first author, with K.K. Pflugh).
- "From the Inside Out: Environmental Agency Views about Communications with the Public," <u>Risk Analysis</u>, 2006, 26, 1395-1407 (first author, with C. Chess).
- "Evaluating Public Responses to Environmental Trend Indicators," <u>Science Communication</u>, 2006, 28, 64-92 (first author, with C. Chess).
- "Organizational Learning about Public Participation: 'Tiggers' and 'Eeyores'," <u>Human Ecology</u> <u>Review</u>, 2006, 13, 182-192 (second author, with C. Chess).
- "Public Understanding of Environmental Impacts of Electricity Deregulation," <u>Energy Policy</u>, 2006, 34, 1332-1343 (first author, with P.G. Frank).
- "Testing and Expanding a Model of Cognitive Processing of Risk Information," <u>Risk Analysis</u>, 2005, 25, 631-650.
- "Communicating About Environmental Indicators," <u>Journal of Risk Research</u>, 2005, 8, 63-75 (second author, with C. Chess and G. Gibson).
- "Accommodating Incertitude in Comparative Risk," <u>Risk Analysis</u>, 2004, 24, 1323-1335 (third author, with C.J. Andrews and D. Hassenzahl).
- "Arguments for Testing Ethnic Identity and Acculturation as Factors in Risk Judgments," <u>Risk</u> <u>Analysis</u>, 2004, 24, 1279-1287.
- "Risk Comparisons, Conflict, and Risk Acceptability Claims," Risk Analysis, 2004, 24, 131-145.
- "Varying Risk Comparison Elements: Effects on Public Reactions," <u>Risk Analysis</u>, 2004, 24, 103-114.
- "How Reassuring Are Risk Comparisons to Pollution Standards and Emission Limits?," <u>Risk</u> <u>Analysis</u>, 2003, 23, 999-1007 (first author, with C. Chess).
- "Do Reports on Drinking Water Quality Affect Customers' Concerns? Experiments in Report Content," <u>Risk Analysis</u>, 2003, 23, 985-998.
- "Customer Reaction to Hypothetical and Actual CCRs and Related Information," Journal of the American Water Works Association, 2003, 95(8), 90-99.
- "Communicating Worst-Case Scenarios: Neighbors' Views of Industrial Accident Management," <u>Risk Analysis</u>, 2003, 23, 829-840 (first author, with C. Chess).

