

Jonathan P. Caulkins

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EDUCATION

Ph.D., Operations Research, M.I.T., 1990

Thesis: "The Distribution and Consumption of Illicit Drugs: Some Mathematical Models and Their Policy Implications," Supervisor: Arnold I. Barnett

S.M., Electrical Engineering and Computer Science, M.I.T., 1989

Thesis: "Inventory and the Strategic Value of Product-Flexible Manufacturing Systems," Supervisor: Charles H. Fine

M.S., Systems Science and Mathematics, Washington University, 1987

B.S., Systems Science and Engineering, Computer Science, and Engineering & Policy, Washington University, 1987

EXPERIENCE

- H. Guyford Stever Professor of Operations Research
1990 - present Carnegie Mellon University Heinz School of Public Policy & Mgmt
2005 - 2011 Carnegie Mellon University in Qatar
- 1999 - 2001 Founding Director of Pittsburgh Office, RAND
- 1994 - 1996 Co-director of the Drug Policy Research Center, RAND
- 1990 - present Consultant: UNODC, SOCA, CIA/CNC, UKDPC, UK SOCA, BOTEK, QED, Westat, others

RESEARCH INTERESTS

- Mathematical models of social policy problems and interventions
- Policies concerning drugs, crime, violence, delinquency, & prevention
- Optimal dynamic control, software quality, and decision making

HONORS

Omega Rho Lecturer, INFORMS, 2014
Barash Lecturer, Purdue University, 2012
Plenary speaker, EURO, 2012
British Medical Association, Best Public Health Book of the Year (co-author), 2010
INFORMS President's Award, 2010
INFORMS Fellow, 2010
H. Guyford Stever Chair of Operations Research, 2010
IFORS Distinguished Lecturer at APORS, 2009
National Academy of Engineering's Frontiers of Engineering, 2008
Robert Wood Johnson Foundation Health Investigator Award, 2006
INFORMS Plenary speaker at ORPA-1 Conference in Ouagadougou, 2005
Marschak Colloquium at UCLA, 2001
Pittsburgh's Forty Under Forty Award, 2000
David N. Kershaw Award, Association for Public Policy Analysis & Management, 1999
Carnegie Mellon University Heinz School Martcia Wade Teaching Award, 1999
National Young Investigator, 1993 - 1999
NSF Graduate Fellowship, 1987-1990
Tau Beta Pi, Mortar Board National Honor Society, National Merit Scholar, 1983-1987
Langsdorf Fellowship, Washington University, 1983-1987

Advisory Roles

Advisory Panel for the Interactive Health Communication Environmental Scan, commissioned by Jewish Healthcare Foundation of Pittsburgh (1999 – 2000)
Advisory Board, Center for Uncertain Systems: Tools for Optimization and Management, Carnegie Mellon (2000 - 2002)
Board of Associates, Thiel College (2000 – 2003)
Board of Trustees, Thiel College (2003 - 2012)
Advisory Committee, The William J. Copeland Fund and the Elmer J. Tropman Nonprofit Management Institute (2000 – 2003; 2011 - present)
Board of Advisors, Pittsburgh Technology Council (2000 - 2001)
Faculty Advisory Board, Institute for the Study of Information Technology and Society (InSITEs), Carnegie Mellon (2001 – 2005)
Partnership for a Drug Free America Social Marketing Advisory Board (2002 -)
Pennsylvania Commission on Crime and Delinquency, Public Safety Advisory Committee (2003 - 2004)
Advisory Committee, The Forbes Funds (2003 – 2005)
Advisory Committee, Allegheny County Jail Collaborative (2003 – 2007)
Advisory Board, *Heinz School Review* (2003 – 2005)
National Research Council Committee on Vaccines Against Drugs of Addiction (2002 - 2003)
Institute of Medicine Committee on Reducing Tobacco Use: Strategies, Barriers, and Consequences (2004 – 2007)
Allegheny County Jail Collaborative Advisory Committee (2004-2007)
PIRE Prevention Research Center Scientific Advisory Council (2004 – 2011)

Australia's Drug Policy Modeling Program, Advisory Board (2004 - 2012)
ONDCP Data, Research, and Evaluation Committee Chair (2004 - 2008)
National Research Council Committee on Estimating Costs to the Department of
Justice of Increased Border Security Enforcement by the Department of
Homeland Security (2010 - 2011)
Institute for Behavior and Health, Advisory Committee (2011 -)

PUBLICATIONS

Books and Monographs

Caulkins, Jonathan P., Angela Hawken, Beau Kilmer and Mark A.R. Kleiman (2012). *Marijuana Legalization: What Everyone Needs to Know*. Oxford University Press.

Kleiman, Mark A.R., Jonathan P. Caulkins, and Angela Hawken (2011). *Drugs and Drug Policy: What Everyone Needs to Know*. Oxford University Press.

Thomas Babor, Jonathan Caulkins, Griffith Edwards, David Foxcroft, Keith Humphreys, Maria Medina Mora, Isidore Obot, Jurgen Rehm, Peter Reuter, Robin Room, Ingeborg Rossow, and John Strang. 2010. *Drug Policy and the Public Good*. Oxford University Press.

Grass, Dieter, Jonathan P. Caulkins, Gustav Feichtinger, Gernot Tragler, and Doris Behrens. 2008. *Optimal Control of Nonlinear Processes: With Applications in Drugs, Corruption, and Terror*. Springer.

Caulkins, Jonathan P., Rosalie Pacula, Susan Paddock, and James Chiesa. 2002. *School-Based Drug Prevention: What Kind of Drug Use Does it Prevent?* RAND, Santa Monica, CA.

Caulkins, Jonathan P., Jay Cole, Melissa Hardoby, and Donna Keyser. 2002. *Intelligent Giving: Insights and Strategies for Higher Education Donors*. RAND, Santa Monica, CA.

Gill, Brian P., Jake Dembosky, Caulkins, and Jonathan P. 2002. *A "Noble Bet" in Early Childcare and Education: Lessons from One Community's Experience*. RAND, Santa Monica, CA.

Caulkins, Jonathan P., C. Peter Rydell, Susan S. Everingham, James Chiesa, and Shawn Bushway. 1999. *An Ounce of Prevention, a Pound of Uncertainty: The Cost-Effectiveness of School-Based Drug Prevention Program*, RAND, Santa Monica, CA.

Caulkins, Jonathan P., C. Peter Rydell, William L. Schwabe, and James Chiesa. 1997. *Mandatory Minimum Drug Sentences: Throwing Away the Key or the Taxpayers' Money?* RAND, Santa Monica, CA.

Articles in Refereed Journals

Caulkins, Jonathan P., Gustav Feichtinger, Dieter Grass, Richard F. Hartl, Peter M. Kort, Andrea Seidl (forthcoming). When to Make Proprietary Software Open Source. *Journal of Economic Dynamics and Control*.

Caulkins, Jonathan P., Gustav Feichtinger, Dieter Grass, Richard F. Hartl, Peter M. Kort, Andreas J. Novak, Andrea Seidl (forthcoming). Leading Bureaucracies to the Tipping Point: An Alternative Model of Multiple Stable Equilibrium Levels of Corruption. *European Journal of Operations Research*. **225**: 541-546, Doi:10.1016/j.ejor.2012.10.026.

Paddock, Susan M., Beau Kilmer, Jonathan P. Caulkins, Marika J. Booth and Rosalie L. Pacula (2012). An Epidemiological Model for Examining Marijuana Use over the Life Course. *Epidemiology Research International*. Article ID: 520894. Doi:10.1155/2012/520894. PMID: PMC3518305.

Caulkins, Jonathan P., Gustav Feichtinger, Richard F. Hartl, Peter M. Kort, Andreas J. Novak, Andrea Seidl (forthcoming). Multiple Equilibria and Indifference-Threshold Points in a Rational Addiction Model. *Central European Journal of Operations Research*.

Caulkins, Jonathan P., Anna Kasunic, and Michael A.C. Lee (2012). Marijuana Legalization: Lessons from the 2012 State Proposals. *World Medical and Health Policy*. 4(3):4-34.

Caulkins, Jonathan P.; Coulson, Carolyn C.; Farber, Christina; and Vesely, Joseph V. (2012) Marijuana Legalization: Certainty, Impossibility, Both, or Neither?, *Journal of Drug Policy Analysis*, 5(1):1-27.

Strang, John, Thomas Babor, Jonathan P. Caulkins, Benedikt Fischer, David Foxcroft, and Keith Humphreys (2012). Drug Policy and the Public Good: evidence for effectiveness of interventions. *Lancet*. 379(9810):71-83.

Coulson, Carolyn and Jonathan P. Caulkins (2012). Scheduling of Newly Emerging Drugs: A Critical Review of Decisions Over 40 Years. *Addiction*. 107(4):766-773.

Caulkins, Jonathan P. and Brittany Bond (2012). Marijuana Price Gradients: Implications for Exports and Export-Generated Tax Revenue for California After Legalization. *Journal of Drug Issues*. 42(1):28-45.

Caulkins, Jonathan P., Beau Kilmer, Robert J. MacCoun, Rosalie Liccardo Pacula, and Peter Reuter. 2012. Design Considerations for Legalizing Cannabis: Lessons Inspired by Analysis of California's Proposition 19. *Addiction*. 107(5): 865-871 (Response to commentaries also published as pp.876-877.)

Caulkins, Jonathan P., Peter Reuter, and Carolyn Coulson. 2011. Basing Scheduling Decisions on Scientific Rankings of Drugs' Harmfulness: False Promise from False Premises. *Addiction*. 106: 1886-1890 (Response to commentaries also published.)

Caulkins, Jonathan P. and Carolyn Coulson (2011). To Schedule or not to Schedule: How Well Do We Decide? *Journal of Global Drug Policy and Practice*. 5(4).

Kilmer, Beau, Jonathan P., Caulkins, Rosalie Liccardo Pacula, and Peter Reuter. 2011. Bringing Perspective to Illicit Markets: Estimating the Size of the U.S. Marijuana Market. *Drug and Alcohol Dependence*. 119, 153-160.

Caulkins, Jonathan P., Gustav Feichtinger, Dieter Grass, Richard F. Hartl, Peter M. Kort, and Andrea Seidl. 2011. Optimal Pricing of a Conspicuous Product During a Recession that Freezes Capital Markets. *Journal of Economic Dynamics and Control*. 35:163-174.

Zeiler, Irmgard, Jonathan P. Caulkins, and Gernot Tragler. 2011. Optimal Control of Interacting Systems with DNSS Property: The Case of Illicit Drugs. *Journal of Economic Behavior and Organizations*, 78:60-73. DOI: 10.1016/j.jebo.2010.12.008.

