JOHN STRAIT APPLEGATE

James Louis Calamaras Professor of Law Indiana University Maurer School of Law Baier Hall 316, 211 South Indiana Avenue, Bloomington, Indiana 47405 812.855.9198 - jsapple@indiana.edu

Education 1978 - 1981 HARVARD LAW SCHOOL, Cambridge, Mass. I.D., magna cum laude, 1981 1974 - 1978 HAVERFORD COLLEGE, Haverford, Pa. B.A. with High Honors in English, 1978 Phi Beta Kappa; S.P. Lippincott Prize in History Employment 1998 - present INDIANA UNIVERSITY MAURER SCHOOL OF LAW (Bloomington) James Louis Calamaras Professor of Law, since 2020 Walter W. Foskett Professor of Law, 2002-2020; Professor, 1998-2002 Executive Associate Dean for Academic Affairs, 2002-2009 Indiana University Leadership Development Program, 2006 CIC Academic Leadership Program Fellow, 2003-2004 Alliance of Distinguished and Titled Professors, since 2002 University Graduate School Faculty, since 2002 Faculty Fellow, 1999-2000, 2000-2001 INDIANA UNIVERSITY BLOOMINGTON 2021 - 2022 Interim Provost and Executive Vice President Acting Provost, April-June 2015 2007 - 2021 INDIANA UNIVERSITY Executive Vice President for University Academic Affairs, 2013-2021 Executive Vice President for Univ. Regional Affairs, Planning, and Policy, 2011-2013 Vice President for University Regional Affairs, Planning, and Policy, 2010-2011 Vice President for Planning and Policy, 2008-2010 Presidential Fellow, Office of the President, 2007-2008 VANDERBILT UNIVERSITY SCHOOL OF LAW Fall 1996 Visiting Professor of Law UNIVERSITY OF CINCINNATI COLLEGE OF LAW 1987 - 1998 James B. Helmer, Jr., Professor of Law, 1994-1998 Professor, 1992-1994; Associate, 1990-1992; Assistant, 1987-1990 Goldman Prize for Excellence in Teaching, 1991, 1995 1983 - 1987 COVINGTON & BURLING, Washington, D.C. Associate Attorney Staff Attorney, Neighborhood Legal Services Program, December 1985 – June 1986 1981 - 1983 UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT,

(U.S. Court of Claims, 1981-1982), Washington, D.C. Law Clerk to Hon. Edward S. Smith

Academic Career Highlights

- Author or co-author of numerous books, articles, and chapters on environmental and administrative law.
- James Louis Calamaras Professor of Law (Walter W. Foskett Professor of Law, 2002-2020), Indiana University Maurer School of Law (2002-present); James B. Helmer, Jr., Professor of Law, University of Cincinnati College of Law (1994-1998).
- National Associate, National Academies of Sciences, Engineering, and Medicine, recognizing leadership of numerous NAS studies and workshops, detailed below (2020).
- Nuclear and Radiation Studies Board, National Academy of Sciences, Engineering, and Medicine (2010-2014).
- Àmerican Law Institute (2009).
- Environmental Management Advisory Board, U.S. Dept. of Energy, Washington, D.C. (1994-2001).
- Vice Chair of the University Faculty, University of Cincinnati (1990-1992).

Interim Executive Vice President and Provost, Indiana University Bloomington

- Chief Academic Officer of IU's flagship campus; responsible for all aspects of campus operations except athletics; 45,000 students (including 10,000 graduate and professional), 9200 faculty and staff, \$1.7 billion annual budget.
- Direct reports include deans of 14 schools, College of Arts and Sciences, and University Libraries; 11 vice provosts or equivalent; 8 program directors; numerous auxiliary operations, including housing, dining, and recreational sports; regional academic health center.
- Presiding officer, Bloomington Faculty Council; BFC Executive Committee; member ex officio, University Faculty Council.
- Pursuing initiatives in student health and wellbeing, inclusion and faculty diversity, enhanced research and graduate student support, humanities enrollment, performing arts future audiences, social science resource center.
- University-wide public safety (described below), including coordination of university-wide COVID-19 pandemic response.

Executive Vice President for University Academic Affairs, Indiana University

University Academic Affairs

- Revitalized university-wide faculty and academic affairs, including faculty governance institutions, academic administration, and representation of academic affairs in relationships with state and federal government.
- IU Online Initiative, based on inter-campus collaboration, faculty ownership of curriculum and instruction, shared infrastructure and instructional support, and online-focused student services; pre-pandemic enrollment grew 89% from 2014 to 2020, number of programs grew by 130%.
- Integrated, interactive university-wide systems to support student success, pervasive academic advising, student academic planning, and career connections for students and employers; increased graduation rates significantly on all campuses.
- Numerous university-wide initiatives to elevate the role and support for excellent teaching, including research in pedagogy, resources for teachers (*e.g.*, <u>teaching.iu.edu</u>, <u>keepteaching.iu.edu</u>), teaching awards and ranks, and faculty-led academy on teaching excellence (FACET).
- Principal investigator for Lilly Endowment, Inc. grant (\$5.5 million; additional \$10 million pending) to grow the Indiana's educational pipeline and combat "brain drain."

