# Jonathan P. Caulkins

Carnegie Mellon University Heinz College 5000 Forbes Ave. Pittsburgh, PA 15213 caulkins@andrew.cmu.edu

1652 King James Dr. Pittsburgh, PA 15237 (412) 268-9590 (daytime) (412) 635-7399 (evenings)

## **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**

1990 - present 2005 - 2011	H. Guyford Stever University Professor of Operations Research Carnegie Mellon University Heinz College Carnegie Mellon University in Qatar
1999 - 2001	Founding Director of Pittsburgh Office, RAND
1994 - 1996	Co-director of the Drug Policy Research Center, RAND

#### **RESEARCH INTERESTS**

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

## HONORS

University Professor, Carnegie Mellon, 2016 National Academy of Engineering, 2015 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, 2013 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 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; 2017) 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)
- National Research Council Committee on Modernizing the Nation's Crime Statistics (2013 2017)
- Institute of Medicine Committee on Health Implications of Raising the Minimum Age for Purchasing Tobacco Products (2013 2014)

United Nations Office of Drugs and Crime Scientific Advisory Committee (2015-)

National Academies of Sciences, Engineering, and Medicine Committee on Pain Management and Regulatory Strategies to Address Prescription Opioid Abuse (2016 - 2017)

Institute for Behavior and Health, Advisory Committee (2011 - )

Pennsylvania Governor's Advisory Board on Health, Opioid Subcommittee (2016-2019)

NIH/NIDA Advisory Council Workgroup on Cannabis Legalization (2016-2018) National Academy of Sciences, Engineering and Medicine Division of Behavioral and Social Sciences and Education (DBASSE) Advisory Committee (2018-)

#### PUBLICATIONS

#### **Books and Monographs**

Pardo, Bryce, Jirka Taylor, Jonathan P. Caulkins, Beau Kilmer, Peter Reuter, Bradley D. Stein. (2019). *The Future of Fentanyl and Other Synthetic Opioids*. RAND, Santa Monica, CA.

Babor, Thomas, Jonathan Caulkins, Benedikt Fischer, David Foxcroft, Keith Humphreys, Maria Elena Medina-Mora, Isidore Obot, Jurgen Rehm, Peter Reuter, Robin Room, Ingeborg Rossow, and John Strang. 2018. *Drug Policy and the Public Good, 2nd Edition*. Oxford University Press.

Caulkins, Jonathan P., Beau Kilmer and Mark A.R. Kleiman (2016). *Marijuana Legalization: What Everyone Needs to Know, 2nd Edition*. Oxford University Press.

Caulkins, Jonathan P., Beau Kilmer, Mark A. R. Kleiman, Robert J. MacCoun, Gregory Midgette, Pat Oglesby, Rosalie Liccardo Pacula, and Peter H. Reuter (2015). *Considering Marijuana Legalization: Insights for Vermont and Other Jurisdictions*, Santa Monica, Calif.: RAND Corporation, RR-864. http://www.rand.org/pubs/research\_reports/RR864.html.

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. Spanish translation published in (2014) as Drogas Y Políticas Sobre Drogas: Lo Que Todo El Mundo Necesita Saber. University de Los Andes.

Babor, Thomas, 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., Anne Gould, Bryce Pardo, Peter Reuter and Bradley D. Stein (forthcoming). Opiois and the criminal justice system: New challenges posed by the modern opioid epidemic. *Annual Review of Criminology, Volume 4*.

Heins, Sara, Jonathan P. Caulkins, Beau Kilmer, Bradley Stein. (forthcoming). Concentration of opioid utilization using different measurements. *Drug and Alcohol Dependence*.

Banks, David, Laura Albert, Jonathan Caulkins, Sylvia Fruhwirth-Schnatter, Fiona Grieg, Adrian Raftery, and Duncan Thomas. (forthcoming). A Conversation about

COVID-19 with Economists, Sociologists, and Operations Researchers. Harvard Data Science Review.

Caulkins, Jonathan P., Bryce Pardo, and Beau Kilmer (forthcoming). Intensity of cannabis use: Findings from three online surveys. *International Journal of Drug Policy*.

Caulkins, Jonathan P., Bryce Pardo, and Beau Kilmer (2019). Supervised Consumption Sites: A Nuanced Assessment of the Causal Evidence. *Addiction*. 114:2109-2115. DOI 10.1111/add.14747. Response to commentaries: The benefits of evaluating literatures with essays, published in *Addiction*, 2019, 114:2120-2121. Additional comment published as Response to Belackova et al.: Disagreeing on Whether We Agree. *Addiction*, 2019, 115:784-787.

Caulkins, Jonathan P. and Michelle Kilborn (2019). Lower risk cannabis use guidelines: Will users listen? *American Journal of Public Health*. 45(6):689-697.

Caulkins, Jonathan. 2019. Legalising drugs prudently: The importance of incentives and values. *Journal of Illicit Economies and Development*. 1(3): 279–287. DOI: https://doi.org/10.31389/jied.44.