- "Further Notes on Public Response to Uncertainty in Risk and Science," <u>Risk Analysis</u>, 2003, 23, 781-789. [*Erratum*: <u>Risk Analysis</u>, 2004, 24, 781]
- "Are Some Risk Comparisons More Effective under Conflict?: A Replication and Extension of Roth *et al.*," <u>Risk Analysis</u>, 2003, 23, 767-780.
- "Perceptions of Recreational Fishing Boat Captains: Knowledge and Effects of Fish Consumption Advisories," <u>Risk Analysis</u>, 2003, 23, 369-378 (second author, with J. Burger, S. Shukla, and M. Gochfeld).
- "Communicating Air Quality Information: Experimental Evaluation of Alternative Formats," <u>Risk Analysis</u>, 2003, 23, 91-103.
- "Using Research to Inform Agency Communications: Perceptions of Drinking Water," <u>Applied</u> <u>Environmental Education and Communication</u>, 2002, 1, 221-228 (second author, with C. Chess, D. Kovacs, and C. Schwar).
- "Stability and Inoculation of Risk Comparisons' Effects Under Conflict: Replicating and Extending the 'Asbestos Jury' Study by Slovic *et al.*," <u>Risk Analysis</u>, 2002, 22, 777-788.
- "Gender and Race in Beliefs about Outdoor Air Pollution," Risk Analysis, 2002, 22, 725-738.
- "Comparing Bottled Water and Tap Water: Experiments in Risk Communication," <u>Risk: Health.</u> <u>Safety & Environment</u>, 2002, 13, 69-94.
- "Public Reaction to Mandated Language for U.S. Drinking Water Quality Reports," <u>Risk:</u> <u>Health, Safety & Environment</u>, 2001, 12, 153-178.
- "Utility Customers' Views of the 'Consumer Confidence Report' of Drinking Water Quality," <u>Risk: Health, Safety & Environment,</u> 2000, 11, 309-328.
- "Risk Comparisons in a Democratic Society: What People Say They Want and Do Not Want," <u>Risk: Health, Safety & Environment,</u> 1999, 10, 221-230.
- "Ethical Issues in Risk Communication: Continuing the Discussion," <u>Risk Analysis</u>, 1999, 19, 335-348.
- "Exploring Dimensionality in the Origins of Hazard-Related Trust," <u>Journal of Risk Research</u>, 1999, 2, 325-354.
- "Lay Views on Uncertainty in Environmental Health Risk Assessment," Journal of Risk Research, 1998, 1, 261-279 (first author, with P. Slovic).
- "Presenting Uncertainty in Health Risk Assessment: Initial Studies of Its Effects on Risk Perception and Trust," <u>Risk Analysis</u>, 1995, 15, 485-494 (first author, with P. Slovic).
- "Eliciting and Classifying Concerns: A Methodological Critique," <u>Risk Analysis</u>, 1995, 15, 421-436 (last author, with T. Webler, H. Rakel and O. Renn).
- "Improving' Risk Communication and Risk Management: Legislated Solutions or Legislated Disasters?," <u>Risk Analysis</u>, 1994, 14, 905-906 (first author, with P. Slovic).
- "Public Participation in Decision Making: A Three-Step Procedure," <u>Policy Sciences</u>, 1993, 26, 189-214 (fourth author, with O. Renn, T. Webler, H. Rakel, and P. Dienel).
- "Agency Communication, Community Outrage, and Perception of Risk," <u>Risk Analysis</u>, 1993, 13, 585-598 (third author, with P.M. Sandman, P.M. Miller, and N.D. Weinstein).
- "Advancing Understanding of Knowledge's Role in Lay Risk Perception," <u>RISK: Issues in</u> <u>Health & Safety</u>, 1993, 4, 189-212.
- "Coping with Paradoxes of Risk Communication: Observations and Suggestions," <u>Risk Analysis</u>, 1993, 13, 241-243.
- "The Mental Model' Meets 'The Planning Process': Wrestling with Risk Communication Research and Practice," <u>Risk Analysis</u>, 1993, 13, 5-8.

- "Testing the Role of Technical Information in Public Risk Perception," <u>RISK: Issues in Health &</u> <u>Safety</u>, 1992, 3, 341-364 (first author, with P.M. Sandman and P. Miller).
- "Residential Exposure to Chromium Waste: Urine Biological Monitoring in Conjunction with Environmental Exposure Monitoring," <u>Environmental Research</u>, 1992, 58, 147-162 (eighth author, with A.H. Stern, N.C.G. Freeman, P. Pleban, R.R. Boesch, T. Wainman, T. Howell, S.I. Shupack, and P.J. Lioy).
- "Public Participation in Hazard Management: Citizen Panels and Their Applications in the United States of America," <u>RISK: Issues in Health & Safety</u>, 1991, 2, 197-226 (third author, with O. Renn and T. Webler).
- "Biological Markers in Chromium Exposure Assessment: Confounding Variables," <u>Archives of</u> <u>Environmental Health</u>, 1991, 46, 230-236 (last author, with J.A. Bukowski, M.D. Goldstein, and L.R. Korn).
- "Risk and Culture Research: Some Cautions," Journal of Cross-Cultural Psychology, 1991, 22, 141-149.
- "Environmental Project Reevaluation with Rising Calendar Time Benefits," <u>Journal of</u> <u>Environmental Systems</u>, 1988, 17, 167-175 (second author, with D.C. Major, R.H. Cole, R. Hosier, and M. Morrison).
- "Accounting for the Social Context of Risk Communication," <u>Science & Technology Studies</u>, 1987, 5, 103-111.
- "Public Concerns and the Public Role in Siting Nuclear and Chemical Waste Facilities," <u>Environmental Management</u>, 1987, 11, 571-586.
- "Project Evaluation in International Development," Issues in Engineering, 1982, 108, 122-132
- "Federal Wastewater Reuse Policy: Institutional and Attitudinal Obstacles to National Progress," <u>Resource Recovery and Conservation</u>, 1980, 5, 179-193.
- "Wastewater Reuse and Water Quality Planning in New England: Attitudes and Adoption," <u>Water Resources Research</u>, 1979, 15, 1329-1334.