Reuter, Peter, Rosalie Liccardo Pacula, and Jonathan P. Caulkins. 2011. RAND's Drug Policy Research Center. *Addiction*. 106(2):253-259. DOI: 10.1111/j.1360-0443.2010.03017.x.

Caulkins, Jonathan P. (2011). The Global Recession's Effect on Drug Demand – Diluted by Inertia. *International Journal of Drug Policy*, 22:374-375. doi:10.1016/j.drugpo.2011.02.005.

Zeiler, Irmgard, Jonathan P. Caulkins, Dieter Grass, and Gernot Tragler. 2010. Keeping Options Open: an Optimal Control Model with Trajectories that Reach a DNSS Point in Positive Time. *SIAM Journal on Control and Optimization*. 48(6):3698-3707.

Caulkins, Jonathan P. and Robert L. DuPont. 2010. Is 24/7 Sobriety a Good Goal for Repeat DUI Offenders? *Addiction*. 105:575-577.

Caulkins, Jonathan P. and David Baker. 2010. Cobweb Dynamics and Price Dispersion in Illicit Drug Markets. *Socio-Economic Planning Sciences*. 44(4): 220-230. doi:10.1016/j.seps.2010.06.001.

Caulkins, Jonathan P. 2010. Might Randomization in Queue Discipline Be Useful When Waiting Cost is a Concave Function of Time? *Socio-Economic Planning Sciences*. 44:19-24, DOI: [10.1016/j.seps.2009.04.001](https://doi.org/10.1016/j.seps.2009.04.001).

Caulkins, Jonathan P., Richard F. Hartl, and Peter M. Kort. 2010. Delay Equivalence in Capital Accumulation Models. *Journal of Mathematical Economics*. 46: 1243-1246. DOI:10.1016/j.jmateco.2010.08.021.

Caulkins, Jonathan P. and Nancy Nicosia. 2010. What Economics Can Contribute to the Addiction Sciences. *Addiction*, 105(7):1156-1163. DOI: 10.1111/j.1360-0443.2010.02915.x.

Gallupe, Owen, Martin Bouchard, and Jonathan P Caulkins. 2010. No change is a good change? Restrictive deterrence in illegal drug markets. *Journal of Criminal Justice*. 39:81-89 doi:[10.1016/j.jcrimjus.2010.12.002](https://doi.org/10.1016/j.jcrimjus.2010.12.002).

Caulkins, Jonathan P., Gustav Feichtinger, Gernot Tragler, and Dagmar Wallner. 2010. "When in a Drug Epidemic Should the Policy Objective Switch from Use Reduction to Harm Reduction." *European Journal of Operational Research*. Vol. 201, 301-318. DOI: 10.1016/j.ejor.2009.03.015.

Caulkins, Jonathan P., Dieter Grass, Gustav Feichtinger, and Gernot Tragler. 2009. Optimal Control of Terrorism and Global Reputation: A Case Study with Novel Threshold Behavior. *Operations Research Letters*. 37: 387-391. doi:10.1016/j.orl.2009.07.003.

Caulkins, Jonathan P. and Ryan Menefee. 2009. Is Objective Risk All that Matters When It Comes to Drugs? *Journal of Drug Policy Analysis*. Vol. 2, Issue 1, Article 1. DOI: 10.2202/1941-2851.1005, available at www.bepress.com/jdpa/vol2/iss1/art1.

Caulkins, Jonathan P., Honora Burnett, and Edward Leslie. 2009. "How Illegal Drug Enter and Island Country: Insights from Interviews with Incarcerated Smugglers." *Global Crime*. Vol. 10, No. 1, pp.66-93. Reprinted in *Illegal Markets and the Economics of Organized Crime*, Martin Bouchard and Chris Wilkins (eds), Routledge, 2010.

Caulkins, Jonathan P., Benjamin Gurga, and Christopher Little. 2009. "Economic Analysis of Drug Transaction 'Cycles' Described by Incarcerated UK Drug Dealers." *Global Crime*. Vol. 10, No. 1, pp. 94-112. Reprinted in *Illegal Markets and the Economics of Organized Crime*, Martin Bouchard and Chris Wilkins (eds), Routledge, 2010.

Caulkins, Jonathan P., Gernot Tragler, and Dagmar Wallner. 2009. "Optimal Timing of Use versus Harm Reduction In a Drug Epidemic Model."

International Journal of Drug Policy. 20(6):480-487. DOI: [dx.doi.org/10.1016/j.drugpo.2009.02.010](https://doi.org/10.1016/j.drugpo.2009.02.010).

Caulkins, Jonathan P. and Peter Reuter. 2009. "Toward a Harm Reduction Approach to Enforcement." *Safer Communities*, Vol. 8, No. 1, pp.9-23.

Bultmann, Roswitha, Jonathan P. Caulkins, Gustav Feichtinger, and Gernot Tragler. 2008. "How Should Drug Policy Respond to Market Disruptions." *Contemporary Drug Problems*. 35(2&3):371-395.

Caulkins, Jonathan P. 2008. "Implications of Inertia for Assessing Drug Control Policy: Why Upstream Interventions May not Receive Due Credit." *Contemporary Drug Problems*, 35(2-3):347-369.

Caulkins, Jonathan P. and Haijing Hao (2008) "Modeling Drug Market Supply Reductions: Where Do All the Drugs Not Go?" *Journal of Policy Modeling*. 30(2), pp. 251-270, DOI: 10.1016/j.polmod.2007.04.003.

Caulkins, Jonathan P., Dieter Grass, Gustav Feichtinger, and Gernot Tragler. 2008. "Optimizing Counter-Terror Operations: Should One Fight Fire with 'Fire' or 'Water'?" *Computers and Operations Research*, 35(6):1874-1885 doi: 10.1016/j.cor.2006.09.017.

Caulkins, Jonathan P., Emily Eelman, Minoli Ratnatunga, and David Schaarsmith. 2008. "Operations Research & Public Policy for Africa: Harnessing the Revolution in Management Science Instruction." *International Transactions in Operations Research*, 15:151-171.

Behrens, Doris A., Marion S. Rauner, and Jonathan P. Caulkins (2008). An Epidemic Model of the Spread of Hepatitis C via Commercial Tattoo Parlors: Implications for the Timing of Public Health Interventions. *OR Spectrum Special Issue on Bioinformatics and OR*, 30(2):269-288 DOI: 10.1007/s00291-007-0090-7.

Caulkins, Jonathan P. 2007. "The Need for Dynamic Drug Policy." *Addiction*. 102(1):4-7.

Caulkins, Jonathan P., Gustav Feichtinger, Gernot Tragler, and Vladimir Veliov. 2007. "Cycles of Violence: A Dynamic Control Analysis." *European Journal of Operations Research*. 181(1):350-361.

Caulkins, Jonathan P., Gustav Feichtinger, Dieter Grass, and Gernot Tragler. 2007. "Bifurcating DNS Thresholds in a Model of Organizational Bridge Building." *Journal of Optimization Theory and Applications*. 133(1): 19-35. DOI: 10.1007/s10957-007-9180-6.

Caulkins, Jonathan P., Paul Dietze, and Alison Ritter. 2007. "Dynamic Compartmental Model of Trends in Australian Drug Use." *Healthcare Management Science*. Vol 10., No. 2, pp.151-162. DOI: 10.1007/s10729-007-9012-0.

Caulkins, Jonathan P., Erica Layne Morrison, and Timothy Weidemann (2007) Spreadsheet Errors and Decisionmaking: Evidence from Field Interviews. *Journal of Organizational and End User Computing*. 19(3):1-24. Reprinted in *End User Computing: Concepts, Methodologies, Tools and Applications*, Steve Clarke (Ed.), Information Science Reference, Hershey, PA, 2008, pp.856-874.

Moore, Timothy, Ritter, Alison, & Caulkins, Jonathan P. (2007) A cost effectiveness comparison of three policy options for reducing heroin dependency. *Drug and Alcohol Review*, 26(4), 369-378.

Caulkins, Jonathan P., Eric Hough, Nancy Mead, and Hassan Osman. 2007. "Using Integer Programming to Optimize Investments in Security Countermeasures: A Practical Tool for Fixed Budgets." *IEEE Security & Privacy*. Sept/Oct issue, pp.24-27. Published online by Building Security In at <https://buildsecurityin.us-cert.gov/daisy/bsi/articles/best-practices/requirements/552.html>.

Caulkins, Jonathan P. 2007. Price and Purity Analysis for Illicit Drugs: Data and Conceptual Issues. *Drug and Alcohol Dependence*. 90S, S61-S68. DOI 10.1016/j.drugalcdep.2006.08.014.

Caulkins, Jonathan P., Richard F. Hartl, Peter Kort, and Gustav Feichtinger (2007) Explaining Fashion Cycles: Imitators Chasing Innovators in Product Space. *Journal of Economic Dynamics and Control*. 31:1535-1556.

Caulkins, Jonathan P., Gustav Feichtinger, Josef Haunschmied, and Gernot Tragler. 2006. "Quality Cycles and the Strategic Manipulation of Value." *Operations Research*. Vol. 54, No. 4, pp.666-677.

Moore, Timothy J. and Jonathan P. Caulkins (2006) "How Cost-Of-Illness Studies Can Be Made More Useful For Illicit Drug Policy Analysis." *Applied Health Economics and Health Policy*, Vol. 5, No. 2, pp.75-85.

Caulkins, Jonathan P. and Sara Chandler (2006) Long-Run Trends in Incarceration of Drug Offenders in the US. *Crime and Delinquency*. Vol 52, No. 4, pp.619-641, DOI: 10.1177/0011128705284793.

Caulkins, Jonathan P., Alessandra Gragnani, Gustav Feichtinger, and Gernot Tragler (2006) High and Low Frequency Oscillations in Drug Epidemics. *International Journal of Bifurcation and Chaos*. 16(11):3275-3289.

Caulkins, Jonathan P., Peter Reuter, and Lowell Taylor (2006) Can Supply Restrictions Lower Price? Violence, Drug Dealing, and Positional Advantage. *Contributions to Economic Analysis and Policy*. 5(1), Article 3. <http://www.bepress.com/bejeap/contributions/vol5/iss1/art3>.

Kort, Peter M., Jonathan P. Caulkins, Richard F. Hartl, and Gustav Feichtinger. 2006. "Brand Integrity and Brand Dilution in the Fashion Industry." *Automatica*. Vol. 42(8), pp.1363-1370.

Caulkins, Jonathan P. and Rosalie Pacula. 2006. "Marijuana Markets: Inferences from Reports by the Household Population." *Journal of Drug Issues*. Vol. 36, No. 1, pp.173-200.