University Faculty Relations

- Partnership with reconstituted University Faculty Council to take an active role in academic governance, adopt new academic and faculty policies, and undertake a comprehensive review of existing academic policy.
- Regional Faculty Caucus created as part of regional campus reorganization, to guide faculty and academic collaboration; regional campuses join leadership of University Faculty Council.

Regional Campus Affairs

- "Blueprint" reorganization of IU regional campuses under executive vice president for university academic affairs; creation of vision, mission, organization, and infrastructure for the intensive collaboration among the IU regional campuses (*Blueprint for Student Attainment, Blueprint 2.0*); instituted budget conferences; improved outcomes, sharing of resources, new efficiencies, fiscal stability, and raised profile within the university, communities, and in state government.
- Doubled 4-year graduation rates; among biggest "winners" in competitive state performance funding formula.
- Exceeded goal for IU Bicentennial Campaign (\$83 million); new culture of philanthropic support: 125% growth in annual average funds raised, 103% growth in endowment resources.
- Minority enrollment proportion increased to exceed service region on all campuses; new HSI campus; multi-cultural centers, offices, and curriculum on all campuses.

Strategic Planning

- Leadership or leadership role in seven major strategic plans, including IU Bicentennial Strategic Plan (concluded in 2020), which articulated institutional direction and priorities, set goals, and served as the basis for public support and private philanthropy:
 - Indiana University Bicentennial Strategic Plan (2015)
 - Blueprint 2.0 (2015)
 - New Academic Directions (2011)
 - New Directions in Teaching & Learning (2011)
 - IU Principles of Excellence (2010)
 - Blueprint for Student Attainment (2010)
 - Advancing Knowledge, Justice, and the Public Good: IU School of Law Bloomington Strategic Plan (2005)

Public Safety and Institutional Assurance

- Creation of professional university-wide public safety infrastructure with clearly defined responsibilities, accountability, standards, and training – including police, emergency management, environmental health and safety, event safety, and physical and cyber security.
- Best-practice, progressive law enforcement policies, education, and training on sexual assault, mental health crisis, implicit bias, active shooters, de-escalation, body-worn cameras, use of force, after-action analysis, public dashboards, behavioral consultation teams, programs involving children, and Clery Act compliance.
- Diversity and bias training in IU Police Academy; first Chief Diversity Officer in IU Police Department; women, persons of color, and LGBTQ+ individuals appointed to top leadership positions in police and public safety departments, and serving at all ranks.
- Emergency response structure successfully responded to numerous long- and short-term critical events, including pandemics, suspected active shooters, mold, and extreme weather events; adopted national emergency management procedures and standards.

University Student Services and Systems

• Financial literacy and debt reduction programs that reduced student loans by 22% in 8 years, and halved default rates on highest rate campuses.

- Implemented a shared services system for enrollment management, admissions, registrar, financial
 aid, advising, bursar, and student records, saving \$8.1 million annually in administrative costs and
 allowing campuses to shift resources to student-facing, success-oriented activities; support use of
 Salesforce CRM for student services; distributed services suffered no loss of performance in
 pandemic.
- Doubled number of veterans, active service members, and families; veteran-friendly recognitions.

University Institutional Research & Reporting

- Comprehensive suite of authoritative, current, and widely accessible reports and self-service analytical tools; support all aspects of enrollment management with data and analysis.
- Annual analyses of major external rankings of campuses and programs to assure best representation consistent with institutional integrity and goals.

Organizational Excellence

- Hiring and promoting women, people of color, and LGBTQ to senior positions in university academic administration office and regional campus leadership.
- Fully transparent and readily accessible system for developing, publishing, and revising university policies across all functions (<u>policies.iu.edu</u>); reduced administrative policy burden.

Instruction

Courses Taught

Toxic Substances and Hazardous Wastes, International Environmental Law, Environmental Law Seminar (various topics), Property, Administrative Law, Torts, Environmental Law Survey

Dissertation Committees

SJD – chaired 4, member of 2

PhD – member of 6 at Indiana (SPEA, Law & Political Science), 2 at Cincinnati (Communications, Engineering)

Books

THE LAW OF TOXIC SUBSTANCES AND HAZARDOUS WASTES (& JAN G. LAITOS, MARY J. ANGELO, JEFFREY M. GABA) (Foundation Press 2020).

THE REGULATION OF TOXIC SUBSTANCES AND HAZARDOUS WASTES, 3D ED. (& JAN G. LAITOS, JEFFREY M. GABA, NOAH M. SACHS) and Teachers Manual (Foundation Press 2018).

THE REGULATION OF TOXIC SUBSTANCES AND HAZARDOUS WASTES, 2D ED. (& JAN G. LAITOS, JEFFREY M. GABA, NOAH M. SACHS) and Teachers Manual (Foundation Press 2011).

ENVIRONMENTAL LAW: RCRA, CERCLA, AND THE MANAGEMENT OF HAZARDOUS WASTE (Foundation: Turning Point Series) (& JAN G. LAITOS) (2005).

THE INTERNATIONAL LIBRARY OF ESSAYS IN ENVIRONMENTAL LAW: ENVIRONMENTAL RISK (2 volumes; Ashgate 2004) (editor), and Introduction: Environmental Risk: Defining the Problem and Disciplining the Response (pp. xiii-xxiv).