BOOK CHAPTERS

- "Risk Analysis," in S.H. Priest (ed.), <u>Encyclopedia of Science and Technology Communication</u>, Thousand Oaks, CA: Sage, 2010.
- "Risk Communication by Organizations: The Back Story," in R.L. Heath & D. O'Hair (eds.), <u>Handbook of Crisis and Risk Communication</u>, New York: Routledge, 2009, 323-342 (second author, with C. Chess).
- "Getting Out of the Swamp: Toward Understanding Sources of Trust in Wetlands Management," in M. Siegrist, T.C. Earle & H. Gutscher (eds.), <u>Trust in Cooperative Risk Management:</u> <u>Uncertainty and Scepticism in the Public Mind</u>, London: Earthscan, 2007, 211-240. [**Refereed**]
- "Information is Not Enough," in S. Moser and L. Dilling (eds.), <u>Creating a Climate for Change:</u> <u>Communicating Climate Change–Facilitating Social Change</u>, Cambridge University Press, 2007, 223-233 (second author, with C. Chess). [**Refereed**]
- "Trust Judgements in Complex Hazard Management Systems: The Potential Role of Concepts of the System," in G. Cvetkovich and R. Löfstedt (eds.), <u>Social Trust and the Management of Risk</u>, London: Earthscan, 1999, 62-72. [**Refereed**]
- "Using Qualitative Data-Gathering Techniques to Improve the Design of Environmental Maps," in K. Rybaczuk & M. Blakemore (eds.), <u>Mapping the Nations, Proceedings, Volume 1</u>

(International Cartographic Association, Bournemouth, 1991), London: ICA, 1991, 364-373 (second author, with M. Monmonier).

- "Risk Education and Hazard Management in the Workplace: The Role of Workers' and Executives' Social Relations," in L.A. Cox, Jr. (ed.), <u>New Risks: Issues and Management</u>, New York: Plenum, 1990, 659-665.
- "Community Risk Perception: A Pilot Study," in L. Lave (ed.), <u>Risk Assessment and</u> <u>Management</u>, New York: Plenum, 1987, 337-344 (first author, with B. Baltensperger)
- "The Environmentalist Movement and Grid/Group Analysis: A Modest Critique," in Johnson & Covello, 1987 [see Books, first page], 147-175.
- "Congress as Hazard Manager," in R.W. Kates, C. Hohenemser, & J.X. Kasperson (eds.), <u>Perilous Progress: Managing the Hazards of Technology</u>, Boulder: Westview Press, 1985, 455-475. [**Refereed**]

"Tales of Woe: A Literature Survey," in Kates et al., op cit., 291-310. [Refereed]