Arora, Ashish, Jonathan P. Caulkins, and Rahul Telang. 2006. "Sell First, Patch Later: Impact of Patching on Software Quality." *Management Science*. Vol. 52, No. 3, pp.465-471.

Caulkins, Jonathan P., Wenxuan Ding, George Duncan, Ramayya Krishnan, Eric Nyberg. 2006. A Method for Managing Access to Web Pages: Filtering by Statistical Classification (FSC) Applied to Text. *Decision Support Systems*, 42(1):149-161

Caulkins, Jonathan P. and Peter Reuter. 2006. "Illicit Drug Markets and Economic Irregularities." *Socio-Economic Planning Sciences*. 40:1-14. DOI information: 10.1016/j.seps.2004.08.002.

Caulkins, Jonathan P., Gustav Feichtinger, Caius Gavrila, Alfred Greiner, Josef L. Haunschmied, and Gernot Tragler. 2006. "How Much to Spend on Drug Substitute Programs? A Dynamic Cost-Benefit Analysis." *JOTA*. 128(2), 279-294. DOI: 10.1007/s10957-006-9016-9.

Caulkins, Jonathan P., Gustav Feichtinger, Dieter Grass, Michael Johnson, Gernot Tragler, Yuri Yegorov. 2005. "Placing the Poor While Keeping the Rich in Their Place: Separating Strategies for Optimally Managing Residential Mobility and Assimilation." *Demographic Research*. Vol. 13, Article. 1, pp.1-34.

Caulkins, Jonathan P. and Eric Sevigny. 2005. "How Many People Does the US Incarcerate for Drug Use, and Who Are They?" *Contemporary Drug Problems*. 32(3):405-428.

Caulkins, Jonathan P., Gustav Feichtinger, Dieter Grass, and Gernot Tragler. 2005. "A Model of Moderation: Finding Skiba Points on a Slippery Slope." *CEJOR*. Vol. 13, Issue No. 1, pp.45-64.

Caulkins, Jonathan P., Gustav Feichtinger, Michael Johnson, Gernot Tragler, Yuri Yegorov. 2005. "Skiba Thresholds in a Model of Controlled Migration."

Journal of Economic Behavior and Organizations, Vol. 57, pp.490-508. DOI information: 10.1016/j.jebo.2005.04.008.

Gavrila, Caius, Jonathan P. Caulkins, Gustav Feichtinger, Gernot Tragler, and Richard F. Hartl. 2005. "Managing the Reputation of an Award to Motivate Performance." *Mathematical Methods of Operations Research*. Vol. 61, pp.1-22.

Reuter, Peter and Jonathan P. Caulkins. 2004. "Illegal Lemons: Price Dispersion in Cocaine and Heroin Markets." *Bulletin on Narcotics*. Vol. LVI, No. 1-2, pp.141-165.

Caulkins, Jonathan P., Doris A. Behrens, Claudia Knoll, Gernot Tragler, and Doris Zuba. 2004. "Markov Chain Modeling of Initiation and Demand: The Case of the US Cocaine Epidemic." *Health Care Management Science*. Vol. 7, No. 4, 319-329. DOI: [10.1007/s10729-004-7540-4](https://doi.org/10.1007/s10729-004-7540-4).

Sevigny, Eric and Jonathan P. Caulkins. 2004. "Kingspins or Mules? An Analysis of Drug Offenders Incarcerated in Federal and State Prisons." *Criminology and Public Policy*, Vol. 3, No. 3, pp.401-434.

Caulkins, Jonathan P. 2004. "What Makes Software Special – And Especially Faulty." *International Journal of Information Technology Education*. Vol 1, No. 1, pp.115-128.

Behrens, Doris A., Jonathan P. Caulkins, and Gustav Feichtinger. 2004. "A Model of Chaotic Drug Markets and Their Control," *Nonlinear Dynamics, Psychology, and Life Sciences*. Vol 8, pp.373-399.

Caulkins, Jonathan P., Rosalie Pacula, Susan Paddock, and James Chiesa. 2004. "What We Can – And Can't – Expect from School-Based Drug Prevention." *Drug and Alcohol Review*, Vol. 23(1), pp.79-87.

Almeder, Christian, Jonathan P. Caulkins, Gustav Feichtinger, and Gernot Tragler. 2004. "An Age-Structured Single-State Initiation Model – Cycles of Drug Epidemics and Optimal Prevention Programs." *Socio-Economic Planning Sciences*, Vol. 38, No. 1, pp.91-109.

Winkler, Doris, Jonathan P. Caulkins, Doris Behrens, and Gernot Tragler. 2004. "Estimating the Relative Efficiency of Various Forms of Prevention at Different Stages of a Drug Epidemic." *Socio-Economic Planning Sciences*, Vol. 38, No. 1, pp.43-56.

Caulkins, Jonathan P. and Robert MacCoun. 2003. "Limited Rationality and the Limits of Supply Reduction." *Journal of Drug Issues*. Vol. 33, No. 2, pp.433-464.

Behrens, Doris A., Jonathan P. Caulkins, Gernot Tragler, and Gustav Feichtinger. 2002. "Why Present-Oriented Societies Undergo Cycles of Drug Epidemics." *Journal of Economic Dynamics and Control*, Vol. 26, No. 6, pp.919-936.

Caulkins, Jonathan P., Richard F. Hartl, Gernot Tragler, Gustav Feichtinger. 2001. "Why Politics Makes Strange Bedfellows: A Dynamic Model with DNS Curves." *JOTA*, Vol. 111, No. 2, pp. 237-254.

Kleiman, Mark A.R. and Jonathan P. Caulkins. 2001. "Noticing the Micro-Distributional Consequences of Cigarette Taxation and Its Equivalents." *Journal of Policy Analysis and Management*, Vol. 20, No. 2, pp.353-.

Caulkins, Jonathan P. 2001. "The Relationship Between Prices and Emergency Department Mentions for Cocaine and Heroin." *American Journal of Public Health*, Vol., 91, No. 9, pp.1446-1448.

Caulkins, Jonathan P. 2001. "How Large Should the Strike Zone Be in "Three Strikes and You're Out" Sentencing Laws?" *Journal of Quantitative Criminology*. Vol. 17, No. 3.

Caulkins, J.P. 2001. "When Parametric Sensitivity Analysis Isn't Enough," *INFORMS Transactions on Education*, Vol. 1, No. 3, pp.88-101, <http://ite.informs.org/Vol1No3/caulkins/caulkins.html>.

Tragler, Gernot, Jonathan P. Caulkins, and Gustav Feichtinger. 2001. "Optimal Dynamic Allocation of Treatment and Enforcement in Illicit Drug Control." *Operations Research* Vol. 49 No. 3, pp.352-362.

Caulkins, Jonathan P. 2001. "The Dynamic Character of Drug Problems." *Bulletin on Narcotics*, Vol. 53, No. 1, pp.11-23.

Almeder, Christian, Jonathan P. Caulkins, Gustav Feichtinger, and Gernot Tragler. 2001. "Age-specific Multi-State Initiation Models: Insights from Considering Heterogeneity." *Bulletin on Narcotics*, Vol. 53, No. 1, pp.105-118.

Behrens, Doris A., Jonathan P. Caulkins, Gernot Tragler, and Gustav Feichtinger. 2000. "Optimal Control of Drug Epidemics: Prevent and Treat – But Not at the Same Time?" *Management Science*, Vol. 46, No. 3, pp.333-347. To be reprinted (2010) in *Drug Abuse Prevention and Treatment*, Mangai Natarajan (ed.), Ashgate Publishing.

Caulkins, Jonathan P., Maria Dworak, Gustav Feichtinger, and Gernot Tragler. 2000. "Price-Raising Drug Enforcement and Property Crime: A Dynamic Model." *Journal of Economics*, Vol. 71, No. 3, pp.227-253.

- Behrens, Doris A., Jonathan P. Caulkins, Gernot Tragler, Josef Haunschmied, and Gustav Feichtinger. 1999. "A Dynamic Model of Drug Initiation: Implications for Treatment and Drug Control." *Mathematical Biosciences*. Vol. 159, pp.1-20.
- Caulkins, Jonathan P., Bruce Johnson, Angela Taylor, and Lowell Taylor. 1999. "What Drug Dealers Tell Us About Their Costs of Doing Business," *Journal of Drug Issues*. Vol. 29, No.2, pp.323-340.
- Caulkins, Jonathan P. 1999. "The Revolution in Management Science Instruction: Implications for Teaching Public Affairs Students." *The Journal of Public Affairs Education*. Vol. 5, No. 2, pp.107-117.
- Caulkins, Jonathan P. and Peter Reuter. 1998. "What Price Data Tell Us About Drug Markets." *Journal of Drug Issues*. Vol. 28, No. 3, pp.593-612.
- Caulkins, Jonathan P., Edward H. Kaplan, Peter Lurie, Thomas O'Connor, and Sung-Ho Ahn. 1998. "Can Difficult-to-Reuse Syringes Reduce the Spread of HIV Among Injection Drug Users?" *Interfaces*, Vol. 28, No. 3, pp.23-33.
- Yuan, Yuehong and Jonathan P. Caulkins. 1998. "The Effect of Variation in High-Level Domestic Drug Enforcement on Variation in Drug Prices," *Socio-Economic Planning Sciences*, Vol. 32, No. 4, pp.265-276.
- Yuan, Yuehong, Jonathan P. Caulkins, and Stephen Roehrig. 1998. "The Relationship Between Advertising and Content Provision on the Internet," *European Journal of Marketing*, Vol. 32, No.7/8, pp.677-687.
- Caulkins, Jonathan P., C. Peter Rydell, William L. Schwabe, and James Chiesa. 1998. "Are Mandatory Minimum Drug Sentences Cost-Effective?" *Corrections Management Quarterly*, Vol. 2, No. 1, pp.62-73.
- Caulkins, Jonathan P. 1997. "Modeling the Domestic Distribution Network for Illicit Drugs," *Management Science*, Vol. 43, No. 10, pp.1364-1371.
- Caulkins, Jonathan P. 1997. "Is Crack Cheaper than (Powder) Cocaine?" *Addiction*, Vol. 92, No. 11, pp.1437-1443.
- Fullerton, Don, Shaun P. McDermott, and Jonathan P. Caulkins. 1997. "Sulfur Dioxide Compliance of a Regulated Utility," *Journal of Environmental Economics and Management*, Vol. 34, pp.32-53.
- Caulkins, Jonathan P. and Peter Reuter. 1997. "Setting Goals for Drug Policy: Harm Reduction or Use Reduction," *Addiction*, Vol. 92, No. 9, pp.1143-1150.