Caulkins, Jonathan P., Steven Davenport, Anhvinh Doanvo, Kyle Furlong, Aatir Siddique, Michael Turner, and Beau Kilmer (2019). Triangulating Web & General Population Surveys: Do Results Match Legal Cannabis Market Sales? *International Journal of Drug Policy*, 73:293-300. 10.1016/j.drugpo.2019.06.010.

Hall, Wayne, Daniel Stjepanović, Jonathan P. Caulkins, Michael Lynskey, Janni Leung, Gabrielle Campbell, and Louisa Degenhardt (2019). Public health implications of legalising the production and sale of cannabis for medical and recreational use. *The Lancet*, 394:1580-1590.

Caulkins, Jonathan P. and Michelle Kilborn (2019). Cannabis legalization, regulation, & control: A review of key challenges for local, state, and provincial officials. *The American Journal of Drug and Alcohol Abuse*, *45*(6), 689-697. DOI: 10.1080/00952990.2019.1611840.

Babor, Thomas, F., Jonathan Caulkins, Benedikt Fischer, David Foxcroft, Maria Elena Medina-Mora, Isidore Obot, Jürgen Rehm, Peter Reuter, Robin Room, Ingeborg Rossow, and John Strong (2019). Drug Policy and the Public Good: A Summary of the Second Edition. *Addiction*, 114(11):1941-1950.

Caulkins, Jonathan P., and Mark Kleiman. "Lessons to be Drawn from US Drug Control Policies." *European Journal on Criminal Policy and Research* 24, no. 2 (2018): 125-144. DOI: 10.1007/s10610-018-9376--3.

Parry, Charles David, Bronwyn J. Myers, and Jonathan P. Caulkins (2019). Decriminalisation of recreatian cannabis in South Africa. *The Lancet*, 393:1804-1805.

Kilmer, Beau, Rosanna Smart, Jirka Taylor, and Jonathan P. Caulkins (2019). Prescribing diamorphine in the United States: Insights from a nationally representative survey. *Drug and Alcohol Dependence*, 196:62-65.

Caulkins, Jonathan P., Yilun Bao, Steve Davenport, Imane Fahli, Yutian Guo, Krista Kinnard, Mary Najewicz, Lauren Renaud, & Beau Kilmer (2018). Big data on a big new market: Insights from Washington State's legal cannabis market. *International Journal of Drug Policy*, 57:86-94.

Kress, Moshe, Jonathan P. Caulkins, Gustav Feichtinger, Dieter Grass, and Andrea Seidl (2018). Lanchester Model for Three-Way Combat. *European Journal of Operations Research*. 264(1):46-54.

Seidl, Andrea, Jonathan P. Caulkins, Richard F. Hartl, and Peter M. Kort (2018). Serious strategy for the makers of fun: Analyzing the option to switch from payto-play to free-to-play in a two-stage optimal control model with quadratic costs. *European Journal of Operations Research*. 267(2):700-715.

Smart, Rosanna, Jonathan P. Caulkins, Beau Kilmer, Steven Davenport, and Greg Midgette (2017). Variation in cannabis potency and prices in a newly-legal market: Evidence from 30 million cannabis sales in Washington State. *Addiction*. 112(12): 2167-2177, DOI: 10.1111/add.13886. Response to commentaries: New data sources for understanding cannabis markets, published in *Addiction*, 2017; 112(12): 2180-2181.

Caulkins, Jonathan P., Gustav Feichtinger, Dieter Grass, Richard Hartl, Peter M. Kort, and Andrea Seidl. (2017). Interaction of pricing, advertising, and experience quality: A dynamic analysis. *European Journal of Operations Research*, 256(3), 877-885.

Caulkins, Jonathan P. (2017). Recognizing and Regulating Cannabis as a Temptation Good. *International Journal of Drug Policy*, 42:50-56.

Caulkins, Jonathan P. and Beau Kilmer (2016). Considering marijuana legalization carefully: Insights for other jurisdictions from analysis for Vermont. *Addiction*, 111(12):2082-2089. Response to commentaries: The U.S. as an example of how not to legalize marijuana?, published in *Addiction*, 111(12): 2095-2096.

Wrzaczek, Stefan, Edward H. Kaplan, Jonathan P. Caulkins, Andrea Seidl, and Gustav Feichtinger (2016). Differential Terror Queue Games. *Dynamic Games and Applications*. 1-16. DOI: 10.1007/s13235-016-0195-1.

Davenport, Steven and Jonathan P. Caulkins (2016). Evolution of the U.S. Marijuana Market in the Decade of Liberalization before Full Legalization. *Journal of Drug Issues*, 46(4), 411-427.

Caulkins, Jonathan P., Emma Disley, Marina Tzvetkova, Mafalda Pardal, Hemali Shan, & Xiaoke Zhang (2016). Modeling the structure and operation of drug supply chains: The case of cocaine and heroin in Italy and Slovenia. *International Journal of Drug Policy*. 31:64-73. DOI: http://dx.doi.org/10.1016/j.drugpo.2016.02.003.