THE REGULATION OF TOXIC SUBSTANCES AND HAZARDOUS WASTES (Foundation Press 2000) (& JAN G. LAITOS, CELIA CAMPBELL-MOHN); and TEACHERS MANUAL (2002).

Articles and Chapters

Chemicals as Regulatory Targets (Chapter 1), in ENCYCLOPEDIA OF CHEMICAL LAW: PRODUCTS, WASTE, AND SOIL (Adam Abelkop & Lucas Bergkamp, eds.) (Elgar 2023).

Vermont Yankee Revisited: Public Participation in Administrative Decisionmaking, in PENSER LE DROIT À PARTIR DE L'INDIVIDU: MÉLANGES EN HOMAGE À ELISABETH ZOLLER (Dalloz, 2018).

Embracing a Precautionary Approach to Climate Change, in ECONOMIC THOUGHT AND U.S. CLIMATE CHANGE POLICY (David M. Driesen, ed.) (MIT Press 2010).

Synthesizing TSCA and REACH: Practical Principles for Chemical Regulation, 35 ECOLOGY L.Q. 721 (2008), reprinted in 41 LAND USE AND ENVIRONMENT L. REV. 515 (2010), as one of the peer-selected six best environmental law articles published in 2009.

The Temporal Dimension of Land Pollution: Another Perspective on Applying the Breaking-the-Logjam Principles to Waste Management, 17 NYU ENVTL. L.J. 757 (2008). Bridging the Data Gap: Balancing the Supply and Demand for Chemical Information, 86 TEX. L. REV. 1365 (2008).

Missing Information: The Scientific Data Gap in Conservation and Chemical Regulation, 83 IND. L.J. 399 (2008) (introduction to symposium conference) (& Robert Fischman).

Environmental Justice and the Sense of Place, in ENVIRONMENTAL LITERACY: A BASIC COMPETENCY FOR 21ST CENTURY UNIVERSITY EDUCATION, Heather L. Reynolds *et al.*, eds. (Indiana Univ. Press 2010).

Reforming the Toxic Substances Control Act, in CPR for the Environment: Breathing New Life into the Nation's Major Environmental Statutes, Center for Progressive Reform (2007) (& Wendy E. Wagner), January 2007.

The Government Role in Scientific Research: Who Should Bridge the Data Gap in Chemical Regulation?, in RESCUING SCIENCE FROM POLITICS: REGULATION AND THE DISTORTION OF SCIENTIFIC RESEARCH (Wendy Wagner & Rena Steinzor, eds.) (Cambridge Univ. Press 2006), pp. 255-278.

The Story of Reserve Mining: Managing Scientific Uncertainty in Environmental Regulation in ENVIRONMENTAL LAW STORIES (Richard Lazarus & Oliver Houck, eds.) (Foundation Press 2005).

The Taming of the Precautionary Principle, 27 WM. & M. ENVTL. L. & POLICY REV. 13 (2002).

Introduction: Syncopated Sustainable Development, 9 IND. J. GLOBAL LEGAL STUD. 1 (2001) (& Alfred C. Aman, Jr.).

The Prometheus Principle: Using the Precautionary Principle to Harmonize the Regulation of Genetically Modified Organisms, 9 IND. J. GLOBAL LEGAL STUDIES 207 (2001).

Judicial Review of Risk Assessment: Substance or Procedure? 6 RISK DECISION & POLICY (Cambridge Univ. Press) 123 (2001).

Getting Ahead of Ourselves: A Comment on Professor Frank B. Cross' Legal Implications of Hormesis, 8:3 BELLE [Biological Effects of Low Level Exposures] Newsletter 9 (2001); 20:3 HUMAN & EXPERIMENTAL TOXICOLOGY 129 (2001). The Precautionary Preference: An American Perspective on the Precautionary Principle, 6:3 HUMAN & ECOLOGICAL RISK ASSESSMENT 413 (2000).

Using Cases as Case Studies for Teaching Administrative Law, 38 BRANDEIS L.J. 217 (2000).

Risk Assessment: Science, Law, and Policy, 14:4 NAT. RESOURCES & ENVT. 219 (Spring 2000) (& Celia Campbell-Mohn).

National Security and Environmental Protection: The Half-Full Glass, 26 ECOLOGY L.Q. 350 (1999) (book review).

Preparing for Rule 612, in ABA SECTION ON LITIGATION, THE LITIGATION MANUAL: PRETRIALAT 432 (3d ed. 1999) (revision of 1993 LITIGATION article, infra), reprinted in THE LITIGATION MANUAL: DEPOSITIONS (2006).

Learning from NEPA: Some Guidelines for Responsible Federal Risk Legislation, 23 HARV. ENVTL. L. REV. 93 (1999) (Celia Campbell-Mohn &).

Risk Assessment, Redevelopment, and Environmental Justice: Candidly Evaluating the Brownfields Bargain, 13 J. NAT. RESOURCES & ENVTL. L. 243 (1997-98).

