

SEMINAR IN ENVIRONMENTAL ECONOMICS
Syllabus and Reading List

Economics 724-001

TR 11:00am-12:15pm, BE 214

Glenn Blomquist

Office: BE 335Q (Economics)

Hours: TR 2:30-4:00pm and 5:45-6:15pm. Other times by appointment.

University of Kentucky

Fall 2008

Phone: 257-3924 (voice mail)

E-mail: gcbloom@.uky.edu

Course Description: This seminar in environmental economics deals with benefit-cost analysis, valuation of environmental changes, and selected topics in environmental economics. Central to the seminar is environmental quality as an input to human health, behavior related to health risks, risk perception, and valuing changes in health risks. Selected topics include environmental equity, markets for environmental quality, and climate change. Prerequisite background for the seminar is a working knowledge of material covered ECO 601 Advanced Microeconomic Theory and a graduate econometrics course. This course and Advanced Health Economics are the two courses that are the basis for the area in Environmental and Health Economics in the Ph.D. program in Economics.

Text: Freeman, A. Myrick III. *The Measurement of Environmental and Resource Values* (Washington, DC: Resources for the Future, 2003). All other required readings are available as journal articles or working papers.

Grades: Evaluation will be based on a paper (35 points), midterm (20 points), final exam (20 points), class participation (15 points), and homework (10 points.) The midterm exam will be given about October 21. The final exam will be given in the regular classroom at 10:30am on Friday, December 19, 2008.

Readings: Required readings are marked with an asterisk and those which we go over in detail are marked with a double asterisk. Pertinent additional readings are given by topic. Required readings that are not in Freeman's book or available on-line will be made available in class. Most articles are available on-line through the University of Kentucky library.

I. ENVIRONMENTAL AND RESOURCE ECONOMICS AND POLICY

*Cropper, Maureen L. and Wallace E. Oates. "Environmental Economics: A Survey," *Journal of Economic Literature* 30 (June 1992): 675-740.

**Stavins, Robert N. "Environmental Economics" Resources for the Future (RFF) Discussion Paper 04-54 (December 2004). Prepared for *The New Palgrave Dictionary of Economics*, 2nd ed., Lawrence Blum and Steven Durlauf, eds. (London: Palgrave MacMillan Ltd.)

Heal, Geoffrey. "A Celebration of Environmental and Resource Economics" *Review of Environmental Economics and Policy* 1 (Winter 2007): 7-25.

Portney, Paul R. "Environmental Problems and Policy: 2000-2050" *Journal of Economic*

Perspectives 14 (Winter 2000): 199-206.

Arrow, Kenneth, et al. "Are We Consuming Too Much?" *Journal of Economic Perspectives* 18 (Summer 2004): 147-172.

Krautkraemer, Jeffrey A. "Nonrenewable Resource Scarcity" *Journal of Economic Literature* 36 (December 1998): 2065-2107.

Environmental Economics Blog < www.env-econ.net > by Tim Haab and John Whitehead is a good source for economic analysis of environmental news (and some weird humor.)

II. BENEFIT-COST ANALYSIS, REGULATOR BEHAVIOR, AND POLICY PRODUCTS

*Freeman, A. Myrick III. "Environmental Policy Since Earth Day: What Have We Gained?" *Journal of Economic Perspectives* 16 (Winter 2002): 125-146.

*Hahn, Robert W. "The Impact of Economics on Environmental Policy" *Journal of Environmental Economics and Management* 39 (May 2000): 375-399.

*Arrow, Kenneth J. et al. "Benefit-Cost Analysis in Environmental, Health, and Safety Regulation: A Statement of Principles." *Science* 272 (April 12, 1996): 221-222. Available from (Washington, DC: American Enterprise Institute for Public Policy Research, 1996). http://aei-brookings.org/admin/authorpdfs/redirect-safely.php?fname=../pdffiles/arrow_cropper_etal.pdf

*Hahn, Robert W. and Patrick M. Dudley. "How Well Does the U.S. Government Do Benefit-Cost Analysis?" *Review of Environmental Economics and Policy* 1 (Summer 2007): 192-211.