Seidl, Andrea, Edward H. Kaplan, Jonathan P. Caulkins, Stefan Wrzaczek, and Gustav Feichtinger (2016). Optimal Control of a Terror Queue. *European Journal of Operations Research*. 248:246-256.

Scott, Nick, Jonathan P. Caulkins, and Paul Dietze. 2016. How is methamphetamine typically purchased and used in Melbourne, Australia? Reports from a cohort of people who inject drugs. *Addiction Research and Theory*, 24(5), 416-425.

Scott, Nick, Peter Higgs, Jonathan P. Caulkins, Campbell Aitken, Shelley Cogger, and Paul Dietze. 2016. The introduction of CCTV and associated changes in heroin purchase and injection settings in Footscray, Victoria, Australia. *Journal of Experimental Criminology*, *12*(2), 265-275.

Caulkins, Jonathan P. 2015. After the Grand Fracture: Scenarios for the Collapse of the International Drug Control Regime. *Journal of Drug Policy Analysis*. 24(1):60-68. Published online: DOI: 10.1515/jdpa-2015-0008.

Caulkins, Jonathan P., Gustav Feichtinger, Dieter Grass, Richard F. Hartl, Peter M. Kort, and Andrea Seidl (2015). Capital stock management during a recession that freezes capital markets. *Journal of Economic Behavior & Organizations*, 116:1-14, doi:10.1016/j.jebo.2015.02.023.

Caulkins, Jonathan P., Jesse Sussell, Beau Kilmer, and Anna Kasunic (2015). How much of the cocaine market are we missing? Insights from respondent driven sampling in a mid-sized American city. *Drug and Alcohol Dependence*. 147:190-5, http://dx.doi.org/doi:10.1016/j.drugalcdep.2014.11.032.

Davenport, Steven, Jonathan P. Caulkins, and Mark A.R. Kleiman (2015). Controlling underage access to legal cannabis. *Case Western Reserve Law Review*, 65(3):541-566.

Scott, Nick, Jonathan P. Caulkins, Alison Ritter, and Paul Dietze. (2015). Patterns of drug preference and use among people who inject drugs in Melbourne, Australia. *Addiction Research and Theory*. DOI: 10.3109/16066359.2015.1031118.

Scott, Nick, Jonathan P. Caulkins, Alison Ritter, Catherine Quinn, and Paul Dietze. (2015). High-frequency drug purity and price series as tools for explaining drug trends and harms in Victoria, Australia. *Addiction*. **110**(1):120-128.

Caulkins, Jonathan P., Gustav Feichtinger, Dieter Grass, Richard F. Hartl, Peter M. Kort, and Andrea Seidl (2014). Skiba Points in Free End-time Problems. *Journal* of Economic Dynamics & Control. **51**:404-419. http://dx.doi.org/10.1016/j.jedc.2014.11.003.

Bond, Brittany, Jonathan P. Caulkins, Nick Scott, Beau Kilmer, and Paul Dietze (2014). Are users most recent drug purchases representative? *Drug and Alcohol Dependence*, **142**:133-138.

Caulkins, Jonathan P., Beau Kilmer, Peter H. Reuter, and Greg Midgette. (2015). Cocaine's Fall and Marijuana's Rise: Questions and Insights Based on New Estimates of Consumption and Expenditures in U.S. Drug Markets. *Addiction*. 110(5): 728-736. doi: 10.1111/add.12628. Response to commentaries: Beyond prevalence: Importance of estimating drug consumption and expenditures, published in *Addiction*, 2015; 110(5):743-745.

Pacula, Rosalie Liccardo, Beau Kilmer, Alexander C. Wagenaar, Frank J. Chaloupka, and Jonathan P. Caulkins (2014). Developing Public Health Regulations for Marijuana: Lessons from Alcohol and Tobacco. *American Journal of Public Health.* **104**(6):1021-1028.

Caulkins, Jonathan P., Gustav Feichtinger, Dieter Grass, Richard F. Hartl, Peter M. Kort, Andreas J. Novak, Andrea Seidl, and Franz Wirl (2013). A Dynamic Analysis of Schelling's Binary Corruption Model: A Competitive Equilibrium Approach. *Journal of Optimization Theory and Applications*. Doi: 10.1007/s10957-013-0420-7.

Caulkins, Jonathan P., Gustav Feichtinger, Dieter Grass, Richard F. Hartl, Peter M. Kort, Andrea Seidl (2013). When to Make Proprietary Software Open Source. *Journal of Economic Dynamics and Control*, 37(6):1182-1194.

Caulkins, Jonathan P., Susan Everingham, Beau Kilmer, and Greg Midgette (2013). The whole is just the sum of its parts: Limited polydrug use among the "big three" expensive drugs in the United States. *Current Drug Abuse Reviews.* 6(2):919-97.

Burns, Rachel Melissa, Jonathan P. Caulkins, Susan S. Everingham, and Beau Kilmer (2013). Statistics on cannabis use skew perceptions of cannabis use. *Frontiers in Psychiatry*. 4:138. doi: 10.3389/fpsyt.2013.00138.