Institutional Controls or Emperor's Clothes? Long-Term Stewardship of the Nuclear Weapons Complex, 28 ENVTL. L. REP. (ENVTL. L. INST.) 10631 (1998) (& Stephen Dycus).

Short Changing Short-Term Risk: A Study of CERCLA Remedy Selection, 15 YALE J. ON REG. 269 (1998) (& Steven M. Wesloh).

Beyond the Usual Suspects: The Use of Citizens Advisory Boards in Environmental Decisionmaking, 73 IND. L.J. 903 (1998).

Comparative Risk Assessment and Environmental Priorities Projects: A Forum, Not a Formula, 25 N. KY. L. REV. 71 (1998).

Decision Time for DOE: LWVEF Urges National Dialogue on Nuclear Facilities Cleanup, THE NATIONAL VOTER [League of Women Voters], January 1998, p. 14 (& Sharon Lloyd-O'Connor).

FUTURESITE: An Environmental Remediation Game-Simulation, 28 SIMULATION & GAMING 13 (1997) (& Douglas J. Sarno).

Citizens Get Involved in Cleaning Up Fernald, 11:4 FORUM FOR APPLIED RES. & PUB. POLICY 122 (1996) (& Douglas J. Sarno).

Coping with Complex Facts and Multiple Parties in Public Disputes, CONSENSUS [Harvard-MIT Public Disputes Program] no.31, p.1 (July 1996) (& Douglas J. Sarno).

A Beginning and Not an End in Itself: The Proper Role of Risk in Environmental Decisionmaking, 63 U. CIN. L. REV. 1643 (1995).

How to Save the National Priorities List from the D.C. Circuit -- And Itself, 9 J. NAT. RESOURCES & ENVTL. L. 211 (1993-94).

Preparing for Rule 612, 19:3 LITIGATION 17 (1993).

Worst Things First: Risk, Information, and Regulatory Structure in Toxic Substances Control, 9 YALE J. ON REG. 277 (1992).

The Perils of Unreasonable Risk: Information, Regulatory Policy, and Toxic Substances Control, 91 COLUM. L. REV. 261 (1991).

Judicial Rhetoric and Administrative Law, 42 ADMIN. L. REV. 307 (1990) (review essay, reviewing G. EDWARD WHITE, THE AMERICAN JUDICIAL TRADITION (expanded ed. 1988)).

Witness Preparation, 68 TEX. L. REV. 277 (1989), reprinted in 39 DEF. L.J. 457 (1990).

The Business Papers Rule: White Collar Crime and Personal Privacy, 16 AKRON L. REV. 189 (1982).

Comment, Pen Registers After Smith v. Maryland, 15 HARV. C.R.-C.L. L. REV. 753 (1980) (& Amy Grossman).

National Academies and U.S. Department of Energy Service

2021 - 2023	Chair, National Academies Study Committee on the Continued Analysis of Supplemental Treatment of Low-Activity Waste at the Hanford Nuclear Reservation
2022	Participant, Expert Meeting on Fusion Energy Technologies (organized by National Academies for Government Accountability Office), Sept. 20-22, 2022 (final GAO report published March 30, 2023)
2020	National Academies of Sciences, Engineering, and Medicine, National Associate
2017 - 2020	Chair, National Academies Study Committee on Supplemental Treatment of Low- Activity Waste at the Hanford Nuclear Reservation (series of four consensus reports published 2018-2020)
2016	Chair, Organizing Committee, National Academies Workshop on Low-Level Radioactive Waste Management and Disposition (report published 2017)
2016	Experts Meeting on Immobilization of Low-Activity Radioactive Waste (organized by National Academies for General Accounting Office), May 3-4, 2016
2014 - 2015	Organizing Committee, National Academies 2014 Gilbert W. Beebe Symposium, The Science of Responding to a Nuclear Reactor Accident (symposium report published 2015)
2014	Organizing Committee, National Academies Workshop on Applying Lessons Learned to Mitigate the Consequences of Nuclear Power Plant Accidents
2010 - 2014	Nuclear and Radiation Studies Board, National Academy of Sciences (oversees NAS nuclear and radiation projects)
2013 - 2015	Steering Committee, National Academies Keck Futures Initiative, The Future of Advanced Nuclear Technologies: Building a Healthier and Safer Planet

2004 - 2006	National Academies Study Committee on the Management of Certain Radioactive Waste Streams Stored in Tanks at Three Department of Energy Sites (consensus report published 2006)
2003 - 2004	Vice-Chair, National Academies Study Committee on Risk-Based Approaches for Radioactive Waste (consensus report published 2005)
2001 - 2003	National Academies Study Committee on Long-Term Institutional Management of DOE Legacy Waste Sites: Phase 2
1998	Congressional Testimony, The Innovative Use of the Federal Advisory Committee Act to Improve Public Participation in Agency Decisions, Subcommittee on Government Management, Committee on Government Review and Oversight, U.S. House of Representatives, July 14, 1998.
1995	Congressional Testimony, The Use of Risk Assessment in Setting Standards and Priorities for the U.S. Department of Energy, Committee on Energy and Natural Resources, U.S. Senate, March 6, 1995.
1994 – 2001	Environmental Management Advisory Board, United States Department of Energy, Washington, D.C. Long-Term Stewardship Committee (co-chair) Accelerated Cleanup Committee (co-chair) Formerly Utilized Sites and Risk Committee
1993 – 1998	Chair, Fernald Citizens Advisory Board (Fernald Citizens Task Force) U.S. Department of Energy, Fernald Environmental Management Project, Ohio

Overseas Teaching and Research

American Administrative Law in Comparative Perspective, Institut de Droit Comparé, Université Panthéon-Assas (Paris 2), Paris, France, 2002, 2007-2018.