**Cropper, Maureen L., William N. Evans, Stephen J. Berardi, Maria M. Ducla-Soares and Paul R. Portney. "The Determinants of Pesticide Regulation: A Statistical Analysis of EPA Decision Making" *Journal of Political Economy* (Feb. 1992): 175-197.

**Viscusi, W. Kip and James T. Hamilton. "Are Risk Regulators Rational? Evidence from Hazardous Waste Cleanup Decisions" *American Economic Review* 89 (September 1999): 1010-1027.

Viscusi, W. Kip and Jahn K. Hakes. "Synthetic Risks, Risk Potency, and Carcinogen Regulation" *Journal of Policy Analysis and Management* 17 (Winter 1998): 52-73.

**Greenstone, Michael. "Did the Clean Air Act Cause the Remarkable Decline in Sulfur Dioxide Concentrations?" *Journal of Environmental Economics and Management* 47 (May 2004): 585-611.

Chay, Kenneth, Carlos Dobkin and Michael Greenstone. "The Clean Air Act of 1970 and Adult

Mortality” *Journal of Risk and Uncertainty* 27 (December 2003): 279-300.

Chay, Kenneth and Michael Greenstone. “The Impact of Air Quality on Infant Mortality: Evidence from Geographic Variation in Pollution Shocks Induced by a Recession” *Quarterly Journal of Economics* 118 (August 2003): 1121-1167.

**Currie, Janet, Matthew J. Neidell and Johannes Schmierer. “Air Pollution and Infant Health: Lessons from New Jersey” NBER Working Paper 14196 (July 2008).

Galiani, Sebastian, Paul Gertler, and Ernesto Schargrotsky. “Water for Life: The Impact of the Privatization of Water Services on Child Mortality” *Journal of Political Economy* 113 (February 2005): 83-120.

Kahn, Matthew E. “The Death Toll from Natural Disasters: The Role of Income, Geography, and Institutions” *Review of Economics and Statistics* 87 (May 2005): 271-284.

*Viscusi, W. Kip. "Risk-Risk Analysis" *Journal of Risk and Uncertainty* 8 (Jan. 1994): 5-17.

**Gerdtham, Ulf-G. and Magnus Johannesson. "Do Life Saving Regulations Save Lives?" *Journal of Risk and Uncertainty* 24 (May 2002): 231-249.

III. VALUING ENVIRONMENTAL CHANGES

Freeman Chapters 1, 2, 9, 13, and 14 on resource evaluation

A. Implicit Markets and Hedonic Prices

*Freeman Chapters 3, 4, 11, and 12 on topics such as welfare change measures, revealed preferences and valuation, and hedonic models

**Berger, Mark C., Glenn C. Blomquist, and Klara Z. Sabirianova "Compensating Differentials in Labor and Housing Markets: Estimates of Quality of Life in Russian Cities" *Journal of Urban Economics* 63 (January 2008): 25-55.

Gabriel, Stuart and Stuart S. Rosenthal. "Quality of the Business Environment versus Quality of Life: Do Firms and Households Like the Same Cities?" *Review of Economics and Statistics* 86 (February 2004): 438-444.

*Chen, Yong and Stuart S. Rosenthal. “Local Amenities and Life Cycle Migration: Do People Move for Jobs or Fun?” *Journal of Urban Economics* (forthcoming). Available on line.

Smith, V. Kerry and Ju-Chin Huang. "Can Markets Value Air Quality? A Meta-Analysis of Hedonic Property Value Models" *Journal of Political Economy* 103 (February 1995): 209-227.

**Gayer, Ted, James T. Hamilton, and W. Kip Viscusi. "Private Values of Risk Tradeoffs at Superfund Sites: Housing Market Evidence on Learning about Risk" *Review of Economics and Statistics* 82 (August 2000): 439-51.

Gayer, Ted, James T. Hamilton, and W. Kip Viscusi. "The Market Value of Reducing Cancer Risk: Hedonic Housing Prices with Changing Information" *Southern Economic Journal* 69 (October 2002): 266-289.