Caulkins, Jonathan P., Angela Hawken, Beau Kilmer, Mark Kleiman, Katherine Pfrommer, Jacob Pruess, and Timothy Shaw (2013). High tax states: Options for gleaning revenue from legal cannabis. *Oregon Law Review*, 91(4):1041-1068.

Reprinted in *Criminal Law and the Regulation of Vice, 2nd Edition*, Franklin E. Zimring and Bernard Harcourt (eds.), Thomson West.

Caulkins, Jonathan P., Gustav Feichtinger, Dieter Grass, Richard F. Hartl, Peter M. Kort, Andreas J. Novak, Andrea Seidl (2013). 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.

Caulkins, Jonathan P., Gustav Feichtinger, Richard F. Hartl, Peter M. Kort, Andreas J. Novak, Andrea Seidl (2013). Long Term Implications of Drug Policy Shifts: Anticipating and Non Anticipating Consumers. *Annual Reviews in Control*, 37(1):105-115.

Caulkins, Jonathan P., Gustav Feichtinger, Richard F. Hartl, Peter M. Kort, Andreas J. Novak, Andrea Seidl (2013). Multiple Equilibria and Indifference-Threshold Points in a Rational Addiction Model. *Central European Journal of Operations Research*, 21(3):507-522.

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. PMCID: PMC3518305.

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. Reprinted in *Policy Diagnosis: Public Policy Insights for Public Health Cures*, Bonnie Stabile (ed.), Westphalia Press, Washington DC, pp.67-96.

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 effectivenss 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.

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.

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.

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.

Sevigny, Eric and Jonathan P. Caulkins. 2004. "Kingpins 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 Joural 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. Caukins, 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

Midgette, Greg, Steven Davenport, Jonathan P. Caulkins, and Beau Kilmer (2019). *What America's Users Spend on Illegal Drugs, 2006-2016.* RAND RR-3140, Santa Monica, CA.

Kilmer, Beau, Steve Davenport, Rosanna Smart, Jonathan Caulkins, and Greg Midgette (2019). *After the Grand Opening: Assessing Cannabis Supply and Demand in Washington State*. RAND RR-3138-WALCB, Santa Monica, CA.

Kilmer, Beau, Jirka Taylor, Jonathan P. Caulkins, Pam Mueller, Alison J. Ober, Bryce Pardo, Rosanna Smart, Lucy Strang, and Peter H. Reuter (2018). *Considering Heroin-Assisted Treatment and Supervised Drug Consumption Sites in the United States*. RAND RR-2693-RC, Santa Monica, CA.

Pardo, Bryce, Jonathan P. Caulkins, and Beau Kilmer (2018). *Assessing the Evidence on Supervised Consumption Sites*. Santa Monica, CA: RAND Corporation WR-1261-RC.

Ober, Alison, Jirka Taylor, Martin Y. Iguchi, and Jonathan P. Caulkins (2018). *Acceptability of Heroin-Assisted Treatment and Supervised Drug Consumption Sites to Address the Opioid Crisis in the United States*. Santa Monica, CA: RAND Corporation WR-1260-RC.

Caulkins, Jonathan P., Beau Kilmer, Mark A.R. Kleiman, Robert J. MacCoun, Gregory Midgette, Pat Oglesby, Rosalie Liccardo Pacula, and Peter H. Reuter. 2015. *Options and Issues Regarding Marijuana Legalization*. Santa Monica, Calif.: RAND Corporation, PE 149. http://www.rand.org/pubs/perspectives/PE149.html.

Caulkins, Jonathan P., Kilmer, Beau, Mark A.R. Kleiman, Robert J. MacCoun, Gregory Midgette, Pat Oglesby, Rosalie Liccardo Pacula, Peter H. Reuter (2015). *The Marijuana Legalization Debate: Insights for Vermont.* RAND RB-9825, Santa Monica, CA.

Kilmer, Beau, Susan S. Everingham, Jonathan P. Caulkins, Greg Midgette, Rosalie Liccardo Pacula, Peter H. Reuter, Rachel M. Burns, Bing Han, and Russell Lundberg (2014). *What America's Users Spend on Illicit Drugs: 2000-2010*. RAND RR-534-ONDCP, Santa Monica, CA.

Kilmer, Beau, Kristy Kruithof, Mafalda Pardal, Jonathan P. Caulkins, and Jennifer Rubin (2013). *Multinational Review of Cannabis Production Regimes*. RAND Europe, Cambridge, UK. Available at http://www.rand.org/content/dam/rand/pubs/research\_reports/RR500/RR510/RA ND\_RR510.pdf. Kilmer, Beau, Jonathan P. Caulkins, Greg Midgette, Linden Dahlkemper, Robert J. MacCoun, and Rosalie Liccardo Pacula (2013). *Before the Grand Opening: Measuring Washington State's Marijuana Market in the Last Year Before Legalized Commercial Sales.* RAND, Santa Monica, CA.

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 Keith Humphreys (2020). Preventing opioid misuse and addiction: New thinking and the latest evidence. In: *The opioid crisis in America: Domestic and international dimensions*.