Visiting Fellowship, EU Economic and Social Research Council/U.S. Social Science Research Council, Centre for Business Relationships, Accountability, Sustainability and Society, Cardiff University, Cardiff, Wales, May 2005.

Anglo-American Property Law, Juristische Facultät, Friedrich-Alexander-Universität Erlangen-Nürnberg, Erlangen, Germany, May - June 2004, June 2000.

Peer Reviewer

Manuscript Reviewer

Springer Nature (Netherlands) (2016), *Law & Society Review* (2006, 2010, 2012, 2013, 2015, 2016), *Science* (2014), *Environmental Management* (2013, 2014), Social Sciences and Humanities Research Council of Canada (2013, 2016), Yale Journal on Health Policy, *Law, and Ethics* (2013), *Risk Analysis* (2003, 2013), *Transnational Environmental Law* (2012), *Regulation & Governance* (2011), *Policy Studies Journal* (2011), *Health Affairs* (2011), Cambridge University Press (2008, 2009, 2010), *Stanford Law Review* (2010), Harvard University Press (2009), Oxford University Press (2008), University of Michigan Press (2007), Indiana University Press (2007), Environmental Management (2007), *Journal of Policy Analysis & Management* (2005),

University of California Press (2002), Duke University Press (2001), Stanford University Press (2001), Greenwood Press (2001).

American Bar Association, Accreditation Site Visit Teams

University of Nebraska (chair) (2018), University of Florida (2016), University of Oklahoma (chair) (2015), University of Miami (2014), University of Nevada Las Vegas (2012), University of Pittsburgh (2011), University of South Carolina (2008), University of New Mexico (2007).

Review Committee, Emerging Areas of Research, Office of the Vice Provost for Research, Indiana University Bloomington, 2017-2018.

National Research Council/National Academy of Sciences, Reviewer, Analysis of Cancer Risks in Populations Near Nuclear Facilities: Phase I, 2012.

Land Use and Environmental Law Review, First Level Review Board (2000-present).

National Research Council/National Academy of Sciences, Reviewer, Follow-Up Letter Reports on Draft Supplementary Risk Assessments and Site Suitability Analyses for the National Emerging Infectious Diseases Laboratory, Boston University, 2011, 2010, 2008.

National Research Council/National Academy of Sciences, Reviewer, Letter Report on Draft Supplementary Risk Assessments and Site Suitability Analyses for the National Emerging Infectious Diseases Laboratory, Boston University, 2007.

National Research Council/National Academy of Sciences, Review Coordinator, One Step at a Time: The Staged Development of Geologic Repositories for High-Level Radioactive Waste, 2003.

National Research Council/National Academy of Sciences, A Strategic Vision for Department of Energy Environmental Quality Research and Development, April 2001.

National Research Council/National Academy of Sciences, Long-Term Management of U.S. Department of Energy Legacy Waste Sites, May 2000.

Rocky Flats Radionuclide Soil Action Level Regulatory Analysis, Rocky Flats, Colorado, February 2000.

U.S. Environmental Protection Agency, STAR Fellowships, Reviewer, 1999.

Nevada Risk Assessment/Management Program (NRAMP), University of Nevada Las Vegas, 1995 - 1998.

Papers, Lectures, and Presentations

Panel on U.S. Congressionally Mandated Study of Treatment Alternatives of Hanford Supplemental Low-Activity Waste, Waste Management 2023, Phoenix, Arizona, March 1, 2023.

Roundtable on Climate Provisions of the Inflation Reduction Act, IU O'Neill School of Public and Environmental Affairs, September 23, 2022.

Indiana University Governance Structure and Organization: A Model for the 21st Century Public University, USAID Vietnam Partnership for Higher Education Reform, September 19, 2022.

Holistic Approaches to Remediation: The Rocky Flats Example, Workshop on Holistic Approaches to Nuclear Site Remediation and Alternative End States, National Academy of Sciences, October 30-31, 2013.

Planning for Proliferation: Some Unsolicited Advice for the Blue Ribbon Commission on America's Nuclear Future, Duke Law School, Center on Law, Ethics and National Security, April 16, 2010.

Moderator, Picking the Low-Hanging Fruit, Regulatory Dysfunction in 3D – TSCA, CPSA, and the OSH Act, University of Maryland School of Law, October 8, 2009.

The Rise of Risk Regulation and the Emergence of Precaution, Academia Sinica, Taipei, Taiwan, April 25, 2008.

Risk Regulation for Hazardous and Nuclear Waste Management, Taiwan Atomic Energy Council, Taipei, Taiwan, April 25, 2008.

New Approaches to Chemicals Regulation in the United States and Europe, National Taiwan Ocean University, Keelung, Taiwan, April 28, 2008.

