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EDUCATION

Ph.D. Economics, Duke University, September 1995.

Thesis Title: The Development of Demand for Intoxicating Substances by Adolescents

M.A. Economics, Duke University, 1992.

B.S. Political Science and Economics, Santa Clara University, 1990.

PROFESSIONAL EXPERIENCE

2019 - Present	Full Professor (with Tenure), University of Southern California Sol Price School of Public Policy
2019 - Present	Faculty, Schaeffer Center for Health Policy & Economics
2018-Present	Co-PI, Opioid Policy Tools & Information Center of Excellence (OPTIC)
2013 - 2018	Director, BING Center for Health Economics, RAND Corporation
2012 - 2013	Director, Economics, Finance and Organization Unit, RAND Health
2009 - 2010	Acting Director, Finance and Organization Unit, RAND Health
2007 - 2019	Professor, Pardee RAND Graduate School of Public Policy
2005 - 2019	Co-Director, Drug Policy Research Center, RAND
1998 - 2019	Associate (1998 -2001), Full (2002-2004) and Senior Economist (2005-2019), RAND
1997 – Present	Faculty Research Fellow, National Bureau of Economic Research
1997 - 1998	Visiting Senior Research Analyst, Health Research and Policy Centers, University of Illinois at
	Chicago
1995 - 1998	Assistant Professor of Economics, School of Business Administration, University of San Diego

RESEARCH INTERESTS

Health Economics and Health Policy, Substance Abuse, Addiction, Illicit Drug Markets, Drug Policy, Insurance, Behavioral Health Care and Service Delivery, Behavioral Economics, and Economics and Crime.

GRADUATE COURSES TAUGHT IN THE PAST 5 YEARS

Graduate Seminar in Health Economics (2016), Pardee RAND Graduate School Cost-Benefit and Cost-Effectiveness Analysis, First Year Core (2011-2017), Pardee RAND Graduate School

PUBLICATIONS <u>Journal Articles</u>

- Shi Y, Cao Y, Shang C, and **RL Pacula** (Forthcoming). "The Impacts of Potency, Warning Messages, and Price on Preferences for Cannabis Products" *International Journal of Drug Policy*.
- Smart R and **RL Pacula**. (Forthcoming). "Early evidence of the impact of cannabis legalization on cannabis use, dependence and the use of other substances: A cautionary tale" *American Journal of Drug and Alcohol Abuse*.