Caulkins, Jonathan P., Anna Kasunic, and Michael A.C. Lee (2019). Estimating the Societal Burden of Substance Abuse: Advantages and Limitations of Current Methodologies. In: *Substance Use Disorders in Adolescents and Young Adults: A Manual for Pediatric and Primary Care Clinicians. Second Edition.* Eds: DE Greydanus, G Kaplan, D Patel, J Merrick. NY: Nova Science Publishers, chapter 19, pp.331-346.

Caulkins, Jonathan P., Anna Kasunic, Mark A.R. Kleiman, and Michael A.C. Lee (2019). The Pros and Cons of Legalization. In: *Substance Use Disorders in Adolescents and Young Adults: A Manual for Pediatric and Primary Care Clinicians. Second Edition.* Eds: DE Greydanus, G Kaplan, D Patel, J Merrick. NY: Nova Science Publishers, chapter 20, pp.347-364.

Kilmer, Beau, Jonathan P. Caulkins, Robert L. DuPont, and Keith Humphreys. 2017. A large and promising opportunity: Reducing substance use in criminal justice populations. In: S.C. Miller, D.A. Fiellin, R. N. Rosenthal, & R. Saitz (Eds.) *The ASAM Principles of Addiction Medicine* (6th ed.). Philadelphia, PA: Lippincott Williams & Wilkinds.

Caulkins, Jonathan P. and Peter Reuter. 2017. Dealing with Drugs More Effectively and Humanely. In *Crime and Justice – Reinventing the Criminal Justice System*, ed. Daniel Nagin and Michael Tonry. University of Chicago Press, Chicago, 46(1):95-158.

Caulkins, Jonathan P. 2016. Legalizing drugs prudently: The importance of incentives and values. In *After the Drug Wars: Report of the LSE Expert Group on the Economics of Drug Policy*, edited by John Collins and Alexander Soderholm: LSE IDEAS (http://www.lse.ac.uk/IDEAS/publications/reports/pdf/LSE-IDEAS-After-the-Drug-Wars.pdf), pp.40-46 & 49-50.

Caulkins, Jonathan P. and Gernot Tragler. 2016. Dynamic drug policy: Optimally varying the mix of treatment, price-raising enforcement, and primary prevention over time. *Dynamic Perspectives on Managerial Decision Making*. Springer International Publishing, 2016. 11-35.

Caulkins, Jonathan P. 2015. Systems modeling to inform drug policy: A Personal Odyssey. In *Envisioning Criminology*, eds. Michael D. Maltz and Stephen K. Rice (New York: Springer), pp.213-226.

Caulkins, Jonathan P., Nancy Nicosia, and Rosalie Liccardo Pacula (2014), Economic Analysis and Policy Studies: Special Challenges in the Prevention Sciences. Chapter 25 in *Defining Prevention Science*, eds. Zili Sloboda and Hanno Petras (New York: Springer), pp.571-596. DOI 10.1007/978-1-4899-7424-2\_25.

Caulkins, Jonathan P. (2014). Effects of Prohibition, Enforcement, and Interdiction on Drug Use. In *The Economics of International Drug Policy*, ed. John Collins (London: LSE IDEAS Special Report), pp.16-25.

Kleiman, Mark A.R., Jonathan P. Caulkins, Tom Jacobson, and Brad Rowe (2014). Violence and Drug Control Policy. Chapter 42 in *Oxford Textbook of Violence Prevention: Epidemiology, Evidence, and Policy*, eds. Catherine Ward and Peter Donnelly, pp.297-302.

Caulkins, Jonathan P. and Beau Kilmer (2014). 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, New York, pp.13-30.

Caulkins, Jonathan P. and Eric Sevigny (2013). The U.S. Causes but Cannot Solve Mexico's Drug Problems. In *A War that Can't Be Won*, eds. Tony Payan, Kathleen Staudt, and Z. Anthony Kruszewski. University of Arizona Press, pp.285-310.

Caulkins, Jonathan P., Anna Kasunic, and Michael A.C. Lee (2013). 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. Donald E. Greydanus, Gabriel Kaplan, Dilip Patel, and Joav Merrick, pp. 345-364. Reprinted as Societal burden of substance abuse, in *International Public Health Journal* 2014;6(3):269-282 and in the *Public Health Yearbook*, 2014, ed. Joav Merrick, pp.305-324.

Caulkins, Jonathan P., Anna Kasunic, Mark A.R. Kleiman, and Michael A.C. Lee (2013). The Pros and Cons of Legalization. In *Substance Abuse in Adolescents and Young Adults: A Critical Conundrum for Society*, eds. Donald E. Greydanus, Gabriel Kaplan, Dilip Patel, and Joav Merrick, pp.365-380. Reprinted as Understanding drug legalization, in *International Public Health Journal* 2014;6(3):283-294 and in the *Public Health Yearbook, 2014*, ed. Joav Merrick, pp.325-340.