Policy Principles for Managing Hazardous Waste, National Taipei University, Taipei, Taiwan, April 28, 2008.

Panel Chair, Waste Management, Breaking the Logjam: An Environmental Law for the 21st Century, New York University School of Law, March 29, 2008.

Supply and Demand, Bridging and Filling: Making Information Count in Chemical Regulation, University of Texas School of Law, February 1, 2008.

Facts, Ideas, and a Precautionary Approach to U.S. Climate Change Policy, University of Kansas School of Law, October 20, 2007.

TSCA and REACH: Toward Principles for Chemical Regulation Reform, Georgetown University Law Center Environmental Law Research Workshop, October 10, 2007.

Prevention and Precaution, TSCA and REACH, European Union Center of Excellence and Graduate School of Public Health, University of Pittsburgh, June 7, 2007.

Next Generation Chemicals and Pesticides Law, Concept Paper for the Roundtable on Next Generation Environmental Law Project, University of Florida, March 1, 2007 (in absentia).

REACH: Europe's New Approach to Toxic Substances Control, Integrated Toxicology and Environmental Health Program, Duke University, February 9, 2007.

White Paper: Strategies for Closing the Chemical Data Gap, Center for Progressive Reform, January 2006 (& Katherine Baer).

The Chemical Data Gap: Risk, REACH, and Precaution, Centre for Business Relationships, Accountability, Sustainability and Society, Cardiff University, Wales, May 19, 2005.

Overview: What Are Data Gaps and Types of Data Gaps; REACH and Data Needs, Symposium: The Data Gaps Dilemma: Why Toxic Ignorance Threatens Public Health, University of Maryland School of Law, May 6, 2005.

Clean Science: The Government Role in Scientific Research, University of Maryland School of Law, April 16, 2004; University of Cincinnati College of Law, April 24, 2004.

REACH, Risk, and Precaution, Society for Risk Analysis Annual Meeting, Baltimore, December 8, 2003.

Environmental Justice and the Sense of Place, Indiana University Environmental Literacy Seminar Series, October 23, 2003.

Environmental Indicators, Accountability, and Risk, Society for Risk Analysis Annual Meeting, New Orleans, December 10, 2002.

Taming the Precautionary Principle: Sustainable Development at Rio Plus 10, William & Mary Law School, Williamsburg, Virginia, March 22, 2002.

Key Issues in Public Participation, Workshop on Public Participation in Environmental Assessment and Decision Making, National Academy of Sciences, Washington, D.C., Dec. 14, 2001.

The Precautionary Principle in International Law: Reconciling Precaution and Risk Analysis, Society for Risk Analysis, Seattle, Wash., Dec. 4, 2001.

Some Implications of American Trucking Associations for Risk Analysis, Society for Risk Analysis, Seattle, Wash., Dec. 3, 2001.

Public Involvement in Radioactive Waste Management Decisions at Fernald, National Academy of Sciences, Board on Radioactive Waste Management, Washington, D.C., August 7, 2001.

Preparing for Long-Term Stewardship in the Department of Energy, National Academy of Sciences, Board on Radioactive Waste Management, Washington, D.C., April 3, 2001.

The Precautionary Principle, Prior Informed Consent, and Sustainable Development: Pieces of the GMO Regulatory Puzzle, Sustainable Development, Agriculture, and the Challenge of Genetically Modified Organisms, Indiana University - Bloomington, March 31, 2001.

Judicial Review of Risk Assessment: Substance or Procedure?, Society for Risk Analysis, Washington, D.C., December 5, 2000.

Science and Law in Judicial Review of Risk Assessments (Poster Platform), Society for Risk Analysis, Washington, D.C., December 5, 2000 (co-author).

The Federalism Debate in Environmental Law, Indiana State Bar Association, Environmental Law Section, Evansville, Indiana, September 18, 2000.

Everywhere and Nowhere: The Precautionary Principle (Vorsorgeprinzip) in United States Environmental Law, Akademie fuer Technikfolgenabschätzung in Baden-Württemburg, Stuttgart, Germany, June 19, 2000.

Everywhere and Nowhere: The Precautionary Principle (Vorsorgeprinzip) in United States Environmental Law, Friedrich-Schiller-Universität, Jena, Germany, June 15, 2000.

Cases and Case Studies, Administrative Law Discussion Forum, Louis D. Brandeis School of Law, University of Louisville, November 13, 1999.

Comment on Howard C. Kunreuther *et al.*, "Third Party Inspection as an Alternative to Command and Control Regulation," Environmental Contracts and Regulatory Innovation: Comparative Approaches in Europe and the United States, The Wharton School, University of Pennsylvania, September 24-25, 1999.

The Precautionary Principle: An American Perspective, Harvard Center for Risk Analysis, Workshop: The Precautionary Principle: Refine It or Replace It?, Washington, D.C., June 3, 1999.

Discussant, The New Cultural, Environmental, and Governing Practices of State Building in Administrative Law, Law & Society Association Annual Meeting, Chicago, May 27, 1999.

Yucca Mountain: The Upcoming Challenge for Disposal of High-Level Radioactive Waste, Tenth Institute for Natural Resources Law Teachers, Rocky Mountain Mineral Law Foundation, Las Vegas, Nevada, May 14, 1999.