Ihlanfeldt, Keith R. and Laura O. Taylor. "Externality Effects of Small-Scale Hazardous Waste Sites: Evidence from Urban Commercial Property Markets" *Journal of Environmental Economics and Management* 47 (January 2004): 117-139.

**Smith, V.K.Smith, Holger Sieg, H. Spencer Banzhaf, and Randall P. Walsh. "General Equilibrium Benefits for Environmental Improvements: Projected Ozone Reductions under EPA's Prospective Analysis for the Los Angeles Air Basin" *Journal of Environmental Economics and Management* 47 (May 2004): 559-584.

*Bajari, Patrick and Matthew E. Kahn. "Estimating Housing Demand with an Application to Explaining Racial Segregation in Cities" *Journal of Business and Economic Statistics* 23 (January 2005): 20-33. <http://ideas.repec.org/p/wop/stanec/02011.html>

Bayer, Patrick, Fenando Ferreira, and Robert McMillan. "A Unified Framework for Measuring Preferences for Schools and Neighborhoods" *Journal of Political Economy* 115 (August 2007): 588-638.

Chay, Kenneth Y. and Michael Greenstone. "Does Air Quality Matter: Evidence from the Housing Market" *Journal of Political Economy* 113 (April 2005): 376-424.

**Greenstone, Michael and Gallagher, Justin, "Does Hazardous Waste Matter? Evidence from the Housing Market and the Superfund Program" *Quarterly Journal of Economics* (August 2008): 951-1003.

*Greenstone, Michael and Ted Gayer. "Quasi-Experimental and Experimental Approaches to Environmental Economics" Resources for the Future Discussion Paper 07-22 (July 2007). Available at RFF website.

Banzhaf, H. Spencer. "Green Price Indices" *Journal of Environmental Economics and Management* 49 (March 2005): 262-280.

Kotchen, Matthew J. "Green Markets and Private Provision of Public Goods" *Journal of Political Economy* 114 (August 2006): 816-834.

B. Contingent Markets and Stated Preferences

*Freeman Chapters 5-8 on topics such as nonuse values, stated preferences, discounting, and option prices

Haab, Timothy C. and Kenneth E. McConnell. *Valuing Environmental and Natural Resources: The Econometrics of Non-Market Valuation* (Northampton, MA: Edward Elgar, 2002)

*Carson, Richard T., Jr. "Contingent Valuation, Resources and Environmental" in *International Encyclopedia of Social and Behavioral Sciences*, Neil J. Smelser and Paul B. Baltes, ed., (Amsterdam, Elsevier Science, 2001), vol. 19, 13272-5.

**Portney, Paul R. "The Contingent Valuation Debate: Why Economists Should Care" *Journal of Economic Perspectives* 8 (Fall 1994): 3-17 and

Hanemann, W. Michael. "Valuing the Environment through Contingent Valuation" *Journal of Economic Perspectives* 8 (Fall 1994): 19-43 and

Diamond, Peter A. and Jerry A. Hausman. "Contingent Valuation: Is Some Number Better than No Number?" *Journal of Economic Perspectives* 8 (Fall 1994): 45-64.

Arrow, Kenneth and Robert Solow (co-chairs), Edward Leamer, Paul Portney, Roy Radner and Howard Schuman. "Report of the NOAA Panel on Contingent Valuation." *Federal Register* Vol. 58, No. 10, (January 15, 1993): 4601-4614.

Tolley, George S. and Robert G. Fabian. "Issues in Improvement of the Valuation of Non-Market Goods" *Resource and Energy Economics* 20 (June 1998): 75-83 and the entire special issue on Nonmarket Valuation.

Blomquist, Glenn C. and John C. Whitehead. "Existence Value, Contingent Valuation, and Natural Resources Damages Assessment" *Growth and Change* 26 (Fall 1995): 573-589.

Whitehead, John C. and Glenn C. Blomquist. "The Use of Contingent Valuation in Benefit-Cost Analysis" in Anna Alberini and James R. Kahn, eds., *Handbook of Contingent Valuation* (Northampton: MA, Edward Elgar Publishing, 2006).