- Abouk R, **RL Pacula**, and D. Powell (2019). "State Laws Improving Naloxone Access Reduce Overdose Risk" *JAMA Internal Medicine*. 179(6), 805-811.
- Powell D, Alpert A. and **RL Pacula**. (2019). "A Transitioning Epidemic: How the Opioid Epidemic is Driving the Rise in Hepatitis C" *Health Affairs* 38(2): 287-294. PMID in Process.
- Powell D, Alpert A. and **RL Pacula** (2019). "Abuse-Deterrent Opioids: The authors reply" *Health Affairs* 38(4): 696.
- Dilly J, Richardson SM, Kilmer B, **Pacula RL**, Segawa MB and M Cerda. (2019). "Prevalence of Cannabis Use in Youths After Legalization in Washington State." *JAMA Pediatrics*. 173(2): 192-193.
- Alpert A, Powell D and **RL Pacula** (2018) "Supply-Side Drug Policy in the Presence of Substitutes: Evidence from the Introduction of Abuse-Deterrent Opioids" *American Economic Journal: Economic Policy*. 10(4): 1–35.
- Powell D, **Pacula RL**, and M Jacobson (2018). "Do Medical Marijuana Laws Reduce Addictions and Deaths Related to Pain Killers?" *Journal of Health Economics*. 25: 29-42. PMID: 29408153.
- **Pacula RL** and D Powell (2018). "A Supply Side Perspective on the Opioid Crisis" *Journal of Policy Analysis and Management*. 37(2): 438-446.
- **Pacula RL** and D Powell (2018). "Responses to Questions on Policing and Insurance Design as They Pertain to the Opioid Crisis" *Journal of Policy Analysis and Management*. 37(2): 449-451.
- Piomelli D, Weiss S, Boyd G, **Pacula RL**, and Z Cooper (2018). Cannabis and the opioid crisis. *Cannabis and Cannabinoid Research*, *3*(1), 108-116. PMCID: PMC5931647.
- Azofeifa A, Sherman LJ, Mattson ME, and **RL Pacula** (2018). "Marijuana buyers in the United States, 2010-2014" *Drug and Alcohol Dependence*, 183, 34-42. PMID: 28223915.
- Sarvet AL, Wall MM, Fink DS, Greene E, Le A, Boustead AE, **Pacula RL**, Keyes KM, Cerda M, Galea S and DS Hasin (2018). "Medical marijuana laws and adolescent marijuana use in the United States: a systematic review and meta-analysis" *Addiction*. 113(6): 1003-1016. PMCID: PMC5942879.
- Stein BD, Dick AW, Sorbero M, Gordon AJ, Burns RM, Leslie DL and **RL Pacula**. (2018). A population-based examination of trends and disparities in medication therapy for opioid use disorders among Medicaid enrollees" *Substance Abuse*. DOI: 10.1080/08897077.2018.1449166. PMCID: PMC6309581.
- Cerdá M, Wall M, Feng T, Keyes KM, Sarvet A, Schulenberg J, O'Malley PM, **Pacula RL**, Galea S, and DS Hasin (2017). "Association of State Recreational Marijuana Laws and Adolescent Marijuana Use" *JAMA Pediatrics*, 171(2): 142-149. PMCID: PMC5365078.
- Nicosia N, MacDonald J and **RL Pacula**. (2017). "Does Mandatory Diversion to Drug Treatment Eliminate Racial Disparities in the Incarceration of Drug Offenders? An Examination of California's Prop 36" *Journal of Quantitative Criminology*, 33(1): 179-205.
- Klieger, SB, Allen L, **Pacula RL**, Ibrahim JK and S Burris (2017). "Mapping medical marijuana: State laws regulating patients, product safety and dispensaries, 2017." *Addiction*. 112, 2206-2216. PMCID: PMC5725759.