Bargaining for Risk - A New Paradigm for Risk Regulation?, Risk Assessment & Policy Association, Washington, D.C., March 26, 1999 (co-author).

Legislative Reform of Risk Assessment, Risk Assessment & Policy Association, Washington, D.C., March 26, 1999.

Reporter, Recommendation Regarding Risk Assessment Legislation, American Bar Association, Section on Administrative Law and Regulatory Practice, February 1999 (with Celia Campbell-Mohn).

Workshop: The Tools of Environmental Practice, National Association of Environmental Law Societies 1999 Conference, Bloomington, Ind., February 27, 1999.

Risk Assessment and Brownfields: A Tool for Evaluation and Communication, Society for Risk Analysis, Phoenix, Ariz., December 8, 1998.

Poster Session, Risk Analysis in the Courts: 1998, Society for Risk Analysis, Risk Science and Law Specialty Group, December 7, 1998 (co-editor & contributor).

Witness Preparation: Ground Rules and Pitfalls, North American Securities Administrators Association Litigation Training Seminar, Charleston, S.C., November 20, 1998.

Brownfields: Risk and Legal Reform, Workshop on Risk, Uncertainty, and the Environment, Health and Environmental Risk Institute, University of Cincinnati, September 9, 1998.

Discussion Group Co-Chair, Workshop on Similarities and Differences between Chemical and Radiation Environmental Risk Management, Environmental Law Institute/Johns Hopkins University Risk Sciences and Public Policy Institute, Annapolis, Md., June 8-9, 1998.

Respondent Panel, Superfund Basic Research: Integrating State and Local Needs and Perspectives, National Environmental Policy Institute, Washington, D.C., May 6, 1998.

Discussion Group Leader, Creating a Successful Long-Term Stewardship Program for DOE Sites, Resources for the Future, Washington, D.C., April 16-17, 1998.

Risk Assessment for Brownfields: The Perils of Prediction, Brownfields Symposium, University of Kentucky College of Law, April 3, 1998.

Organizing Stakeholder Input for Accelerated Cleanup, Waste Management '98, Tucson, Arizona, March 4, 1998 (co-author).

Poster Session, Risk Analysis in the Courts, Society for Risk Analysis, Risk Science and Law Specialty Group, Washington, D.C., Dec. 10, 1997 (co-editor & contributor).

Improving the Practice: Chairing a Citizens Advisory Board, *in* The Practitioner: The Newsletter of the International Association for Public Participation, June 1997.

Colloquium, Improving Environmental Decision-Making through Public Participation: The Fernald Experience, Center for Nuclear and Toxic Waste Management, Department of Nuclear Engineering, University of California, Berkeley, April 29, 1997.

Colloquium, The Management of Short-Term Risk in Superfund Remedy Selection, Department of Nuclear Engineering, University of California, Berkeley, April 28, 1997.

Short-Changing Short-Term Risk in Superfund Remedy Selection, Risk Assessment & Policy Association, Washington, D.C., March 6, 1997.

DOE's Sites: Understanding the Challenge, Workshop on Land Use and DOE Sites: The Implications for Long-Term Stewardship, Resources for the Future, Washington, D.C., January 16, 1997.

When the Cure is Worse Than the Disease, Symposium on Risk, Science & Law, Society for Risk Analysis Annual Meeting, New Orleans, December 10, 1996.

Tools for Building Consensus, Ohio Commission on Dispute Resolution and Conflict Management, Public Policy Facilitators Fall Workshop, Columbus, Ohio, November 4, 1996.

Seminar: Short-Term Risk in CERCLA Remedy Selection, Vanderbilt University School of Engineering, September 17, 1996.

The Application of Brownfields at DOE Sites: Future Use and Institutional Controls, Energy Communities Alliance Annual Meeting, Washington, D.C., March 7, 1996.

The Fernald Citizens Task Force: Shifting the Focus, Waste Management '96, Tucson, Arizona, February 26, 1996 (co-author).

Rule 612 and Witness Preparation, Potter Stewart Inns of Court, Cincinnati, Ohio, January 23, 1996.

Fernald (Of All Places) Offers a Model for Revitalizing Democracy, Guest Editorial, *The Cincinnati Post*, November 20, 1995.

Fernald Update: Realism, Risk, and Radium, U.S. Environmental Protection Agency-University of Cincinnati College of Engineering Seminar Series, November 16, 1995.

Citizen/Stakeholder Participation -- An Integral Component of Site Clean-Up Operations, Seventh Annual Weapons Complex Monitor Decisionmakers' Forum, Jacksonville, Florida, September 27, 1995.

Implementation, Organization, and Management in Environmental Management Activities, Presentation to Committee to Evaluate the Science, Engineering, and Health Basis of DOE's Environmental Management Program, National Academy of Sciences, August 30, 1995.

Mission Accomplished: The Fernald Citizens Task Force (co-author); *and* Roundtable: Collaboration on Clean-up: How Site-Specific Advisory Boards Can Help DOE Make Informed Recommendations on National Clean-up Problems (co-convenor), Environmental Restoration '95, Denver, Colorado, August 14, 1995.