**Blomquist, Glenn C. and John C. Whitehead. "Resource Quality Information and Validity of Willingness to Pay in Contingent Valuation" *Resource and Energy Economics* 20 (June 1998): 179-196.

**Hoehn, John P. and Alan Randall. "The Effect of Resource Quality Information on Resource Injury Perception and Contingent Values" *Resource and Energy Economics* 24 (February 2002): 13-31.

**Cummings, Ronald G. and Laura O. Taylor. "Unbiased Value Estimates of Environmental Goods: A Cheap Talk Design for the Contingent Valuation Method" *American Economic Review*

89 (June 1999): 649-665.

*List, John A. "Do Explicit Warnings Eliminate the Hypothetical Bias in Elicitation Procedures? Evidence from Field Auctions for Sportcards" *American Economic Review* 91 (December 2001): 1498-1507.

**Blumenschein, Karen, Glenn C. Blomquist, Magnus Johannesson, Nancy Horn and Patricia Freeman. "Eliciting Willingness to Pay without Bias: Evidence from a Field Experiment" *The Economic Journal* 118 (January 2008): 114-137

**Blomquist, Glenn C., Karen Blumenschein and Magnus Johannesson. "Eliciting Willingness to Pay without Bias using Follow-up Certainty Statements: Comparisons between Probably/Definitely Sure and a 10-point Certainty Scale" Presented at iHEA World Congress held July 8-11, 2007 in Copenhagen, Denmark. *Environmental and Resource Economics* (forthcoming)

*Whitehead, John C. and Todd L. Cherry. "Willingness to Pay for a Green Energy Program: A Comparison of Ex-Ante and Ex-Post Hypothetical Bias Mitigation Approaches" *Resource and Energy Economics* 29 (November 2007): 247-261.

Ready, Richard C, Ståle Navrud, and W. Richard Dubourg. "How Do Respondents with Uncertain Willingness to Pay Answer CV Questions?" *Land Economics* 77 (August 2001): 315-326.

Berrens, Robert P., Hank Jenkins-Smith, Alok K. Bohara, and Carol L. Silva. "Further Investigation of Voluntary Contribution Contingent Valuation: Fair Share, Time of Contribution, and Respondent Uncertainty" *Journal of Environmental Economics and Management* 44 (July 2002): 144-168.

Alberini, Anna, Kevin Boyle and Michael Welsh. "Analysis of Contingent Valuation Data with Multiple Bids and Response Options Allowing Respondents to Express Uncertainty" *Journal of Environmental Economics and Management* 45 (January 2003): 40-62.

Vossler, Christian A. and Gregory L. Poe. "Analysis of Contingent Valuation Data with Multiple Bids and Response Options Allowing Respondents to Express Uncertainty: A Comment" *Journal of Environmental Economics and Management* 49 (January 2005): 197-200.

**Aadland, David and Arthur J. Caplan. "Curbside Recycling: Waste Resource or Waste of Resources?" *Journal of Policy Analysis and Management* 25 (Fall 2006): 855-874.

Aadland, David M., Arthur J. Caplan, and Owen R. Phillips. "A Bayesian Examination of Information and Uncertainty in Contingent Valuation" *Journal of Risk and Uncertainty* 35 (October 2007):149-178.

List, John and David Reilley. "Field Experiments in Economics: Palgrave Entry" IZA discussion paper 3273 (January 2008).

**Little, Joseph and Robert Berrens. "Explaining Disparities between Actual and Hypothetical Stated Values: Further Investigation Using Meta-analysis" *Economics Bulletin* 3,6 (2004): 1-13.

IV. VALUING CHANGES IN HEALTH

**Freeman Chapter 10 "Valuing Longevity and Health"

Tolley, George, Donald Kenkel, and Robert Fabian. *Valuing Health for Policy: An Economic Approach* (Chicago: University of Chicago Press, 1994)

A. Value of Life, Value of Statistical Life, Values of Mortality Risks

**Blomquist, Glenn C. "Value of Life, Economics of" in the Economics Section edited by Orley Ashenfelter of the *International Encyclopedia of the Social and Behavioral Sciences* edited by Neil J. Smelser and Paul B. Baltes (New York: Pergamon of Elsevier Science, 2001) Volume 24, pages 16132-9.