INVITED PAPERS AND MEETINGS

- "Comparing Survey Measures of Cultural Theory," National Institute for Risk and Resilience, University of Oklahoma, Tulsa, OK, 12 July 2019.
- "Trustworthiness: Avoiding the Need to Build and Sustain Trust, and What to Do When You Can't," 2018 Annual Meeting, Center for Research on Ingredient Safety, Michigan State University, East Lansing, MI, 14 November 2018.
- "Building and Sustaining Trust in Decision Making Processes," National Academies of Science, Engineering and Medicine Workshop on Understanding Pathways to a Paradigm Shift in Toxicity Testing and Decision Making, Washington, D.C., 20 November 2017.
- "Climate Change Communication: A Modest Inquiry into Motives, Meanings, and Means," Workshop on Climate Change Perceptions, Risk Communication and Public Engagement, Cumberland Lodge, Windsor Great Park, United Kingdom, 20-22 July 2010.
- "Communicating Climate Change," National Estuarine Research Reserve Systems/National Estuarine Research Reserve Association annual conference, Shepherdstown, West Virginia, October 25, 2007.
- "Comparing Environmental Conditions to Health Standards: An Initial Assessment of the Communication Context and Sources of Trust in Health Standards," Department of Communications, University of Maryland, College Park, September 28, 2007.
- Discussant, International Workshop on "Dangerous" Climate Change, University of East Anglia, June 28-29, 2004.
- Discussant, Learning from the National Assessment [of Climate Change] Workshop, Washington, D.C., April 29, 2004.
- "Environmental Risk Communication: Implications for Public Education by NAS OPUS," Risk Project Planning Meeting, Office of Public Understanding of Science, National Academy of Sciences, Washington, D.C., November 22, 2002.
- "Industry Neighbors' Views about Accidents, Uncertainty, Standards, and Risk Comparisons," George Perkins Marsh Institute, Clark University, Worcester, Massachusetts, April 2, 2002.
- "How Ordinary People Deal with Uncertainty in Health Risks Posed by Environmental Toxins," MIT Boot Camp on Medical Evidence, Cambridge, Massachusetts, April 1, 2002.

"Managerial Uncertainty in Neighbors' Views of Industrial Accident Prevention" (with C. Chess), Bellingham International Conference on Social Trust in Risk Management, Western Washington University, Bellingham, Washington, June 15-17, 2000

- "Drinking Water Risk Communication Studies in New Jersey," Biannual Federal-State Toxicology and Risk Analysis Committee Meeting, Princeton, May 5-7, 1999
- "How a Multimedia Approach Might Work for Radon," American Water Works Association Water Quality Technology Conference, San Diego, November 1-4, 1998
- "The Mass Media and Concerns about Risk: Demon, Angel, or Merely Befuddledly Human?" and "What Researchers Think They Know About Risk Perception," Annual Meeting of the International Association for Probabilistic Safety Assessment and Management, New York, September 13-18, 1998
- "Grounding Trust-Related Definitions in Empirical Research," Bellingham International Conference on Social Trust in Risk Management, Western Washington University, Bellingham, Washington, July 14-16, 1996
- "Communicating with the Public on Ecological Issues" workshop, Clark University/USEPA, Washington, D.C., May 24-25, 1995
- "Principles of Good Communication Planning," Household Hazardous Waste Conference, Austin, Texas, November 18, 1994
- "Risk Communication Research" panel, National Institute of Medicine, Washington, D.C., November 4-5, 1993
- "Risk Communication" panel, American College of Toxicology, New Orleans, October 6, 1993
- "Organizational Risk Communication Lessons Learned" panel, The Annual Review of Research on Biological Effects of Electric and Magnetic Fields from the Generation, Delivery and Use of Electricity, San Diego, November 8, 1992
- "Public Perception of Risk," Session on Perception of Risk Related to Man-Made vs. Natural Radioactivity, REM '88 (American Nuclear Society Topical Conference: Radiological Effects on the Environment Due to Electricity Generation), East Rutherford, New Jersey, July 19, 1988
- "Risk Communication," Conference of Local Emergency Planning Commissions, Traverse City, Michigan, July 12, 1988
- Panelist at 2d Annual Meeting, International Risk Communication Research Group, Sudbury, Massachusetts, March 21-23, 1988
- "The Social Construction of Risk," Center for Technology, Environment, and Development, Clark University, Worcester, Massachusetts, February 29, 1988
- "Risk Communication and Hazard Management: Is There A Difference?," Seminar on Risk Communication and Environmental Management, Temple University, Philadelphia, November 18, 1987
- Panelist on "Hazard Management Guidelines from Hazard Perception and Risk Communication Research," Hazards Research and Applications Workshop: Risk Communication and Hazards Management, University of Colorado, Boulder, July 20-23, 1986
- "Assessing Explanations of Hazard Perceptions," Oak Ridge National Laboratory, Oak Ridge, Tennessee, June 25, 1986
- "Reassessing Hazard Identification Models," CENTED, Clark University, Worcester, Massachusetts, December 20, 1985