- Baveja, Alok, Jonathan P. Caulkins, Wensheng Liu, Rajan Batta, and Mark H. Karwan. 1997. "When Haste Makes Sense: Cracking Down on Street Markets for Illicit Drugs." *Socio-Economic Planning Sciences*, Vol. 31, No. 4, pp.293-306.
- Rydell, C. Peter, Jonathan P. Caulkins, and Susan Everingham. 1996. "Enforcement or Treatment: Modeling the Relative Efficacy of Alternatives for Controlling Cocaine," *Operations Research*, Vol. 44, No. 5, pp.687-695.
- Naik, Ashish V., Alok Baveja, Rajan Batta, and Jonathan P. Caulkins. 1996. "Scheduling Crackdowns on Illicit Drug Markets." *European Journal of Operational Research*, Vol. 88, pp.231-250.
- Caulkins, Jonathan P., Jacqueline Cohen, Wilpen Gorr, and Jifa Wei. 1996. "Predicting Criminal Recidivism: Comparison of Neural Network with Statistical Methods," *Journal of Criminal Justice*, Vol. 24, No. 3, pp.227-240.
- Caulkins, Jonathan P. and Peter Reuter. 1996. "The Meaning and Utility of Drug Prices," *Addiction*, Vol.91, No. 9, pp.1261-1264.
- Everingham, Susan, C. Peter Rydell, and Jonathan P. Caulkins. 1995. "Cocaine Consumption in the US: Estimating Past Trends and Future Scenarios," *Socio-Economic Planning Sciences*, Vol. 29, No. 4, pp.305-314.
- Reuter, Peter and Jonathan P. Caulkins. 1995. "Redefining the Goals of Drug Policy: Report of a Working Group." *American Journal of Public Health*, Vol.85, No.8, pp.1059-1063.
- Caulkins, Jonathan P. 1995. "Domestic Geographic Variation in Illicit Drug Prices." *The Journal of Urban Economics*, Vol. 37, No. 1, pp.38-56.
- Caulkins, Jonathan P., Patricia Ebener, and Daniel McCaffrey. "Describing DAWN's Dominion." 1995. *Contemporary Drug Problems*, Vol. 22, No. 3, pp.547-567.
- Caulkins, Jonathan P. 1994. "What is the Average Price of an Illicit Drug?" *Addiction*. Vol. 89, No. 7, pp. 815-819.
- Caulkins, Jonathan P. 1993. "Zero-Tolerance Policies: Do They Inhibit or Stimulate Illicit Drug Consumption?" *Management Science*, Vol. 39, No. 4, pp.458-476.
- Caulkins, Jonathan P. 1993. "Local Drug Markets' Response to Focused Police Enforcement." *Operations Research*, Vol. 41, No. 5, pp.848-863.

Caulkins, Jonathan P., Arnold I. Barnett, Patrick D. Larkey, Yuehong Yuan, and Jesse Goranson. 1993. "The On-Time Machines: Some Analyses of Airline Punctuality." *Operations Research*, Vol. 41, No. 4, pp.710-720.

Anglin, M. Douglas, Jonathan P. Caulkins, and Yih-Ing Hser. 1993. "Prevalence Estimation: Policy Needs, Current Capacity, and Future Potential." *The Journal of Drug Issues*, Vol. 23, No. 2, pp.345-360.

Baveja, Alok, Rajan Batta, Jonathan P. Caulkins, and Mark H. Karwan. 1993. "Modeling the Response of Illicit Drug Markets to Local Enforcement." *Socio-Economic Planning Sciences*, Vol. 27, No. 2, pp.73-89.

Caulkins, Jonathan P., Gordon Crawford, and Peter Reuter. 1993. "Simulation of Adaptive Response: A Model of Drug Interdiction." *Mathematical and Computer Modelling*, Vol. 17, No. 2, pp.37-52.

Caulkins, Jonathan P., Richard C. Larson, and Thomas F. Rich. 1993. "Geography's Impact on the Success of Focused Local Drug Enforcement Operations." *Socio-Economic Planning Sciences*, Vol. 27, No. 1, pp.119-130.

Caulkins, Jonathan P. and Rema Padman. 1993. "Quantity Discounts and Quality Premia for Illicit Drugs." *The Journal of the American Statistical Association*. Vol. 88, No. 423, pp.748-757.

Caulkins, Jonathan P. and Rema Padman. 1993. "Interdiction's Impact on the Structure and Behavior of the Export-Import Sector for Illicit Drugs." *Zeitschrift fur Operations Research*, Vol. 37, pp.207-224.

Kleiman, Mark A.R. and Jonathan P. Caulkins. 1992. "Heroin Policy for the Next Decade." *Annals of the American Academy of Political and Social Science*, No. 521 (May), pp.163-174. Reprinted in part as "Evidence of Increased Heroin Use is Inconclusive" in *Drug Abuse: Opposing Viewpoints*, Karin L. Swisher and Katie de Koster (eds.), Greenhaven Press, San Diego, 1994.

Caulkins, Jonathan P. 1992. "Thinking About Displacement in Drug Markets: Why Observing Change of Venue Isn't Enough." *The Journal of Drug Issues*, Vol. 22, No.1, pp.17-30.

Caulkins, Jonathan P. and Edward H. Kaplan. 1991. "AIDS' Impact on the Number of Intravenous Drug Users." *Interfaces*, Vol. 21, No. 3, pp.50-63.

Caulkins, Jonathan P. and Charles H. Fine. 1990. "Seasonal Inventories and the Use of Product-Flexible Manufacturing Technology." *Annals of Operations Research*, Vol. 26, pp.351-375.

RAND Publications

Kilmer, Beau, Jonathan P. Caulkins, Rosalie Liccardo Pacula, and Peter Reuter (2012). *The U.S. Drug Policy Landscape: Insights and Opportunities for Improving the View*. RAND OP-393, Santa Monica, CA.

Kilmer, Beau, Jonathan P. Caulkins, Brittany M. Bond, and Peter Reuter (2010). *Reducing Drug Trafficking Revenues and Violence in Mexico: Would Legalizing Marijuana in California Help?* RAND OP-325-RC, Santa Monica, CA.

Kilmer, Beau, Jonathan P. Caulkins, Rosalie Liccardo Pacula, Robert MacCoun, Peter Reuter (2010). *Altered State? Assessing how marijuana legalization in California could influence marijuana consumption and public budgets*. RAND OP-315-RC, Santa Monica, CA.

Caulkins, Jonathan P., Eric Morris, and Rhajiv Ratnatunga (2010). *Smuggling and Excise Tax Evasion for Legal Marijuana*. RAND WR-766-RC, Santa Monica, CA,
http://www.rand.org/pubs/working_papers/2010/RAND_WR764.pdf.

Bond, Brittany M. and Jonathan P. Caulkins (2010). *Potential for Legal Marijuana Sales in California to Supply Rest of U.S.* RAND WR-765-RC, Santa Monica, CA,
http://www.rand.org/pubs/working_papers/2010/RAND_WR764.pdf.

Caulkins, Jonathan P. (2010). *Estimated Cost of Production for Legal Cannabis*. RAND WR-764-RC, Santa Monica, CA,
http://www.rand.org/pubs/working_papers/2010/RAND_WR764.pdf.

Caulkins, Jonathan P. (2010). *Cost of Marijuana Prohibition on the California Criminal Justice System*. RAND WR-763-RC, Santa Monica, CA,
http://www.rand.org/pubs/working_papers/2010/RAND_WR763.pdf.

Caulkins, Jonathan P., Sudha S. Rajderkar, and Shruti Vasudev. 2010. Creating Price Series without Price Data: Harnessing the Power of Forensic Data. Appendix A in B. Kilmer and S. Hoorens (Eds.) *RAND TR-755-EC Understanding Illicit Drug Markets, Supply Reduction Efforts, and Drug-Related Crime in the European Union* (pp.165-196). Cambridge U.K.: RAND.

Caulkins, Jonathan P., Martin Iguchi, Peter H. Reuter, and James Chiesa. 2005. *Assessing U.S. Drug Problems and Policy: A Synthesis of the Evidence to Date*. OP-121. RAND, Santa Monica, CA. Summarized as Research Brief RB-9110-DPRC (2005).

Caulkins, Jonathan P., Rosalie Liccardo Pacula, Jeremy Arkes, Peter Reuter, Susan Paddock, Martin Iguchi, and Jack Riley. 2004. *The Price and Purity of Illicit Drugs: 1981 Through the Second Quarter of 2003*. Report prepared by

RAND and published by the Office of National Drug Control Policy as Publication # NCJ 207768, November.

Arkes, Jeremy, Rosalie Liccardo Pacula, Susan Paddock, Jonathan P. Caulkins, and Peter Reuter. 2004. *Technical Report for the Price and Purity of Illicit Drugs Through 2003*. Report prepared by RAND and published by the Office of National Drug Control Policy as Publication # NCJ 207769, November.

Caulkins, Jonathan P., Martin Iguchi, Peter H. Reuter, and James Chiesa. 2003. *Drug Use and Drug Policy Futures: Insights from a Colloquium*. IP-246. RAND, Santa Monica, CA. Reprinted in *Foresight*.

Caulkins, Jonathan P., Peter W. Greenwood, James Chiesa, Amanda Geller, and Jeanne Ringel. Forthcoming. *Lessons from Uncertainty: Assembling Crime Prevention Strategies from Cost-Effectiveness Estimates*. DRR-2597-WTGF. RAND, Santa Monica, CA.

Karoly, Lynn A., M. Rebecca Kilburn, James H. Bigelow, Jonathan P. Caulkins, and Jill Cannon. 2000. *Assessing Costs and Benefits of Early Childhood Intervention Programs: Overview and Application to the Starting Early Starting Smart Program*. MR-1336-CFP. RAND, Santa Monica, CA.

Anderson, Robert H., P.S. Anton, Steven C. Bankes, Tora K. Bikson, Jonathan P. Caulkins, Peter J. Denning, James A. Dewar, Richard O. Hundley, C.R. Neu. 2000. *The Global Course of the Information Revolution, Technological Trends: Proceedings of an International Conference*. CF-157-NIC. RAND, Santa Monica, CA.

Caulkins, Jonathan P. with James Chiesa and Susan S. Everingham. 2000. *Response to the National Research Council's Assessment of RAND's Controlling Cocaine Study* MR-1265, RAND, Santa Monica, CA.