**Blomquist, Glenn C. "Self Protection and Averting Behavior, Values of Statistical Lives, and Benefit Cost Analysis of Environmental Policy." *Review of Economics of the Household* 2 (March 2004): 89-110.

**Viscusi, W. Kip and Joseph E. Aldy. "The Value of Statistical Life: A Critical Review of Market Estimates throughout the World" *Journal of Risk and Uncertainty* 27 (August 2003): 5-76.

*Mrozek, Janusz R. and Laura O. Taylor. "What Determines the Value of Life? A Meta-Analysis" *Journal of Policy Analysis and Management* 21 (Spring 2002): 253-270.

Shogren, Jason F. and Tommy Starland. "Skill and the Value of Life" *Journal of Political Economy* 110 (October 2002): 1168-1173.

**Kniesner, Thomas J., Viscusi, W. Kip Kip, Ziliak, James P. and Woock, Christopher, "How Unobservable Productivity Biases the Value of a Statistical Life" (September 2005). Harvard Law and Economics Discussion Paper No. 524 <http://ssrn.com/abstract=843484>

*Costa, Dora and Matthew E. Kahn. "Changes in the Value of Life, 1940-1980" *Journal of Risk and Uncertainty* 29 (September 2004):159-180. Also <http://www.nber.org/papers/w9396>

Costa, Dora L. and Matthew E. Kahn. "The Rising Price of Nonmarket Goods" *American Economic Review* 93 (May 2003): 227-232.

Ashenfelter, Orley and Michael Greenstone. "Using Mandated Speed Limits to Measure the Value of Statistical Life" NBER Working Paper 9094 (August 2002). Also *Journal of Political Economy* 112 (February 2004): S226-S267.

Murphy, Kevin M. and Robert H. Topel. "The Value of Health and Longevity" *Journal of Political Economy* 114 (October 2006): 871-904.

Jena, Anupam, Casey Mulligan, Tomas J. Philipson, and Eric Sun. "The Value of Life in General Equilibrium" NBER Working paper 14157 (July 2008).

B. Age - Elderly and Children

Johansson, Per-Olov. "On the Definition and Age-Dependency of the Value of a Statistical Life" *Journal of Risk and Uncertainty* 25 (November 2002): 251-263.

*Smith, V. Kerry, Hyun Kim and Donald H. Taylor, Jr. "Do the Near Elderly Value Mortality Risks Differently?" *Review of Economics and Statistics* 86 (February 2004): 423-429.

Kniesner, Thomas J. and W. Kip Viscusi. "Value of a Statistical Life: Relative Position vs. Relative Age" *American Economic Review* 95 (May 2005): 142-146.

**Aldy, Joseph E. and W. Kip Viscusi. "Adjusting the Value of a Statistical Life for Age and Cohort Effects" *Review of Economics and Statistics* (August 2008): 573-581.

**Alberini, Anna, Maureen Cropper, Alan Krupnick, and Nathalie B. Simon. "Does the Value of a Statistical Life Vary with Age and Health Status? Evidence from the United States and Canada" *Journal of Environmental Economics and Management* 48 (July 2004): 769-792.
http://www.rff.org/disc_papers/PDF_files/0219.pdf

Krupnick, Alan et al. "Age, Health and the Willingness to Pay for Mortality Risk Reductions: A Contingent Valuation Survey of Ontario Residents" *Journal of Risk and Uncertainty* 24 (March 2002): 161-186.

**O'Connor, Richard M. and Glenn C. Blomquist. "Measurement of Consumer-Patient Preferences Using a Hybrid Contingent Valuation Method" *Journal of Health Economics* 16 (December 1997): 667-83.

*Dickie, Mark and Victoria L. Messman. "Parental Altruism and the Value of Avoiding Acute Illness: Are Kids Worth More than Parents?" *Journal of Environmental Economics and Management* 48 (November 2004): 1146-1174.