PAPERS DELIVERED

- "Eliciting Stated Preferences for Tradeoffs Between National Regulatory Costs and Benefits: Results from Calibration Studies" (first author, with A. Finkel), "Stated-Preference Estimates of the Welfare Effects of Risk Reduction and of Economic Cost: From De Minimis Risk (and Cost!) Through Intolerable" (second author, with A. Finkel), "Longitudinal Panel Survey of Media Exposure, Objective Knowledge, Risk Perceptions, and Protective Behavior of Americans Regarding the Novel Coronavirus Outbreak" (first author, with M. Mayorga), and "Fish, Farms, and Shared Futures: Exploring Stakeholder Risk and Benefit Perceptions of Land-Based Aquaculture in a Multi-State Case Study" (third author, with L.N. Rickard, B. McGreavy, & C. Houston), Society for Risk Analysis (virtual conference), 13-17 December 2020.
- "Public Judgments about National-Level Tradeoffs between Life-Prolonging Regulatory Benefits and Their Costs" (first author, with A. Finkel), and "Towards a Disutility Function for Risk: Asking (Not Telling) the Public How Probabilities of Grave Harm Affect Them" (second author, with A. Finkel), Society for Risk Analysis, Arlington, VA, 9 December 2019
- "Estimating Social Benefits of N Lives Prolonged: Preliminary Experiments on Framing Effects and Nonlinear Value Functions" (first author, with A. Finkel), Society for Risk Analysis, New Orleans, LA, 5 December 2018.
- "Comparing Cultural Theory (CT) and Cultural Cognition Theory (CCT) for Predicting Risk Judgments" (first author, with B. Swedlow), Midwest Political Science Association, Chicago, 7 April 2017.
- "Effects of Communicating Zika Prevalence and Potential Mosquito Vector Ranges on Americans' Zika Judgments of Risk, Concern, and Needed Risk Reduction," Zika Communication Summit, Annenberg Public Policy Center, University of Pennsylvania, Philadelphia, 11 March 2017.
- "Public Cues to Relative Credibility of Disputing Scientists" (poster), "Innovative Experiments to Explore Possible Mis-Estimation of the Net Benefits of Environmental, Public Health, and Safety Regulations" (second author, with A. Finkel), and "Institutional Stereotypes in the Context of Trust in, and Cooperation with, Organizations Facing Hazard Management Decisions" (first author, with D. DeGarmo), Society for Risk Analysis, San Diego, CA, December 11-15, 2016.
- "Exploring Associations of Perceived Hazard-Managing Attributes with Institutional Stereotypes," and "Explaining Variations in Americans' Beliefs, Attitudes and Reported Behaviors Regarding Ebola," Society for Risk Analysis, Arlington, VA, December 6-10, 2015.
- "Does Trust or Distrust Persevere over Repeated Events?: An Extension of Trust Asymmetry Research to Homogeneous Event Sequences Involving Management of Nano-Medicines," and "Americans' Stereotypes of Societal Institutions: An exploratory Investigation" (poster), Society for Risk Analysis, Denver, December 7-10, 2014.