Caulkins, Jonathan P. 2000. *Should the U.S. Direct More Law Enforcement Effort at XTC?* CT-171, statement submitted to Subcommittee on Crime of the House Committee on the Judiciary, June 15th, 2000, RAND, Santa Monica, CA.

Caulkins, Jonathan P., Susan S. Everingham, Rosalie Liccardo Pacula. 1999. *Modifications to ADAM That Would Enhance Its Capacity to Inform Policy Modeling and Analysis*. PM-903-NIJ, RAND, Santa Monica, CA.

Schwabe, W., C.P. Rydell, J. Caulkins, P.W. Greenwood, A. Flanagan, M. Mack, and D.A. Shlapak. "Social Policy Game Supporting the Neighborhood and Family Initiative. PM-531-DPRC, RAND, Santa Monica, CA.

Caulkins, Jonathan P. 1994. "Developing Price Series for Cocaine." MR-317-DPRC, RAND, Santa Monica, CA.

Caulkins, Jonathan P., Nora Fitzgerald, Karyn Model, and H. Lamar Willis. 1994. "Youth Drug Prevention Through Community Outreach: The Military's Pilot Programs," MR-536-OSD, RAND, Santa Monica, CA.

Greenwood, Peter W., C. Peter Rydell, Allan F. Abrahamse, Jonathan P. Caulkins, James Chiesa, Karyn E. Model, and Stephen P. Klein. 1994. "Three Strikes and You're Out: Estimated Benefits and Costs of California's New Mandatory Sentencing Law," MR-509-RC, RAND, Santa Monica, CA. Reprinted as "Estimated Benefits and Costs of California's New Mandatory-Sentencing Law," Chapter 3 in *Three Strikes and You're Out: Vengeance as Public Policy*, David Shichor and Dale K. Sechrest (eds.), pp.53-90, Sage Publications Inc., Thousand Oaks, CA, 1996.

Retuer, Peter, and Jonathan Caulkins. 1993. "ONDCP's First Four Years as a Policy Agency," statement submitted to the House Committee on Government Operations, October 5th, 1993, RAND, Santa Monica, CA.

Chapters in Edited Volumes

Caulkins, Jonathan P. and Beau Kilmer (2013). Criminal Justice Costs of Prohibiting Marijuana in California. In *Something's in the Air: Race and the Legalization of Marijuana*, eds. Katherine Tate, James Lance Taylor, and Mark Q. Sawyer. Routledge.

Caulkins, Jonathan P., Anna Kasunic, and Michael A.C. Lee (forthcoming). Estimating the Societal Burden of Substance Abuse: Advantages and Limitations of Current Methodologies. In *Substance Abuse in Adolescents and Young Adults: A Critical Conundrum for Society*, eds. Donale E. Greydanus, Gabriel Kaplan, Dilip Patel, and Joav Merrick.

Caulkins, Jonathan P., Anna Kasunic, Mark A.R. Kleiman, and Michael A.C. Lee (forthcoming). The Pros and Cons of Legalization. In *Substance Abuse in Adolescents and Young Adults: A Critical Conundrum for Society*, eds. Donale E. Greydanus, Gabriel Kaplan, Dilip Patel, and Joav Merrick.

Lievens, Delfine, Freya Vander Laenen, Jonathan Caulkins, and Brice De Ruyter. Drugs in Figures III: Study of Public Expenditures on Drug Control and Drug Problems. In *European Criminal Justice and Policy*, eds. Marc Cools, Brice De Ruyter, Marleen Easton, Lieven Pauwels, Paul Ponsaers, Gudrun Vande Walle, Tom Vander Beken, Freya Vander Laenen, Antoinette Verhage, Gert Vermeulen, and Gerwinde Vynckier. Maklu Publishers, pp.41-64.

Caulkins, Jonathan P. and Mark A.R. Kleiman (2011). Drugs and Crime. In *Oxford Handbook of Crime and Criminal Justice*, ed. Michael Tonry. Oxford University Press, pp.275-320.

Boyum, David, Jonathan P. Caulkins, and Mark A.R. Kleiman (2011). Drugs, Crime, and Public Policy. In *Crime and Public Policy*, eds. James Q. Wilson and Joan Petersilia. Oxford University Press, pp.368-410.

Reuter, Peter H. and Jonathan P. Caulkins (2011). Purity, Price, and Production: Are Drug Markets Different? In *Illicit Trade and Globalization*, ed. Paul De Grauwe. MIT Press.

Caulkins, Jonathan P. and Peter Reuter (2010). How Drug Enforcement Affects Drug Prices. In *Crime and Justice – A Review of Research*, vol. 39, ed. Michael Tonry. University of Chicago Press, pp.213-272.

Caulkins, Jonathan P., Vasundhara Garg, and Victor Pontines (2010) Benefits of Including an Asian Currency Unit (ACU) in an Optimized World Currency Basket. In *Global Operations Management*, Lee R. Hockley (Ed.), Nova Science Publishers, New York, pp.73-84.

Caulkins, Jonathan P. and Rosalie Liccardo Pacula. 2010. Drug Policy Research. In *Addiction Research Methods*, Peter G. Miller, John Strang, and Peter M. Miller (Eds.), Wiley-Blackwell Publishing, pp.355-371.

Caulkins, Jonathan P., Erica Layne Morrison, and Timothy Weidemann (2009) Do Spreadsheet Errors Lead to Bad Decisions? Perspectives of Executives and Senior Managers. In *Evolutionary Concepts in End User Productivity and Performance: Applications for Organizational Progress* Volume of the *Advances in End User Computing Series*, Steve Clarke (Ed.), Idea Group Incorporated, Hershey, PA, pp.44-62.

Caulkins, Jonathan P. 2009. “Illicit Substance Abuse and Addiction,” Chapter 6 in David L. Weimer and Aidan R. Vining (eds.) *Investing in the Disadvantaged: Assessing the Benefits and Costs of Social Policies*, Georgetown University Press, pp.83-102.

Caulkins, Jonathan P. and Mark A.R. Kleiman (2008) “Drugs and Drug Policies in the United States,” In Peter H. Schuck and James Q. Wilson (eds.) *Understanding America: The Institutions and Policies that Shape America and the World*, Public Affairs Publishing, New York, pp.563-593.

Caulkins, Jonathan P. 2007. OR and the Drug War: Tales from the Trenches. *MIT ORC 50th Anniversary Symposium*, Ingrid Larson (ed.). INFORMS Press, pp.73-78.

Behrens, Doris A., Jonathan P. Caulkins, Gustav Feichtinger, and Gernot Tragler. (2007). “Incentive Stackelberg Strategies for a Dynamic Game on Terrorism.” In: S. Jorgensen, M. Quincampoix, T.L. Vincent (eds.), *Advances in Dynamic Game Theory and Application – Numerical Methods, Algorithms, and Applications to*

Ecology and Economics, Series: *Annals of the International Society of Dynamic Games, Vol 9*. Birkhauser.

Caulkins, Jonathan P. 2005. "Models Pertaining to How Drug Policy Should Vary Over the Course of an Epidemic Cycle." In Bjorn Lindgren and Michael Grossman (eds.) *Substance Use: Individual Behavior, Social Interactions, Markets, and Politics*, Advances in Health Economics and Health Services Research, Volume 16. Elsevier, pp.407-439.

Caulkins, Jonathan P. 2005. "Investing for Cost-Effectiveness in the Face of Uncertainty: Applying Financial Portfolio Optimization to Prevention Programming." In Tim Stockwell, Paul Gruenewald, John Toumbourou, and Wendy Loxley (eds.) *Preventing Harmful Substance Abuse: The Evidence Base for Policy and Practice*. Wiley, Chichester, West Sussex, England, pp.401-413.

Caulkins, Jonathan P. and Robert MacCoun. 2005. "Analyzing Illicit Drug Markets When Dealers Act with Limited Rationality." In Francesco Parisi and Vernon L. Smith (eds.) *The Law and Economics of Irrational Behavior*, Standard University Press, Stanford, CA, pp.315-338.

Caulkins, Jonathan P. 2004. "Drug Policy: Insights from Mathematical Analysis." In Brandeau, M.L., Sainfort, F., and Pierskalla W.P. (eds.) *Operations Research and Healthcare: A Handbook of Methods and Applications*, Kluwer Academic Publishers, Boston, pp.297-332.

Caulkins, Jonathan P., Mark A.R. Kleiman, and Peter Reuter. 2003. "Counterterrorism and Counterdrug Policies: Comparisons and Contrasts." In Arnold Howitt and Robyn Pangi (eds.) *Preparing for Domestic Terrorism*, MIT Press.

Caulkins, Jonathan P. and Philip Heymann. 2001. "How Should Low-Level Drug Dealers Be Punished?" In Philip B. Heymann and William N. Brownsberger (eds.) *Drug Addiction and Drug Policy: The Struggle to Control Dependence*, pp.206-238, Cambridge: Harvard University Press.

Caulkins, Jonathan P. 2000. "The Evolution of Drug Initiation: From Social Networks to Public Markets." In E.J. Dockner, R.F. Hartl, M. Luptacik, and G. Sorger (eds.) *Optimization, Dynamics, and Economic Analysis*, pp.353-367. Heidelberg: Physica-Verlag.

Caulkins, Jonathan P. 2000. "Measurement and Analysis of Drug Problems and Drug Control Efforts." In David Duffee, David McDowall, Lorraine Green Mazerolle, and Stephen D. Mastrofski (eds.) *Criminal Justice 2000: Volume 4, Measurement and Analysis of Crime and Justice*, pp.391-449. Washington, DC: USGPO.

Caulkins, Jonathan P. 1998. "The Cost-Effectiveness of Civil Remedies: The Case of Drug Control Interventions." *Crime Prevention Studies*, Lorraine Green Mazerolle and Janice Roehl (eds.), Vol. 9, pp.219-237.

MacCoun, Robert J. and Jonathan P. Caulkins. 1996. "Examining the Behavioral Assumptions of the National Drug Control Strategy." In W.K. Bickel and R.J. DeGrandpre (eds.) *Drug Policy and Human Nature: Psychological Perspectives on the Prevention, Management, and Treatment of Illicit Drug Use*. pp.177-197. New York: Plenum Press.

Caulkins, Jonathan P. and Patrick D. Larkey. 1994. "Meritocracy in Government Personnel Systems." In *Research in Public Administration*, Vol. 3, pp.315-338.

Conference Proceedings

Caulkins, Jonathan P. and Michael Lee. 2012. Legalizing Drugs in the U.S.: A Solution to Mexico's Problems for Which Mexico Should Not Wait. Counter-Terror Operations," in Ernesto Zedillo and Haynie Wheeler (eds.), *Rethinking the "War on Drugs" Through the US-Mexico Prism*, pp.108-124.