**Dickie, Mark. "Parental Behavior and the Value of Children's Health: A Health Production Approach" *Southern Economic Journal* 71 (April 2005): 855-872.

Agee, Mark D. and Thomas D. Crocker. "Smoking Parents' Valuations of Own and Children's Health" Paper presented at the AERE Workshop, Bar Harbor, ME (June 2001).
<http://www.csb.uncw.edu/people/whiteheadj/aere/index.html> or www.aere.org for AERE workshop 2001

Baker, Rachel, Susan Chilton, Michael Jones-Lee, and Hugh Metcalf. "Valuing Lives Equally: Defensible Premise of Unwarranted Compromise?" *Journal of Risk and Uncertainty* (April 2008): 125-138.

D. Quality Adjusted Life Years

*Subramanian, Uma and Maureen Cropper. "Public Choices Between Life Saving Programs: The Tradeoff Between Qualitative Factors and Lives Saved" *Journal of Risk and Uncertainty* 21 (July 2000): 117-149.

Johannesson, Magnus. *Theory and Methods of Economic Evaluation of Health Care* (Boston: Kluwer Academic Publishers, 1996). Chapter 10 "Cost-Utility Analysis"

**Kenkel, Don. "WTP and QALY-Based Approaches to Valuing Health for Policy: Common Ground and Disputed Territory" *Environmental and Resource Economics* 34 (July 2006): 419-437.

**Hirth, Richard A., Michael E. Chernew, Edward Miller, A. Mark Fendrick, and William G. Weissert. "Willingness to Pay for a Quality-Adjusted Life Year: In Search of a Standard" *Medical Decision Making* 20 (July-September 2000): 332-342.

**Becker, Gary S., Kevin M. Murphy, and Tomas J. Philipson. "The Value of Life Near its End and Terminal Care" (August 2007). NBER Working Paper No. W13333.

V. HEALTH RISKS, PERCEPTIONS, BEHAVIORAL ECONOMICS AND POLICY

*Rabin, Matthew. "Psychology and Economics" *Journal of Economic Literature* 36 (March 1998): 11-46.

Viscusi, W. Kip and William N. Evans. "Behavioral Probabilities" *Journal of Risk and Uncertainty* 32 (January 2006): 5-16.

Starmer, Christopher. "Developments in Non-expected Utility Theory: The Hunt for a Descriptive Theory of Choice Under Risk" *Journal of Economic Literature* 38 (June 2000): 332-382.

*Harrison, Glenn W. and John A. List. "Field Experiments" *Journal of Economic Literature* 42 (December 2004): 1009-1055.

Frey, Bruno S. And Alois Stutzer. "What Can Economists Learn from Happiness Research?" *Journal of Economic Literature* 40 (June 2002): 402-435.

Fehr, Ernst and Jean-Robert Tyran. "Individual Irrationality and Aggregate Outcomes" *Journal of Economic Perspectives* 19 (Fall 2005): 43-66.

McFadden, Daniel. "Rationality for Economists" *Journal of Risk and Uncertainty* 19 (December 1999): 73-105.

Vatn, Arild. "Environmental Valuation and Rationality" *Land Economics* 80 (February 2004): 1-18.

**Viscusi, W. Kip and Richard J. Zeckhauser. "Sacrificing Civil Liberties to Reduce Terrorism Risks" *Journal of Risk and Uncertainty* 26 (March/May 2003): 99-120.

*Shogren, Jason F., Seung Y. Shin, Dermot J. Hayes, and James B. Kliebenstein. "Resolving Differences in Willingness to Pay and Willingness to Accept" *American Economic Review* 84 (Mar., 1994): 255-270

**Cherry, Todd L, Thomas D. Crocker, and Jason F. Shogren. "Rationality Spillovers" *Journal of Environmental Economics and Management* 45 (January 2003): 63-84.

**Brookshire, David S., Mark A. Thayer, John Tschirhart and William D. Schulze. "A Test of the Expected Utility Model: Evidence from Earthquake Risks" *Journal of Political Economy* 93 (April 1985): 369-389.