- "Towards a Theory of Regulatory Cost Perception, Part 1: Main Results from a Survey of Life-Saving Tradeoffs with Uncertainty in Regulatory Costs and Interindividual Variation in Cost Burden" and "Towards a Theory of Regulatory Cost Perception, Part 2: Effects of Demographic Variables, Numeracy, Regulatory Ideology, 'Regulatory Surprise,' and Value-of-Statistical-Lives-Information on Perceptions of Cost (both with A.M. Finkel), Society for Risk Analysis, San Francisco, December 11, 2012.
- "Challenges of Managing Small Suburban Natural Areas: Public Beliefs, Attitudes and Behaviors Regarding Ecological Effects," plus posters (with C. Cuite and W.K. Hallman) on "Trust and Responsibility Attributions: Variations Across Hazard Managers in Accidental and Intentional Food Contamination Incidents," and (adding R.M. McWilliams) "Experimental Investigation into Public Response to Food Terrorism vs. Accidental Contamination," Society for Risk Analysis, Charleston, December 7, 2011.
- Panelist on "Risk Communication in the Wild: How Do We Know When We Have Succeeded?," Society for Risk Analysis, Salt Lake City, December 8, 2010.
- "Gender, Ethnicity, and Risk Perception Effects of Local Hazards and Stressed Neighborhoods," Society for Risk Analysis, Baltimore, December 9, 2009.
- "Trust and Terrorism: Citizen Responses to Anti-Terrorism History," Society for Risk Analysis, Boston, December 8, 2008 (co-winner, **Best Poster**).
- "Cancer Cluster Attitudes and Beliefs about 'Helpful' Communications" (with L. Waishwell), Society for Risk Analysis, San Antonio, December 12, 2007.
- "Trust in Drinking Water Standards," Society for Risk Analysis, Baltimore, December 5, 2006.
- "Beliefs and Attitudes of Agency Personnel about Communication with the Public" (with C. Chess) and "Trust, Drinking Water Standards, and Beliefs about Private Well Water Contamination in New Jersey," Society for Risk Analysis, Orlando, December 5-7, 2005.
- "Cognitive Processing of Industrial Risk Comparison Information" and "Examining the Sources of Trust: Concepts and Pilot Evidence on Wetlands," Society for Risk Analysis, Baltimore, December 7-10, 2003.
- "Public Views on the Protectiveness of Standards" (with C. Chess), "Exploring the Relative 'Toxicity' of Risk Comparisons," and "Public Response to Environmental Indicators" (with C. Chess), Society for Risk Analysis, New Orleans, December 8-11, 2002.
- "Wetlands: Public and Local Officials' Views on Their Value and Management" (with K.K. Pflugh) and "Industry Neighbors' Reaction to Worst-Case Accident Scenarios" (with C. Chess), Society for Risk Analysis, Seattle, Washington, December 2-5, 2001.
- "Risk Comparisons, Criticism and Inoculation: New Data and Theoretical Implications"; (with G. Gibson and C. Chess) "Communicating Environmental Indicators"; (with R. Hazen) "Making 'Environmental Justice' Practical in Government Decisions: An Argument and Demonstration"; and (with J. Burger, S. Shukla, M. Gochfeld) "Perceived Effect of Fish Consumption Advisories on Recreational and Party-Boat Fishing in New Jersey," Society for Risk Analysis, Arlington, Virginia, December 3-6, 2000.
- "Consumer Confidence Reports' on Drinking Water Quality: Surveys of Utility Customer Reactions"; "Communicating Air Pollution Conditions: Results from a Philadelphia Study"; and (with D. Kovacs and C. Chess) "Beliefs about Utility, Private Well, and Bottled Water Quality and Management of New Jersey Residents," Society for Risk Analysis, Atlanta, December 5-8, 1999.