Lievens, Delfine, Freya Vander Laenen, Jonathan Caulkins, and Brice De Ruyer. Drugs in Figures III: Study of Public Expenditures on Drug Control and Drug Problems. (2012). In European Criminal Justice and Policy, eds. Marc Cools, Brice De Ruyer, 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, New York, 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, Chicago, 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. Amsterdam, 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 Polcy 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. "Counterterror 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**

Caulkins, Jonathan P. (2020). With a little ingenuity, we can reopen much of the economy right now. *Politico*, April 2nd, https://www.politico.com/news/magazine/2020/04/02/coronavirus-economy-reopen-deaths-balance-analysis-159248#5.

Caulkins Jonathan P, Kammer-Kerwick Matt, Konrad Renata, Maass Kayse Lee, Martin Lauren, Sharkey Thomas. (2019). A Call to the Engineering Community to Address Human Trafficking. *The Bridge*, 49(3): 67-73.

Humphreys, Keith, Jonathan P. Caulkins, Vanda Felbab-Brown. (2020). What the US and Canada can learn from other countries to combat the opioid crisis. Brookings Institution Order from Chaos series, advailable at https://www.brookings.edu/blog/order-from-chaos/2020/01/13/what-the-us-and-canada-can-learn-from-other-countries-to-combat-the-opioid-crisis/.

Caulkins, Jonathan P., Kyle Furlong, Brandon McComas, Martha Nogueira Domingues, Aatir Siddique, and Beau Kilmer. (forthcoming). Comparing Two Approaches for Estimating Cannabis Consumption: Raking and Regression. Published in: European Web Surveys on Drugs: Patterns of Use.

Caulkins, Jonathan P. (2019). Cannabis funding and healthy paranoia. *Journal of Studies on Alcohol and Drugs*, 80(2): 261-262.

Caulkins, Jonathan P. 2018. In praise of flawed treaties. *Addiction*, 113(7):1224-1225.

Felbab-Brown, Vanda, Jonathan P. Caulkins, and Keith Humphreys. (2018). How synthetic opioids can radically change global illegal drug markets and foreign policy. Brookings Institution Order from Chaos series, available at https://www.brookings.edu/blog/order-from-chaos/2018/04/30/how-synthetic-opioids-can-radically-change-global-illegal-drug-markets-and-foreign-policy/.

Caulkins, Jonathan P. 2018. Marijuana: The Nonprofit Approach – A prudent course for legalization. *National Review*, April 2nd, pp.27-29.

Keith Humphreys, Jonathan P. Caulkins, and Vanda Felbab-Brown. 2018. Opioids of the Masses: Stopping an American Epidemic from Going Global. *Foreign Affairs*, May/June, pp.118-129. Republished in Spanish in El Malpensante, https://elmalpensante.com/articulo/4255/opioides\_para\_las\_masas.

Caulkins, Jonathan P. and Keith Humphreys. 2018. Drug dealers among us: Look for those wearing lab coats or pinstripe suites. *The Hill*. February 6th, http://thehill.com/opinion/healthcare/372242-drug-dealers-among-us-look-for-those-wearing-lab-coats-or-pinstripe-suits.

Caulkins, Jonathan P. 2018. With opioids, death is a symptom and unity is the cure. *The Hill*. January 2<sub>nd</sub>, http://thehill.com/opinion/healthcare/366769-with-opioids-death-is-a-symptom-and-unity-is-the-cure.

Caulkins, Jonathan P. 2018. Hedging bets: Applying New Zealand's gambling machine regime to cannabis. *International Journal of Drug Policy*, 53:113-114.

Caulkins, Jonathan P. 2018. Advertising restrictions on cannabis products for nonmedical use: Necessary but not sufficient? *American Journal of Public Health*, 108(1):19-21. doi: 10.2105/AJPH.2017.30419.

Caulkins, Jonathan P. 2018. Assessing Efforts to Reduce the Demand for Imported Illegal Drugs. Testimony given on April 13th, 2016 to the Senate Committee on Homeland Security and Governmental Affairs. Printed in 2018 as pp.70-92 of America's Insatiable Demand for Drugs, S. Hrg. 114-172. U.S. GPO: Washington, DC. Available at https://www.govinfo.gov/content/pkg/CHRG-114shrg22771/pdf/CHRG-114shrg22771.pdf.

Caulkins, Jonathan P. (2017). A principled approach to taxing marijuana. *National Affairs*. Issue 35, Available at: https://www.nationalaffairs.com/publications/detail/a-principled-approach-to-taxing-marijuana.

Caulkins, Jonathan P. 2017. Psychoactive drugs in light of libertarian principles. *Law and Liberty*. November 7th. Available at http://www.libertylawsite.org/liberty-forum/psychoactive-drugs-in-light-of-libertarian-principles/.

Caulkins, Jonathan P. 2017. Nip It in the Bud: Could Donald Trump be our best hope for sensible marijuana legalization? *Washington Monthly*, January/February.

Caulkins, Jonathan P. 2017. Improving research on drug law enforcement. *International Journal of Drug Policy*. 41:158-159.

Caulkins, Jonathan P. 2016. Supply control without incarceration? *Addiction*, *111*(11), 2010-2011.