**Hallstrom, Daniel G. and V. Kerry Smith. "Market Responses to Hurricanes" *Journal of Environmental Economics and Management* 50 (November 2005): 541-561.

Bin, Okmyung, Tom Crawford, Jamie Kruse, and Craig Landry. "Valuing Spatially Integrated Amenities and Risks: Evidence from the Coastal Housing Markets" East Carolina University working paper (November 2005).

Bin, Okmyung and Stephen Polasky. "Effects of Flood Hazards on Property Values: Evidence Before and After Hurricane Floyd" *Land Economics* 80 (November 2004): 490-500.

**Smith, V. Kerry, Donald H. Taylor, Jr., and Frank A. Sloan. "Longevity Expectations and Death: Can People Predict Their Own Demise?" *American Economic Review* 91 (September 2001): 1126-1134.

Persson, Ulf, Anna Norinder, Krister Hjalte, and Katarina Gralén. "The Value of a Statistical Life in Transport: Findings from a New Contingent Valuation Study in Sweden" *Journal of Risk and Uncertainty* 23 (September 2001): 121-134.

Hammitt, James K. and Ibararán, María Eugenia , "The Economic Value of Reducing Fatal and Non-Fatal Occupational Risks in Mexico City using Actuarial- and Perceived-Risk Estimates" (January 2005). <http://ssrn.com/abstract=648684>

*Harrison, Glenn W. and Elisabet E. Rutström. "Eliciting Subjective Beliefs about Mortality Risk Orderings" *Environmental and Resource Economics* 33 (2006): 325-346.

**Cameron, Trudy Ann. "Updating Subjective Risks in the Presence of Conflicting Information: An Application to Climate Change" *Journal of Risk and Uncertainty* 30 (January 2005): 63-97.

Lundborg, Petter and Björn Lindgren. "Do They Know What They are Doing? Risk Perceptions and Smoking Behaviour Among Swedish Teenagers" *Journal of Risk and Uncertainty* 28 (May 2004): 261-286.

Moore, Michael J. and Carolyn W. Zhu. "Passive Smoking and Health Care: Health Perceptions Myth vs. Health Care Reality" *Journal of Risk and Uncertainty* 21 (November 2000): 283-310.

Chilton, Susan et al. "Public Perceptions of Risk and Preference-Based Values of Safety" *Journal of Risk and Uncertainty* 25 (November 2002): 211-232.

Jakus, Paul M. and W. Douglass Shaw. "Perceived Hazard and Product Choice: An Application to Recreation Site Choice" *Journal of Risk and Uncertainty* 26 (January 2003): 77-92.

VI. COSTS OF POLLUTION ABATEMENT ACTIVITIES, POLLUTION HAVENS, AND ENVIRONMENTAL KUZNETS CURVES

Copeland, Brian R. and M. Scott Taylor. "Trade, Growth, and the Environment" *Journal of Economic Literature* 42 (March 2004): 7-71.

*Palmer, Karen, Wallace E. Oates and Paul R. Portney. "Tightening Environmental Standards: The Benefit-Cost or the No-Cost Paradigm?" *Journal of Economic Perspectives* 9 (Fall 1995): 119-132.

Hazilla, Michael and Raymond J. Kopp. "Social Cost of Environmental Quality Regulations: A General Equilibrium Analysis" *Journal of Political Economy* 98 (August 1990): 853-873.

Jaffe, Adam B., Steven R. Peterson, Paul R. Portney and Robert N. Stavins. "Environmental Regulation and the Competitiveness of U.S. Manufacturing: What Does the Evidence Tell Us?" *Journal of Economic Literature* 33 (March 1995): 132-163.

**Greenstone, Michael. "The Impacts of Environmental Regulations on Industrial Activity: Evidence from the 1970 and 1977 Clean Air Act Amendments and the Census of Manufacturers" *Journal of Political Economy* 110 (December 2002): 1175-1219.

Ederington, Josh, Arik Levinson, and Jenny Minier. "Footloose and Pollution Free" *Review of Economics and Statistics* 87 (February 2005): 92-99.