Caulkins, Jonathan P., Gustav Feichtinger, Dieter Grass, and Gernot Tragler. 2010. "Optimizing Counter-Terror Operations," in Proceedings of the International Federation of Automatic Control.

Bultmann, Roswitha, Jonathan P. Caulkins, Gustav Feichtinger, and Gernot Tragler. 2008. "Modeling Supply Shocks in Optimal Control Models of Illicit Drug Consumption," in Lirkov, I., S. Margenov and J. Wasniewski (eds.), *Large Scale Scientific Computing* (Springer, Heidelberg), pp.285-292.

Caulkins, Jonathan P. 2003. "International Drug Prices: Evidence from STRIDE" Proceedings of the Roundtable on Business Practices of Narcotics Trafficking Enterprises held at the Library of Congress, January 29, 2003 available at (http://www.loc.gov/rr/frd/Drug_conference/home.htm) and RAND RP, Santa Monica, CA.

Caulkins, Jonathan P., Susan Paddock, Rosalie Pacula, and James Chiesa. 2003. "What Can We – And Can't We – Expect from School-Based Drug Prevention?" Proceedings of the International Research Symposium on Preventing Substance Use, Risky Use, and Harm: What is Evidence-Based Policy? Held in Freemantle, West Australia, February 24-27, 2003.

Caulkins, Jonathan P. 2002. "The Role of Operations Research in Public Policy," Proceedings of the International Conference on Operations Research held at the University of Klagenfurt, September 2-5, 2002.

Kleiman, Mark A.R. and Jonathan P. Caulkins. 1997. "The Proposed 'Global Settlement' of Tobacco Litigation: A Policy Analysis," Proceedings of the

Conference on the So-Called Global Tobacco Settlement: Its Implications for Public Health and Public Policy held at the Institute for Legal Studies, University of Wisconsin Law School, October 17, 1997.

Caulkins, Jonathan P. 1996. "What Does Mathematical Modeling Tell Us About Harm Reduction," *Drug and Alcohol Review*, Vol. 15, No. 3, pp.231-235.

Caulkins, Jonathan P. 1994. "Evaluating the Effectiveness of Interdiction and Source Country Control." Proceedings of Economics of the Narcotics Industry Conference held November 21-22, 1994, Bureau of Intelligence and Research, US Department of State and the Central Intelligence Agency and RAND RP-410, Santa Monica, CA.

Larkey, Patrick D. and Jonathan P. Caulkins. 1991. "The Persistence of Performance Evaluation Systems." Proceedings of the 1991 National Public Management Research Conference held at Syracuse University's Maxwell School of Citizenship and Public Affairs.

Custom Textbooks

Caulkins, Jonathan P. and Cliff Ragsdale 2004. *Optimization and Multi-Criteria Decision Making*. South-Western College Publishing, Mason, OH. (Revised edition published in 2005)

Other Professional Publications

Hawken, Angela, Caulkins, Jonathan P., Beau Kilmer, and Mark A.R. Kleiman. 2013. "Quasi-Legal Cannabis in Colorado and Washington: Local and National Implications." Editorial in *Addiction*.

Caulkins, Jonathan P. and Beau Kilmer (with Marlon Graf). 2013. Estimating the Size of the EU Cannabis Market.

Pacula, Rosalie Liccardo, Russell Lundberg, Jonathan P. Caulkins, Beau Kilmer, Sarah Greathouse, and Terry Fain. Forthcoming. *Recommendations for Improving the Measurement of Drug-Related Crime*.

Caulkins, Jonathan P. and Michael A.C. Lee. 2012. The Drug-Policy Roulette. *National Affairs*. 12, pp.35-51.

Caulkins, Jonathan P., Angela Hawken, Beau Kilmer, and Mark A.R. Kleiman. 2012. Marijuana Legalization 2012 Style: The Brewing Conflict Between State and Local Laws. *American Interest*.

Kleiman, Mark A.R., Jonathan P. Caulkins, and Angela Hawken. 2012. Rethinking the War on Drugs. *Wall Street Journal*. Saturday Essay, April 20, 2012.

Kleiman, Mark A.R., Jonathan P. Caulkins, Angela Hawken, and Beau Kilmer. 2012. Eight Questions for Drug Policy Research. *Issues in Science and Technology*. Summer. <http://www.issues.org/28.4/kleiman.html>.

Humphreys, Keith and Jonathan P. Caulkins. 2012. Towards a smarter drugs policy. *The Guardian*, January 6th (<http://www.guardian.co.uk/commentisfree/cifamerica/2012/jan/06/towards-smarter-drugs-policy>).

Kleiman, Mark, Jonathan Caulkins, and Angela Hawken. 2001. Algo de lo que hay que saber sobre las drogas y nadie sabe ni pregunta ni puede responder. *Nexos*, September 1st (downloaded from <http://www.nexos.com.mx/?P=leerarticulo&Article=2099491> on October 8, 2011).

Caulkins, Jonathan P. Medical marijuana: The Justice Department speaks – again. *Christian Science Monitor*, August 8th, 2011. www.csmonitor.com/Commentary/Opinion/2011/0808/Medical-marijuana-The-Justice-Department-speaks-again.

Caulkins, Jonathan P., Jonathan Kulick, and Mark A.R. Kleiman. 2011. *Think Again: The Afghan Drug Trade*. *Foreign Policy*.

Caulkins, Jonathan P. (2012). The Term and the Vision (Comment on Victoria A. Greenfield and Letizia Paoli's If supply-oriented drug policy is broken, can harm reduction help fix it?) *International Journal of Drug Policy*. 23: 19-20. <http://dx.doi.org/10.1016/j.drugpo.2011.07.006>.

Caulkins, Jonathan P. 2011. Can We Treat Our Way Out of Incarcerating Drug-Involved Offenders? Comment on Pollack et al.'s If Drug Treatment Works So Well, Why Are So Many Drug Users In Prison? In Phil Cook, Jens Ludwig, and Justin McCrary (eds.) *Controlling Crime: Strategies and Tradeoffs*, University of Chicago Press, Chicago, pp.160-65.

Caulkins, Jonathan P. and Eric Sevigny (2010). The Effects of Drug Enforcement and Imprisonment on Source Countries: The Case of the U.S. and Mexico. Appendix C to *Cooperative Mexico-U.S. Antinarcotics Efforts*, Sidney Weintraub and Duncan Wood, pp.99-127. Center for Strategic and International Studies, Washington, DC.

Caulkins, Jonathan P., Mark A.R. Kleiman, and Jonathan Kulick. 2010. *Drug Production and Trafficking, Counterdrug Policies, and Security and Governance in Afghanistan*. New York University's Center on International Cooperation, New York.

Beau Kilmer and Jonathan P. Caulkins (2010). Filtering the Smoke: Legalizing Marijuana Would Slash the Price, But Effects On Use and Revenues Are Hazy. *RAND Review*, 34(2).

<http://www.rand.org/publications/randreview/issues/summer2010/marijuana.html>.

Beau Kilmer, Stijn Hoorens, and Jonathan P. Caulkins (2010). Do Drug Arrests Work? The Effectiveness of Drug Enforcement in Europe. *RAND Review*, 34(2). www.rand.org/publications/randreview/issues/summer2010/arrest.html.

Caulkins, Jonathan P. 2010. "Systems Modeling to Inform Drug Policy." Entry in *Encyclopedia of Operations Research and Management Science*, James J. Cochran (ed.). Wiley.

Drugs and Public Policy Group (2010), Drug Policy and the Public Good: a summary of the book. *Addiction*, 105: 1137–1145. doi: 10.1111/j.1360-0443.2010.03049.x.

Reuter, Peter, and Jonathan P. Caulkins 2009. "An Assessment of Drug Incarceration and Foreign Interventions." May 19th testimony to the Domestic Policy Subcommittee of the Oversight and Government Reform Committee.

Caulkins, Jonathan P. 2009. "How to Expand the 'Sample Size' of Studies of Drug Market Disruptions," Comment on Cunningham et al.'s 'Impact of US and Canadian Precursor Regulations on Methamphetamine Purity' *Addiction*. 104, 454-455.

Caulkins, Jonathan P. 2008. "Commentary on Ralph Keeney's 'Personal Decisions Are the Leading Cause of Death'" *Operations Research Forum*, 56(6), on-line commentary.

Caulkins, Jonathan P. 2008. "Is Responsible Drug Use Possible?" *Cato Unbound*, on-line blog forum (<http://www.cato-unbound.org/archives/>).

Caulkins, Jonathan P. 2008. "Publication Bias: A Concern Just for Drug Prevention or for the Entire Drug Control Literature?" *Drug and Alcohol Review* 27(4), 1-2.

Caulkins, Jonathan P. 2008. "Harm Reduction." Entry in *Encyclopedia of Drugs, Alcohol, and Addictive Behavior, Third Edition*, Rosalyn Carson-DeWitt (ed.). Macmillan Reference Group, Farmington Hills, MI.

Caulkins, Jonathan P. 2008. "Legalization vs. Prohibition of Drugs: Policy Analysis." Entry in *Encyclopedia of Drugs, Alcohol, and Addictive Behavior, Third Edition*, Rosalyn Carson-DeWitt (ed.). Macmillan Reference Group, Farmington Hills, MI.

Caulkins, Jonathan P. 2008. "Legalization vs. Prohibition of Drugs: Historical Perspective." Shared by-Line Entry (with Duane C. McBride) in *Encyclopedia of Drugs, Alcohol, and Addictive Behavior, Third Edition*, Rosalyn Carson-DeWitt (ed.). Macmillan Reference Group, Farmington Hills, MI.

Caulkins, Jonathan P. 2007. Book review of *Pot Politics: Marijuana and the Costs of Prohibition*. Mitch Earleywine (Ed.), Oxford University Press, *Addiction*. 102, p.1007.

Caulkins, Jonathan P. and Peter Reuter. 2006. "Reorienting U.S. Drug Policy," *Issues in Science and Technology*. Vol. XXIII, No. 1., pp.79-85.

Caulkins, Jonathan P. and Peter Reuter. 2006. "The Disparity Between Crack and Powder Cocaine Sentences," Testimony to the US Sentencing Commission, presented November 15, 2006.

Caulkins, Jonathan P. 2006. "Cost Benefit Analyses of Investments to Control Illicit Substance Abuse and Addiction" paper prepared for appendix to David Weimer and Aidan Vining's report to the MacArthur Foundation, *Net Benefits of Public Investment in Individuals: What Do, and Could, We Know?*

Caulkins, Jonathan P. and Peter Reuter. 2006. "Comment on 'Changes in Canadian Heroin Supply Coinciding with the Australian Heroin Shortage'" Editorial in *Addiction*. 101(5), pp.621-622.