- "Public Response to the Notion of Drinking Water Quality Reports: Initial Survey Data" and "Risk Comparisons: What Does the Public Want?," Society for Risk Analysis, Phoenix, December 6-9, 1998.
- "Some Ethical Challenges of Practical Risk Communication: A Discussion Group" and "Consumer Confidence Reports' for Drinking Water Contamination: Initial Studies on Public Response," Society for Risk Analysis, December 1997.
- "Trust Judgments in Complex Hazard Management Systems: The Potential Role of Concepts of 'The System," Second Bellingham International Conference on Social Trust in Risk Management, Bellingham, Washington, July 13-15, 1997.
- "Sharing Environmental Information with the Public Through Interactive Computer Mapping: A New Jersey Pilot Project" (with R. Berardo, S. Strater, and J. Shaw) and "Lay Concepts of Uncertainty in Health Risk Estimates" (with P. Slovic), Society for Risk Analysis, New Orleans, December 8-12, 1996.
- "Grounding Trust-Related Definitions in Empirical Research," First Bellingham International Conference on Social Trust in Risk Management, Bellingham, Washington, July 14-16, 1996.
- "Lay Concepts of Uncertainty in Health Risk Estimates" (with P. Slovic), Society for Risk Analysis, Honolulu, December 3-6, 1995.
- "Public Responses to Uncertainty in Health Risk Assessment" (with P. Slovic), Society for Risk Analysis, Baltimore, December 4-7, 1994.
- "Institutional Constraints on Evaluating Risk Communications," ""Voluntary Siting of Hazardous Facilities: New Jersey's Approach to Low-Level Radioactive Waste," and "Public Response to Uncertainty in Risk Estimates: Preliminary Data" (with P. Slovic), Society for Risk Analysis, Savannah, Georgia, December 5-8, 1993.
- "Trust in Risk: Many Questions, Few Answers" and "Public Response to Uncertainty in Risk Estimates" (with P. Slovic), Society for Risk Analysis, San Diego, December 6-9, 1992
- "Knowledge and Risk Perception: What We Don't Know," American Sociological Association, Pittsburgh, August 20-24, 1992.
- "Toward Better Theories of Risk Perception," "Outrage and Technical Detail: The Impact of Agency Behavior on Community Risk Perception" (with P. Sandman & P. Miller), & "A Risk Communication Tool to Diagnose Misunderstandings Between Citizens, Experts, and Regulatory Agencies" (with O. Renn et al.), Society for Risk Analysis, Baltimore, December 8-11, 1991.
- "Using Qualitative Data-Gathering Techniques to Improve the Design of Environmental Maps" (with M. Monmonier), 15th International Cartographic Conference, Bournemouth, England, September 23-October 1, 1991.
- "Risk Communication: Does Agency Behavior or Technical Risk Information Determine Public Risk Perceptions?" (with P. Sandman and P. Miller), Philadelphia Chapter-Society for Risk Analysis, Philadelphia, April 17, 1991.
- "Assessing Government Needs for Risk Communication: A Case Study in New Jersey" (with J. Shaw), "Use of Community Right to Know Data in New Jersey: A Survey of Actions and Perceptions," and "Coping with Paradoxes of Risk Communication," Society for Risk Analysis, New Orleans, October 7-10, 1990.

- "Knowledge and Risk Perception: What We Don't Know," "Classifying Hazards: A Discussion of Costs and Benefits," and "Framing Public Debate: Adopting a Process for Communicating Environmental Risk" (with J. Shaw and K. Kirk), Society for Risk Analysis, San Francisco, October 29-November 1, 1989.
- "A Public Role in Exposure Assessment," Society for Risk Analysis, Washington, D.C., October 30-November 2, 1988.
- "The Social Context of Risk Communication: The Next Task," Society for Risk Analysis, Houston, November 1-4, 1987.
- "Political Interests in Risk Assessment," American Political Science Association, Chicago, September 3-6, 1987.
- "Risk Education and Hazard Management in the Workplace: The Role of Workers' and Executives' Social Relations," Society for Risk Analysis, Boston, November 9-12, 1986.
- "The Social Construction of Science and Hazard Assessment," Society for the Social Study of Science, Pittsburgh, October 23-26, 1986.
- "Dimensions of Natural, Social and Technological Hazard Perception," American Association for the Advancement of Science, Philadelphia, May 25-30, 1986 (with B. Baltensperger).
- "An Empirical Test of Alternative Hazard Perception Models," Association of American Geographers, Minneapolis, May 4-7, 1986 (first author, with B. Baltensperger).
- "Attitudes to Nuclear Waste Facilities: A Comparison with Chemical Waste Facility Attitudes," Western Social Science Association, Reno, Nevada, April 23-26, 1986.
- "Community Risk Perception: A Pilot Study," Society for Risk Analysis, Alexandria, Virginia, October 6-9, 1985 (first author, with B. Baltensperger).
- "New Directions in Hazard Identification Research," Association of American Geographers, Detroit, April 24, 1985.
- "An Agenda for Cultural Risk Selection Research," American Association for the Advancement of Science, New York, May 26, 1984.