Caulkins, Jonathan P. (2016). The real dangers of marijuana. *National Affairs*. Issue 26, pp.21-34. Available at: http://www.nationalaffairs.com/publications/detail/the-real-dangers-of-marijuana.

Kleiman, Mark A.R. and Jonathan P. Caulkins (2015). How to legalize cannabis. Maclean's online, December 23rd: http://www.macleans.ca/news/canada/the-right-and-wrong-way-to-legalize-cannabis/.

Caulkins, Jonathan P. 2015. After the Grand Fracture: Scenarios for the Collapse of the International Drug Control Regime. Paper published in the series *Improving Global Drug Policy: Comparative Perspectives and UNGASS 2016*, eds. Harold Trinkunas and Vanda Felbab-Brown (Washington DC: Brookings Institution).

Caulkins, Jonathan P. 2015. Essential Chemical Controls: Miracle from a Black Box? *Addiction*. 110(5): 821-822.

Scott, Nick, Jonathan P. Caulkins, Alison Ritter, and Paul Dietze (2015). How patterns of injecting drug use evolve in a cohort of people who inject drugs. *Trends and Issues in Crime and Criminal Justice, No. 502.* Australian Institute of Criminology, Canberra. Available at http://www.aic.gov.au/publications/current%20series/tandi/501-520/tandi502.html.

Caulkins, Jonathan P. 2014. Vaping in the old tobacco and new marijuana industries. Invited post on Oxford Dictionaries naming "vaping" the word of the year. OUP Blog, Nov. 18th, Available at http://blog.oup.com/2014/11/vaping-tobacco-marijuana-industry/.

Caulkins, Jonathan P. and Mark A.R. Kleiman 2014. How Much Crime Is Drug-Related? History, Limitations, and Potential Improvements of Estimation Methods. Report Submitted to the National Institute of Justice. Available at https://www.ncjrs.gov/pdffiles1/nij/grants/246404.pdf.

Kleiman, Mark A.R., Jonathan P. Caulkins, and Peter Gehred 2014. Measuring the cost of crime. Report Submitted to the National Institute of Justice. Available at https://www.ncjrs.gov/pdffiles1/nij/grants/246405.pdf.

Caulkins, Jonathan P. 2014. Drug Control and Reductions in Drug-Attributable Crime. Report Submitted to the National Institute of Justice. Available at https://www.ncjrs.gov/pdffiles1/nij/grants/246403.pdf.

Caulkins, Jonathan P. 2014. Nonprofit Motive: How to Avoid a Likely and Dangerous Corporate Takeover of the Legal Marijuana Market. *Washington Monthly*. March/April/May, pp.39-41.

Caulkins, Jonathan P. 2014. Diminishing Returns and Great Potential: A Comment on Pollack's and Reuter's Review on Tougher Drug Enforcement and Prices. *Addiction* 109(12):1967-1968.

Caulkins, Jonathan P. 2014. Vice ratchets: A comment on Stevens' and Measham's drug policy ratchet. *Addiction* 109(8):1233-1234.

Caulkins, Jonathan P. 2013. Commentary on Crowley et al.'s Research Priorities for Economic Analysis of Prevention. *Prevention Science*. 10.1007/s11121-013-0440-4,

Caulkins, Jonathan P. 2013. The Attorney General and Mandatory Drug Laws. *The American*. September 23rd.

Caulkins, Jonathan P., Susan Andrzejweski, and Linden Dahlkemper (2013). How much will the 25/25/25 tax scheme actually impact the price of cannabis? Supplement: Retailer and Processor Markup. BOTEC Analysis Corp., I-502 Project Report #430-81, June 28, 2013, available from http://lcb.wa.gov/publications/Marijuana/BOTEC%20reports/8a\_Impact\_of\_tax\_s chemes\_Appendix\_A\_on\_Markups-Final.pdf.

Caulkins, Jonathan P., Susan Andrzejweski, and Linden Dahlkemper (2013). How much revenue could the cannabis tax generate, under different scenarios? BOTEC Analysis Corp., I-502 Project Report #430-8b, June 28, 2013, available from http://lcb.wa.gov/publications/Marijuana/BOTEC%20reports/8b\_Tax\_revenue\_un der\_different\_scenarios-%20Final.pdf.

Caulkins, Jonathan P., and Linden Dahlkemper (2013). Retail store allocation. BOTEC Analysis Corp., I-502 Project Report #430-Re, June 28, 2013, available from

http://lcb.wa.gov/publications/Marijuana/BOTEC%20reports/Re\_Store\_Allocatio n\_Task\_Report-Final.pdf.

Caulkins, Jonathan P., Matthew Cohen, and Luigi Zamarra (2013). Estimating Adequate Licensed Square Footage for Production. BOTEC Analysis Corp., I-502 Project Report #430-5(a), available from http://liq.wa.gov/publications/Marijuana/BOTEC%20reports/5a\_Cannabis\_Yields -Final.pdf.

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*, 108(5): 837–838. doi: 10.1111/add.12156.