Timothy J. Moore, Jonathan P. Caulkins, Alison Ritter, Paul Dietze, Shannon Monagle and Jonathon Pruden. 2005. Heroin Markets in Australia: Current Understanding and Future Possibilities. DPMP Monograph Series. Fitzroy, Australia: Turning Point Alcohol and Drug Centre.

Caulkins, Jonathan P., Erica Layne Morrison, and Timothy Weidemann. 2005. "Spreadsheet Errors: Are They Undermining Decision Making in Your Organization?" *The Public Manager*. 34(1):22-27.

Caulkins, Jonathan P., Emily Eelman, Minoli Ratnatunga, and David Schaarsmith 2005. "Operations Research in Africa: Recent Progress and Future Potential." *OR/MS Today*, October.

Caulkins, Jonathan P., Erica Layne Morrison, and Timothy Weidemann. 2005. "Are Spreadsheet Errors Undermining Decision Making in Your Organization?" *Nonprofit World*. 24(3):26-28.

Caulkins, Jonathan P. 2005. "The Benefits of Structural Modeling of Australia's Heroin Drought." Commentary on Degenhardt et al.'s "Effects of a Sustained Heroin Shortage." *Addiction*, 100(7): 928-930.

Caulkins, Jonathan P. 2004. Comment on Kleiman's "Flying Blind on Drug Control Policy." *Issues in Science and Technology*, Vol. XXI, No. 1, pp.6-7.

Caulkins, Jonathan P. 2004. "CAPPS II: A Risky Choice Concerning and Untested Risk Detection Technology." *Risk Analysis*, Vol. 24(4), pp.921-924.

Caulkins, Jonathan P. and Gernot Tragler. 2004. "Dynamic Drug Policy: An Introduction and Overview." *Socio-Economic Planning Sciences*, 38(1), pp.1-6.

Caulkins, Jonathan P. 2003. "Methamphetamine Epidemics: An Empirical Overview." *Law Enforcement Executive Forum*. Vol 3, No. 4, pp.17-42. Republished in *Challenging American Police: A Reader for 21st Century*, Larry Hoover, Thomas Jurkanin, and Vladimir Sergevnin (eds.).

Reuter, Peter and Jonathan P. Caulkins. 2003. "Does Precursor Regulation Make a Difference?" Editorial in *Addiction*, Vol. 98(9), pp.1177-1179.

Greenwood, Peter W., Jonathan P. Caulkins, Jennifer S. Wong, and Sherry Cicchetti. 2003. *The Deschutes County Community Youth Investment Project: An Experiment in Delinquency Prevention Financing*. Greenwood and Associates, Agoura, CA.

Mark A. R. Kleiman, Peter Reuter, and Jonathan P. Caulkins. 2002. "The War on Drugs and the War on Terror: A Comparison." *Public Interest Report*, Vol. 55, No. 2, pp.3-5.

Caulkins, Jonathan P. 2002. "Using Models that Incorporate Uncertainty." *Journal of Policy Analysis and Management*, Vol. 21, No. 3, pp.486-491.

Caulkins, Jonathan P. 2002. "Law Enforcement's Role in a Harm Reduction Regime." Crime and Justice Bulletin Number 64. New South Wales Bureau of Crime and Justice Research. Translated into Russian and Polish for distribution by the International Debate Education Association and reprinted in *War on Drugs, HIV/AIDS and Human Rights*.

Caulkins, Jonathan P. 2002. "Law and Policy: Drug Legalization Debate." Entry in *Encyclopedia of Drugs, Alcohol, and Tobacco: Learning About Addictive Behavior*, Rosalyn Carson-DeWitt (ed.). Macmillan Reference Group, Farmington Hills.

Caulkins, Jonathan P. 2002. "Insights Australia Should and Should Not Take from US Drug Policy." *Sydney Institute Papers*, Vol. 14, No. 1, pp.1-6.

Caulkins, Jonathan P. 2001. Book review of *Forces of Habit: Drugs and the Making of the Modern World*, David T. Courtwright, Harvard University Press, *Issues in Science and Technology*, Vol. XVII, No. 4, pp.85-87.

Caulkins, Jonathan P. 2001. Comment on "Should the DEA's STRIDE Data Be Used for Economic Analysis of Markets for Illegal Drugs," *JASA*, Vol. 96, No. 456.

Caulkins, Jonathan P. Forthcoming. "Drug Abuse Control Over the Epidemic Cycle: Policy Implications from Dynamic Models." Abstracts of the Marschak Colloquium at UCLA. *Mathematical Social Sciences*.

Caulkins, Jonathan P. 2001. Review of "A Study of Recidivism of Serious and Persistent Offenders Among Adolescents," by Brent B. Benda and Connie L. Tollett, 1999, *Journal of Criminal Justice*, 27(2):111-126, published in *International Journal of Forecasting*, Vol. 17, pp.135-140.

Barnett, Arnold I., Jonathan P. Caulkins, and Michael Maltz. 2001. "Crime and Justice," in *Encyclopedia of Operations Research and Management Science*, Centennial Edition, Saul I. Gass and Carl M. Harris (eds.), Kluwer Academic Publishers, Hingham, MA.

Caulkins, Jonathan P. 2000. "A Policy Analysis of Drug Legalization." Entry in *Encyclopedia of Drugs, Alcohol, and Addictive Behavior, Revised Edition*, Rosalyn Carson-DeWitt (ed.). Macmillan Reference Group, Farmington Hills, pp.878-882.

Caulkins, Jonathan P. 2000. "Do Drug Prohibition and Enforcement Work?" White paper published in the "What Works?" series. Lexington Institute, Arlington, VA.

Caulkins, Jonathan P. 1999. "Quantified Contributions: Erdos-like Numbers May Shed Light on an OR Paper's Accessibility and Relevance." *OR/MS Today*, Vol., 26, No. 6, pp.18-19.

Caulkins, Jonathan P. 1999. "Can Supply Factors Suppress Marijuana Use By Youth?" Federation of American Scientists' *Drug Policy Analysis Bulletin*, Issue Number 7, pp.3-5.

Caulkins, Jonathan P. and Sally L. Satel. 1999. "Methadone Patients Should Not Be Allowed to Persist in Cocaine Use," Federation of American Scientists' *Drug Policy Analysis Bulletin*, Issue Number 6, pp.1-4.

Caulkins, Jonathan P. 1999. Book review of *Harm Reduction: A New Direction for Drug Policies and Programs*, Patricia G. Erickson, Diane M. Riley, Yuet W. Cheung, and Patrick A. O'Hare (eds.). *International Criminal Justice Review*, Vol. 9, pp.97-99.

- Caulkins, Jonathan P. 1999. "Comments on Chapters 5 and 6," in *The Economic Analysis of Substance Use and Abuse: An Integration of Econometric and Behavioral Research*, Warren K. Bickel, Frank J. Chaloupka, Michael Grossman, and Henry Saffer (eds), University of Chicago Press, pp.174-180.
- Caulkins, Jonathan P. 1998. "Drug Prevention: The Paradox of Timing," Federation of American Scientists' *Drug Policy Analysis Bulletin*, Issue Number 5, pp.1-3.
- Caulkins, Jonathan P. 1997. Book review of *Global Habit: The Drug Problem in a Borderless World* by Paul Stares. *Politics and the Life Sciences*, Vol. 16, No. 1 (March), pp.148-150.
- Caulkins, Jonathan P. 1997. "How Prevalent are 'Very Light' Drug Users?" Federation of American Scientists' *Drug Policy Analysis Bulletin*, Issue Number 3, pp.3-5.
- Caulkins, Jonathan P. 1997. "Sense and Sensitivity Analysis," *OR/MS Today*, Vol. 24, No.6, pp.24-28.
- Caulkins, Jonathan P. 1996. "Color-Blind Policies Not Enough: A Case in Favor of Affirmative Action," *OR/MS Today*, Vol. 23, No. 4, pp.25-27. www.lionhrtpub.com/orms/orms-8-96/color-blind.html.
- Caulkins, Jonathan P. 1995. "Dealing with the Country's Drug Problem." *OR/MS Today*, Vol. 22, No.1, pp.32-40.
- Caulkins, Jonathan P. 1995. "Yes: Treatment Is More Cost-Effective than Law Enforcement." *Insight*. June 12, pp.18-20.
- Merz, Jon F. and Jonathan P. Caulkins. 1995. "Propensity to Abuse--Propensity to Murder?" *Chance*, Vol.8, No.2, p.14.
- Caulkins, Jonathan P. 1994. Book review of *Crack and the Evolution of American Anti-Drug Policy* by Steven Belenko. *Criminal Justice Review*, Vol. 19, No. 2, pp.303-305.
- Caulkins, Jonathan P. 1993. "Judge's Commentary: The Coal Tipple Operations Papers." *The UMAP Journal*, Vol. 14, No. 3, pp.275-276.
- Caulkins, Jonathan P. 1993. Preface for special issue of *Mathematical and Computer Modelling* on drug markets and drug policy, Vol. 17, No. 2, pp.ix-xi.
- Reuter, Peter, and Jonathan Caulkins. 1993. "ONDCP's First Four Years as a Policy Agency," RAND Congressional Testimony Series, CT-110, November.

Caulkins, Jonathan P. 1992. "Judge's Commentary: The Emergency Power Restoration Problem." *The UMAP Journal*, Vol. 13, No. 3, pp.269-271.

Caulkins, Jonathan P. 1991. "Practitioner's Commentary: The Outstanding Steiner Tree Papers." *The UMAP Journal*, Vol. 12, No.3, pp.279-280.

Barrett, Robert C., Jonathan P. Caulkins, and Andrew J. Yates. 1986. "Optimizing the Placement of Two Emergency Facilities." *Mathematical Modelling*, Vol. 7, No. 4, pp.627-652.

Barrett, Robert C., Jonathan P. Caulkins, and Andrew J. Yates. 1985. "Population Dynamics of the Peruvian Anchovy." *Mathematical Modelling*, Vol. 6, No. 6. Reprinted as "Peruvian Anchovy Population Dynamics." *Undergraduate Journal of Mathematics and Its Applications*, Vol. 6, No. 3, pp.525-548.

Articles in Newspapers

Articles or op-eds in the *The New York Times*, *The Guardian*, *Pittsburgh Business Times*, *Plano News*, *Rochester Democrat and Chronicle*, and the *Wall Street Journal*.