**Cave, Lisa A. and Glenn C. Blomquist. "Environmental Policy in the European Union: Fostering the Development of Pollution Havens?" *Ecological Economics* 65 (April 2008): 253-261.

**Kahn, Matthew E. "Domestic Pollution Havens: Evidence from Cancer Deaths in Border Counties" *Journal of Urban Economics* 56 (July 2004): 51-69.

Dasgupta, Susmita, Deboit Laplante, Hua Wang and David Wheeler. "Confronting the Environmental Kuznets Curve" *Journal of Economic Perspectives* 16 (Winter 2002): 147-168.

*Harbaugh, William T., Arik Levinson, and David M. Wilson. "Reexamining the Empirical Evidence for an Environmental Kuznets Curve" *Review of Economics and Statistics* 84 (August 2002): 541-551.

Kahn, Matthew. "New Evidence on Eastern Europe's Pollution Progress" *Topics in Economic Analysis and Policy* 3,1 Article 4 (2003): 1-16. <http://www.bepress.com/bejeap>

Millimet, Daniel L., John A. List, and Thanasis Stengos. "The Environmental Kuznets Curve: Real Progress or Misspecified Models?" *Review of Economics and Statistics* 85 (November 2003): 1038-1047.

VII. ENVIRONMENTAL EQUITY: INCIDENCE OF ENVIRONMENTAL POLICY

*Kiel, Katherine and Katherine T. McClain. "House Prices during Siting Decision Stages: The Case of an Incinerator from Rumor through Operation" *Journal of Environmental Economics and Management* 28 (March 1995): 241-255.

Kriesel, Warren, Terence J. Center and Andrew G. Keeler. "Neighborhood Exposure to Toxic Releases: Are There Racial Inequities?" *Growth and Change* 27 (Fall 1996): 479-499.

**Baden, Brett M. and Don L. Coursey. "The Locality of Waste Sites Within the City of Chicago: A Demographic, Social, and Economic Analysis" *Resource and Energy Economics* 24 (February 2002): 53-94.

Noonan, Douglas, Douglas Krupka, and Brett Baden. "Neighborhood Dynamics and Price Effects of Superfund Site Clean Up" *Journal of Regional Science* 47 (October 2007): 665-692.

VIII. MARKETS FOR ENVIRONMENTAL QUALITY

Menell, Peter S. "The Limitations of Legal Institutions for Addressing Environmental Risks"

Journal of Economic Perspectives 5 (Summer 1991): 93-113.

**Foster, Vivien and Robert W. Hahn. "Designing More Efficient Markets: Lessons from Los Angeles Smog Control" *Journal of Law & Economics* 38 (April 1995): 19-48.

*Joskow, Paul L., Richard Schmalensee, and Elizabeth M. Bailey. "The Market for Sulfur Dioxide Emissions" *American Economic Review* 88 (September 1999): 669-685.

*Stavins, Robert. "Lessons from the American Experiment with Market-Based Environmental Policies" JFK School of Government, Harvard, Working Paper RWP01-032 (April 2002). Available on SSRN.

IX. CLIMATE CHANGE - A BRIEF INTRODUCTION

*Nordhaus, William D. "A Review of the "Stern Review on the Economics of Climate Change"" *Journal of Economic Literature* 45 (September 2007): 686-702.

*Heal, Geoffrey. "Climate Economics: A Meta Review and Some Suggestions" NBER 13927 (April 2008)

*Weitzman, Martin. "Structural Uncertainty and the Value of Statistical Life in the Economics of Catastrophic Climate Change" NBER13490 (October 2007).

Ogawa, Hikaru and David E. Wildasin. "Think Locally, Act Locally: Spillovers, Spillbacks, and Efficient Decentralized Policymaking" *American Economic Review* (forthcoming)

Tatsutani, Marika and William A. Pizer. "Managing Costs in a U.S. Greenhouse Gas Trading Program: A Workshop Summary" RFF discussion paper (July 2008).

Aldy, Joseph E. and William A. Pizer. "Issues in Designing U.S. Climate Control Policy" RFF discussion paper 08-20 (June 2008).