Caulkins, Jonathan P. and Beau Kilmer (with Marlon Graf). 2013. Estimating the Size of the EU Cannabis Market. Published in: Further Insights into Aspects of the Illicit EU Drugs Market / Franz Trautmann, Beau Kilmer, Paul Turnbull (eds.) (Luxembourg : Publications Office of the European Union, 2013.), Part I, Report 4, p. 289-323.

Pacula, Rosalie Liccardo, Russell Lundberg, Jonathan P. Caulkins, Beau Kilmer, Sarah Greathouse, Terry Fain, and Paul Steinberg. 2013. *Improving the Measurement of Drug-Related Crime*. Washington, D.C.: Executive Office of the President.

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

Caulkins, Jonathan P. 2012. Parallels with Gun Control. *New York Times* Room for Debate column on how to curb prescrition drug abuse. February 15th. http://www.nytimes.com/roomfordebate/2012/02/15/how-to-curb-prescription-drug-abuse.

Caulkins, Jonathan P., Angela Hawken, Beau Kilmer, and Mark A.R. Kleiman. 2012. A voter's guide to decriminalizing marijuana. *American Interest*. pp.28-36.

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. <u>http://www.issues.org/28.4/kleiman.html</u>.

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*, April 1.

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 Coopertion, New York, March.

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 Dectection 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. Available as RAND Reprint RP-909 at http://www.rand.org/pubs/reprints/RP909.

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, Los Angeles Times, The Guardian, Pittsburgh Business Times, Plano News, Rochester Democrat and Chronicle, USA Today,* 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-'98, F'12-F'18	
Decision and Risk Modeling	S'04, S'05, S'07, S'09-S'19	
MISM/MSIT Decision Making Under Uncertainty F'02, S'03, S'04, S'05, Su '1		
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'19	
Ph.D. Seminar	F'91'F'93, F'97-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'96, S'08			
Policy Decision Modeling Workshop	S'05, S'10, S'11, S'12			
Physical Technical Systems II	S'91			
Systems Synthesis	F'97,S'98,F'13,F'14,S'17,F'17,S'18			
Summer undergreduate classes in the OSSD program				
Summer undergraduate classes in the QSSP program Advanced Quantitative Analysis (Mathematical Modelling) Su '91, Su '12				
Auvanceu Quantitative Analysis (Mautematical Moderning) 50 91, 50 12				
Adelaide Campus				
Decision Making Under Uncertainty (in Adelaide, Australia) S'07, Su '08				
Qatar Campus (undergraduate classess)				
Decision Making	S'06, S'07			
Math Modeling for Consulting	F'09-F'11			
Models and Methods for Optimization S'06-				
Probability Theory and Random Processes S'07-S'09, F'09,				
Probability and Statistics for Business Applications F'05, F'09, F'1				
Executive Education				
CIO Decision Making S'03-S'07, S				
Merging Perspectives on Drugs and Crime (Harvard JFK School) Summer '				
MMM Operations Management F'08-F'17				
Project Management (Korean IT Execuctive Education Program) Su'				
RAND Graduate School				
Ph.D.: Drugs, Crime, & Violence: Applying Quantitative Methods to Social Policy Problems W <sup>3</sup>				
to Social Folicy Floblellis	W'95			
Vienna Institute of Technology (TU Wien)				
Mathematical Modeling of Drug and Crit	me 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 Plannning 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 – 2013) Editorial Board Member, I/S: A Journal of Law and Policy for the Information Society (2004 – 2019) 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 Criminal Justice, 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, BioScience, BMC Medical Research Methodology, BMC Public Health, British Journal of Sociology, British Journal of Mathematical and Statsistical 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, Economic Letters, Education Research Journal, Electronic Journal of Evolutionary Modeing 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 Journal of Health Policy and Management, International Journal of Law and Criminal Justice, International Journal of Public Opinion Research, International Review of Law and Economics, I/S: A Journal of Law and Policy for the Information Society, JAMA Pediatrics, JASA, Journal of Addictive Diseases, Journal of Acquired Immune Deficiency Syndrome, Journal of Applied Econometrics, Journal of Benefit Cost Analysis, 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 Health Policy, Politics, and Law, 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, Mathematical Social Science, Multi-Echelon/Public Applications of Supply Chain Conference, National Cancer Institute Monograph Series, National Institute of Justice Research Report series, Naval Research Logistics, New England Journal of Medicine, 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 Health Reviews, Public Policy Institute of California Report Series, RAND Report Series, Regulatory Toxicology and Pharmacology, Review of Law and Economics, Risk Analysis, Robert Wood Johnson Foundation Health Investigator Awards, Sage Press, Social Psychiatry & Psychiatric Epidemiology, 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, World Medical and Health Policy, 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 Revoution 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.

"What Users Report about Marijuana's Harms and Improving Understanding of Who Suffers from Frequent Marijuana Use." The Achelis and Bodman Foundation. \$50,000. Awarded May, 2014.

"EAGER: ISN: Detecting and Disrupting Illicit Supply Networks via Traffic Distribution Systems." Co-PI. National Science Foundation. \$299,924. Awarded October, 2018.