COURSES TAUGHT (masters level unless otherwise noted)

Heinz Pittsburgh

Methods Classes

Decision Analysis & MCDM	S'91, S'92, S'96, F'97, F'98, F'12
Decision and Risk Modeling	S'04, S'05, S'07, S'09, S'10, S'11, S'12, S'13
MISM/MSIT Decision Making Under Uncertainty	F'02, S'03, S'04, S'05, Su '12
Management Science	S'96 - 99, S'01 - 05, Su '03
Operations Research for the Public Sector	F'93, S'05
Optimization	S'04, S'05, S'12, S'13
Ph.D. Seminar	F'91, S'92, F'92, S'93, F'97, F'98, F'99
Ph.D. Probabilistic Modelling Methods	S'92, S'93

Policy Classes

Criminal Justice Policy	F'93, F'95, F'96, F'97, S'10
Illicit Drugs: The Challenge to Policy	F '90, F'91, F'92, F'93, F'95, F'96, S'08
Policy Decision Modeling Workshop	S'05, S'10, S'11, S'12
Physical Technical Systems II	S'91
Systems Synthesis: Municipal Government Cash Flow Management	F'97, S'98

Summer undergraduate classes in the QSSP program

Advanced Quantitative Analysis (Mathematical Modelling)	Su '91, Su '12
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Adelaide Campus

Decision Making Under Uncertainty (in Adelaide, Australia)	S'07, Su '08
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Qatar Campus (undergraduate classes)

Decision Making	S'06, S'07
Math Modeling for Consulting	F'09, F'10, F'11
Models and Methods for Optimization	S'06, S'07, S'08, S'09
Probability Theory and Random Processes	S'07, S'08, S'09, F'09, F'10
Probability and Statistics for Business Applications	F'05, F'09, F'10
Executive Education	
CIO Decision Making	S'03, S'04, S'05, S'06, S'07, S'09, S'10, S'11, S'12, F'12, S'13
Merging Perspectives on Drugs and Crime (JFK School of Govt. Executive Education Program)	Summer '99
MMM Operations Management	F'08, F'09, F'10, F'11, F'12
Project Management (Korean IT Executive Education Program)	Su'04
RAND Graduate School	
Ph.D.: Drugs, Crime, & Violence: Applying Quantitative Methods to Social Policy Problems	W'95
Vienna Institute of Technology (TU Wien)	
Mathematical Modeling of Drug and Crime Policy	F'96
OR and Financial Modeling	S'02

PROFESSIONAL SERVICE

Editing

Guest Editor of Vol. 17, No. 2 *The International Journal of Mathematical and Computer Modelling*. "Mathematical Models of Drug Markets and Drug Policy."

Guest Editor with Gernot Tragler of *Socio-Economic Planning Sciences special issue: Drug Use, Markets, and Policy: Models for Adaptive Control of a Dynamic Problem.*"

Guest Editor with Gernot Tragler and Gustav Feichtineger of *Bulletin on Narcotics* special issue. "Dynamic Drug Policy Modeling."

Management Science (Associate editor 1995-1997 & 2003 - present; Departmental Editor 1998-2003)

Associate Editor, *Operations Research* (1996-1999)

Assistant Editor, *Journal of Drug Issues* (1993- present)

Editorial Board Member, *Drug Policy Analysis Bulletin/Journal of Drug Policy Analysis* (1997 – present)

Editorial Board Member, *Socio-Economic Planning Sciences* (2003 – present)

Editorial Board Member, *I/S: A Journal of Law and Policy for the Information Society* (2004 – present)

Member of Advisory Committee of *OR/MS Today* (2005 - 2007)

Refereeing

Referee for: *Addiction*, *Addiction Research & Theory*, *African Journal of Business Management*, *American Economic Review*, *AIMS Conference Proceedings*, *American Journal of Economics and Sociology*, *American Journal of Public Health*, *Australian and New Zealand Journal of Criminology*, *Australian Economic Papers*, *Behavioral Sciences and the Law*, *BMC Medical Research Methodology*, *BMC Public Health*, *British Journal of Sociology*, *British Journal of Mathematical and Statistical Psychology*, *Brooks/Cole Publishing*, *Bulletin on Narcotic Drugs*, *Cambridge University Press*, *Central European Journal for Operations Research and Economics*, *Computers & Operations Research*, *Contemporary Drug Problems*, *Contemporary Economic Policy*, *Crime & Delinquency*, *Crime and Justice* edited volumes, *Crime, Law and Social Change*, *Criminal Justice Review*, *Criminology*, *Decision Analysis*, *Decision Support Systems*, *Drug and Alcohol Dependence*, *Drug and Alcohol Review*, *Drugs: Education, Prevention, and Policy*, *Drustvena Istrazivanja*, *Education Research Journal*, *Electronic Journal of Evolutionary Modeling and Economic Dynamics (e-JEMED)*, *Evaluation and the Health Professions*, *Global Crime*, *Governance*, *Health Care Management Science*, *IEEE Transactions on Control Systems Technology*, *Information Sciences*, *Interfaces*, *International Journal of Comparative and Applied Criminal Justice*, *International Journal of Drug Policy*, *International Review of Law and Economics*, *I/S: A Journal of Law and Policy for the Information Society*, *JASA*, *Journal of Acquired Immune Deficiency Syndrome*, *Journal of Applied Econometrics*, *Journal of Business*, *Journal of Combinatorial Optimization*, *Journal of Criminal Justice*, *Journal of Defense Modeling and Simulation*, *Journal of Drug Issues*, *Journal of Drug Policy Analysis*, *Journal of Economic Dynamics and Control*, *Journal of Economics*, *Journal of Experimental Criminology*, *Journal of Health Economics*, *Journal of Law and Economics*, *Journal of Law, Economics, and Organization*, *Journal of Mathematical Biology*, *Journal of Organizational and End User Computing*, *Journal of Policy Analysis and Management*, *Journal of Quantitative Criminology*, *Journal of Research in Crime and Delinquency*, *Journal of Urban Economics*, *Journal of Urban Health*, *Justice Quarterly*, *Macroeconomic Dynamics*, *Management Science*, *Manufacturing and Service Operations Management*, *Mathematical and Computer Modelling*, *Multi-Echelon/Public Applications of Supply Chain Conference*, *National Cancer Institute Monograph Series*, *National Institute of Justice Research Report series*, *Naval Research Logistics*, *Omega: The International Journal of Management Science*, *Operations Research*, *Optimal Control Applications and Methods*, *OR Spectrum*, *Pediatrics*, *Pew Center for the States*, *Policy Studies Journal*, *Public Health*, *Public Policy Institute of California Report Series*, *Public Health*, *RAND Report Series*, *Review of Law and Economics*, *Risk Analysis*, *Robert Wood Johnson Foundation Health Investigator Awards*, *Sage Press*, *Sociological Perspectives*, *Sociological Quarterly*, *Science*, *Substance Abuse and Rehabilitation*, *Time Sharing Experiments for the Social Sciences*, *United Kingdom Office of Science and Technology*, *United Nations Drug Control Program*, *United Nations University Press*, *Wiley Press*, *Yale University Press*.

Proposal Review Panels

Austrian National Science Foundation, National Institute on Drug Abuse, National Institute of Health, National Institute of Justice, National Science Foundation, Oesterreichische Nationalbank, Pew Charitable Trusts, Robert Wood Johnson Foundation, Royal Society of New Zealand's Marsden Fund, Wellcome Trust

RESEARCH GRANTS

National Science Foundation Graduate Fellowship, 1987-1990.

“Rating Players Who Compete In Disparate Sets of Unlike Tournaments.” National Science Foundation. \$42,673. Awarded March, 1992.

“Estimating Own and Cross Elasticities of Demand for Cocaine and Heroin: An Investigation Using DUF Data.” National Institute of Justice. \$25,000. Awarded in 1993.

“National Young Investigator Award.” National Science Foundation. \$125,000 - \$500,000 depending on matching funds. Awarded May, 1993.

“Assessing DoD’s Pilot Programs to Reduce Illegal Drug Use by Youth.” \$250,000. Office of the Secretary of Defense. Awarded March, 1994.

“Modeling Mandatory Minimum Drug Sentences.” Private individual. \$100,000. Awarded November, 1994.

“Drug Policy Research Center: Proposal for Refunding and Report on Activities.” Ford Foundation. \$1,800,000. Awarded August, 1995.

“Measuring the Cost-Efficacy of Drug Prevention.” Robert Wood Johnson Foundation. \$224,501. Awarded January, 1996.

“Dynamic Systems Modeling of the Evolution of Epidemics of Drug Use and Drug-Related Crime and Violence.” National Consortium on Violence Research. \$4,000. Awarded June, 1996.

“Drug Markets and Violence.” National Consortium on Violence Research. \$135,905. Awarded December, 1996.

“Supplement to Drug Markets and Violence.” National Consortium on Violence Research. \$10,000. Awarded July, 1997.

“Why Haven’t Drug Prices Risen with Tougher Enforcement?” Office of National Drug Control Policy and National Institute of Justice. \$261,502. Awarded July, 1998.

“Assessing and Improving the Value of ADAM for Drug Policy Modeling.” National Institute of Justice. \$24,950. Awarded January, 1999.

“Estimating the Effects of Drug Prevention Programs on the Use of Cocaine, Marijuana, Cigarettes, and Alcohol.” Robert Wood Johnson Foundation. \$97,860. Awarded February, 2000.

“A Center for the Analysis of Advancing Information Technologies: Planning Grant Proposal.” The Buhl Foundation. \$79,150. Awarded April, 2000.

“Private Insurance in CyberMarkets.” Alex C. Walker Educational and Charitable Foundation. \$20,000. Awarded December, 2000.

“The Impact of the Information Revolution on Public Policy: A Proposal for Customized Job Training.” Pennsylvania Department of Community and Economic Development. \$247,490. Awarded December, 2000.

“Insights and Strategies for Higher Education Philanthropy.” Private Individual. \$100,000. Awarded January, 2001.

“Describing and Predicting Drug Epidemics.” Robert Wood Johnson Foundation Substance Abuse Policy Research Program. \$61,731. Awarded January, 2003.

“Math Modeling of Social Policy Problems.” CMU-Q Research Fund. \$155,910 in direct costs. Awarded September, 2005.

“Synthesizing Lessons for Drug Policy and Policy Research.” Robert Wood Johnson Health Investigator Award. Awarded May, 2006. \$172,458.

“Modeling Control of Infectious Diseases with Behavior-Driven Infectivity.” Qatar National Research Foundation. Awarded December, 2007. \$132,754.

“Math Modeling of Social Policy Problems, II.” CMU-Q Research Fund. \$44,090 in direct costs. Awarded May, 2011.