Priority Setting, Timing & Staging of Environmental Management Activities, Presentation to Committee to Evaluate the Science, Engineering, and Health Basis of DOE's Environmental Management Program, National Academy of Sciences, June 27, 1995.

Federal Facilities Clean-up: How Clean Is Clean Enough?, Panelist, National Environmental Policy Institute, Washington, D.C., June 22, 1995.

Organizing a Site-Specific Advisory Board, Sandia National Laboratory Citizens Advisory Board, Albuquerque, New Mexico, June 15, 1995.

Finding Common Ground, Keynote Address, Hamilton County Environmental Priorities Project, Cincinnati, Ohio, May 13, 1995.

Environmental Compliance: A Short Course, University of Cincinnati College of Engineering, May 31 - June 2, 1995 (co-teacher).

Public Participation at Fernald: The Task Force Process, Waste Management '95, Tucson, Arizona, February 27, 1995.

Involving the Public in Risk-Based Decisionmaking at Fernald, U.S. Environmental Protection Agency-University of Cincinnati College of Engineering Seminar Series, January 12, 1995.

The Focused Site-Specific Advisory Board: Key Issues and Activities from the Fernald Experience, October 1994 (co-author).

National Standards and Local Solutions in Superfund Reauthorization, University of Kentucky College of Law, March 31, 1994.

Land Use Issues in Environmental Restoration, U.S. Department of Energy, National Laboratories Environmental and Occupational/Public Health Standards Steering Group, Washington, D.C., March 16, 1994 (panel chair).

Environmental Policy and Regulation of International Trade, Cincinnati Bar Association, January 27, 1992.

An Overview of Federal Environmental Legislation, Association of College and Research Libraries, Law and Political Science Section, Atlanta, Georgia, June 30, 1991.

Returning to Torts, Joint Session of the Fifteenth Annual Mineral Law Seminar, Mineral Law Center, University of Kentucky College of Law, Lexington, Kentucky, October 26, 1990.

Overview of Laws Affecting Municipal Environmental Regulation, Workshop for Local Government Officials on Environmental and Occupational Risk Assessment and Management, Cincinnati, Ohio, May 3, 1990.

Ethical Considerations for the Environmental Lawyer, Cincinnati Bar Association, February 28, 1990.

The Roles of an Administrative Law Judge, Keynote Speech at Annual Meeting of National Association of Hearing Officials, Cincinnati, Ohio, October 15, 1989.

Allocating the Cost of Developing Information About Toxic Substances, Faculty Seminar, University of Cincinnati Institute of Environmental Health, April 27, 1988.

Professional Activities and Public Service

2022 – present	Consultant on Executive Leadership, USAID Partnership for Higher Education Reform (PHER) in Vietnam, IU Bloomington
2014 – present	Board of Advisors, New England Music Camp
2009	Elected to the American Law Institute
2001 – present	Scholar and Founding Member, Center for Progressive Reform Board of Directors, from 2008; Treasurer, from 2012
2003 - 2008	Association of American Law Schools, Section on Environmental Law, Executive Committee; Chair, 2008
2004 - 2015	Indiana Continuing Legal Education Foundation, Board of Directors
2004 - 2009	Indiana State Bar Ass'n, Professional Legal Education, Admission and Development Section Secretary-Treasurer, 2006-2008
2000 - 2007	Board of Directors, Congregation Beth Shalom, Bloomington, Indiana President, 2003-2005
1996 - 2004	Executive Committee, Risk, Science, & Law Specialty Group, Society for Risk Analysis Chair, 2001-2003; Membership Vice-Chair, 1996-2001

1999 - 2001	Monroe County PCB Task Force, Bloomington, Indiana
1995 – 1998	Vice-Chair, Board of Directors, Hamilton County Environmental Priorities Project, Cincinnati, Ohio
1996 - 1997	Planning Group, National Dialogue on Nuclear Waste Policy, League of Women Voters, Washington, D.C.
1996	Consultant, Reuse of Concrete from Contaminated Structures, Vanderbilt University Department of Civil and Environmental Engineering
1996 - 1998	Health and Environmental Risk Institute, University of Cincinnati
1995 - 2003	Risk Assessment and Policy Association
1989 – 1995	City of Cincinnati Environmental Advisory Council

University Service

Indiana (in addition to administrative duties)

Chair, Search Committee for Environmental Health Department Chair, School of Public Health (2022-2022)
Chair, IU Bloomington College of Arts & Sciences Executive Dean Search Committee (2018-2019)
Chair, IU Maurer School of Law Dean Search Committee (2013)
Chair, General Counsel Search Committee (2012)
Arts, Student Events, and Convocation Committee (2006-2007)
Chair, Graduate Working Group, Bloomington Campus Self-Study (2006)
Chancellor's Committee on Lilly Endowment Grant (2003-2004)
Council for Environmental Stewardship (2000-2001)

Cincinnati

Vice Chair of the University Faculty (1990-1992) Provost Search Committee (1994-1995) University Faculty Budget and Priorities Committee (1990-1995) Joint Task Force on the University Budget Chair, Ad Hoc Committee on Discriminatory Harassment

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