RESEARCH REPORTS AND EDUCATIONAL MATERIALS

- Design Guide for Environmental Maps, Division of Science and Research. Trenton: New Jersey Department of Environmental Protection, 1997 (second author, with M. Monmonier).
- Explaining Uncertainty in Health Risk Assessment: Effects on Risk Perception and Trust (Phase 1 Final Progress Report to U.S. Environmental Protection Agency as part of Cooperative Agreement No. CR820522). Eugene, Oregon: Decision Research, Inc., 1994 (first author, with P. Slovic).
- Establishing Dialogue: Planning for Successful Environmental Management; A Guide to <u>Effective Communication Planning</u>, Division of Science and Research. Trenton: New Jersey Department of Environmental Protection and Energy, 1992 (last author, with K.K. Pflugh and J. Shaw).
- An Underused Resource: Users' Experiences with and Expectations of New Jersey Community <u>Right-to-Know Data</u>, Division of Science and Research. Trenton: New Jersey Department of Environmental Protection and Energy, 1991.
- <u>A Look Inside: Risk Communication and Public Participation within the New Jersey Department</u> <u>of Environmental Protection</u>, Division of Science and Research. Trenton: New Jersey Department of Environmental Protection, November 1990 (second author, with J. Shaw).

- <u>A Propositional Inventory of Technological Hazard Management</u>, Background Paper Series No. 1, Center for Technology, Environment, and Development. Worcester, Massachusetts: Clark University, 1979.
- <u>Urbanization and Water Quality Planning; The 208 Experience in Massachusetts</u>, Water Resources Research Center Publication No. 104. Amherst: University of Massachusetts, 1979 (second author, with H.E. Schwarz, R.J. Caiazzo, and D.E. Pincus).
- Handbook of Water Conservation Devices, National Technical Information Service PB283-018. Springfield, Virginia: U.S. Department of Commerce, 1977 (second author, with S. Feldman and B. Corbett).
- NEW TOWN, An Urban Development and Environmental Planning Game (rev. ed.), 1977 (second author, with B. Lawson).

PROFESSIONAL ACTIVITIES

Member, National Research Council, Committee on Human Biomonitoring of Environmental Toxicants, 2005-2006

Member, National Research Council, Committee on Drinking Water Contaminants, 1998-2000 Proposal referee:

National Science Foundation, 1985-Present (including review panel, 2003-2005)

National Oceanic and Atmospheric Administration, 1989-Present

U.S. Environmental Protection Agency, 1993-Present

Manuscript referee (selected):

American Political Science Review; Annals of the Association of American Geographers; Environmental Management; European Journal of Social Psychology; Human and Ecological Risk Assessment; Journal of Policy Analysis and Management; Journal of Risk Research; Risk Analysis; RISK: Health, Safety & Environment; Science, Technology, & Human Values; The Social Science Journal; Water Resources Research

<u>Risk Analysis</u>: Outstanding Reviewer Award (inaugural), 2008; Best Paper, 2010 Risk and Policy Association: President, 2005-2008 Memberships (current):

- American Association for the Advancement of Science
- Society for Risk Analysis (selected positions): SRA Fellow (appointed 2013); Member, Editorial Board, <u>Risk Analysis</u>, 2008-present; member, ad hoc Ethics Committee (2008-2009); Chair (1994-6) and Executive Committee (1993-4), Risk Communication Specialty Group; President, Philadelphia Chapter (1990-1991)

<u>Courses Taught</u> Conservation Controlling Technology Environmental Policy Environmental Policymaking I: Public Demands, Legislative Responses Environmental Policymaking II: Implementation and Evaluation Environmental Problems Government, Science, and Technology Hazard Identification, Estimation, and Evaluation Introduction to Economic Geography Introduction to Natural Resource Issues Strategies of Natural and Technological Hazard Management Technology, Science, and Social Conflict in Modern America