- Breslau J, Yu H, Han B, **Pacula RL**, Burns R and B Stein (2017). "Did the Dependent Coverage Expansion Increase Risky Substance Use Among Young Adults" *Drug and Alcohol Dependence*, *178*, 556-561. PMCID: PMC5584585.
- Hunt P and **RL Pacula** (2017). "Early Impacts of Marijuana Legalization? An Evaluation of Prices in Colorado and Washington" *Journal of Primary Prevention*, 38(3): 221-248. PMCID: PMC5544434.
- **Pacula RL** and R Smart (2017). "Medical Marijuana and Marijuana Legalization" *Annual Review of Clinical Psychology*, 13(1): 397-419. PMID: 28482686.
- Kilmer, B and **RL Pacula** (2017). Building the data infrastructure to evaluate cannabis legalization. *Addiction*, 112(7): 1140-1141. PMID: 28477353.
- Stevens, A and **RL Pacula** (2017). Advancing knowledge on cannabis policy using evidence from North America. *International Journal of Drug Policy*, 42: 36-38. PMID: 28314644.
- Kilmer, B and **RL Pacula** (2017). "Understanding and learning from the diversification of cannabis supply laws" *Addiction*, *112*(7): 1128-1135. PMCID: PMC5446799.
- Stein BD, Mendelsohn J, Gordon AJ, Dick AW, Burns RM, Sorbero M, and **RL Pacula** (2017). "Opioid Analgesic and Benzodiazepine Prescribing Among Medicaid-enrollees with Opioid Use Disorders: The Influence of Provider Communities" *Journal of Addictive Diseases*, 36(1): 14-22. PMCID: PMC5366980.
- Stein BD, Sorbero M, Dick AW, **Pacula RL**, Burns RM and AJ Gordon (2016). "Underutilized physician capacity to treat opioid use disorder with buprenorphine opioid agonist medication assisted treatment" *JAMA*, 316(11): 1211-1212. PMCID: PMC5257276.
- **Pacula RL**, Jacobson MJ, and E Maksabedian. (2016). "In the Weeds: A Baseline View of Marijuana Use Among Legalizing States and Their Neighbors" *Addiction*, 111(6): 973-980. doi: 10.1111/add.13282. PMCID: PMC5216038.
- Blanchard J, Hunter S, Osilla KC, Stewart W, Walters J and **RL Pacula** (2016). "A Systematic Review of the Prevention and Treatment of Prescription Drug Misuse" *Military Medicine*, 181(5): 410-423. PMID: 27136647.
- Burns RM, **Pacula RL**, Bauhoff S, Gordon AJ, Hendrikson H, Leslie DL, and BD Stein (2016). "Policies Related to Opioid Agonist Therapy for Opioid Use Disorders: The Evolution of State Policies from 2004 to 2013" *Substance Abuse*, *37*(*1*): 63-69. PMCID: PMC4801690.
- Stein BD, Dick AW, **Pacula RL**, Gordon AJ, Burns RM, Leslie DL and M Sorbero (2015). "Where is Buprenorphine Dispensed for Treating Opioid Use Disorders? The Role of Private Offices, Opioid Treatment Programs, and Substance Abuse Treatment Facilities in Urban and Rural Counties" *Milbank Quarterly*, 93(3): 561-583. PMCID: PMC4567853.
- Hasin DS, Wall M, Keyes KM, Cerda M, Schulenberg J, O'Malley P, Galea S, **Pacula RL**, and T Feng (2015). "State Medical Marijuana Laws and Adolescent Marijuana Use in the United States: 1991-2012" *The Lancet-Psychiatry*, 2(7): 601-608.
- Olmstead TA, Alessi SM, Kline B, **Pacula RL** and NM Petry (2015). "The Price Elasticity of Demand for Heroin: Matched Longitudinal and Experimental Evidence" *Journal of Health Economics*, 41, 59-71. PMCID: PMC4417427.

- **Pacula RL**, Powell D, Heaton P and E Sevigny (2015). "Assessing the Effects of Medical Marijuana Laws on Marijuana: The Devil is in the Details" *Journal of Policy Analysis and Management*, 34(1): 7-31. PMCID: PMC4315233.
- Dick AW, **Pacula RL**, Gordon AJ, Sorbero M, Burns RM, Farmer CM, Leslie DL, and BD Stein (2015). "Increasing Access to Opioid Agonist Treatment in U.S. Treatment Shortage Areas" *Health Affairs*, 34(6), 1028-1034. PMCID: PMC4743254.
- Taylor E, Saltzman E, Bauhoff S, **Pacula RL** and C Eibner (2015). "More Choice on the Exchanges May Reduce the Value of the Subsidies for Low-Income Enrollees" *Health Affairs*, 34(1): 104-110. PMID: 25561650.
- Stein BD, Gordon AJ, Dick AW, Burns RM, **Pacula RL**, Farmer CM, Leslie DL and M Sorbero (2015). "Supply of Buprenorphine Waivered Physicians: The influence of state policies" *Journal of Substance Abuse Treatment*, 48(1): 104-111. PMCID: PMC4420477.
- Stein BD, Gordon AJ, Dick A, Burns RM, **Pacula** RL, Farmer C, Leslie D. (2015). "Physician Supply for the Treatment of Opioid Use Disorders: The influence of state policies" *Drug and Alcohol Dependence*, 146, e107-e108. PMCID: PMC5774127.
- **Pacula RL** and EL Sevigny (2014). "Marijuana Liberalizations Policies: Why We Can't Learn Much from Policy Still in Motion." *Journal of Policy Analysis and Management*, 33(1): 212-221. PMCID: PMC4051884.
- **Pacula RL** and EL Sevigny (2014). "Natural experiments in a complex and dynamic environment: The need for a measured assessment of the evidence" *Journal of Policy Analysis and Management*, 33(1): 232-235. PMCID: PMC4051883.
- MacDonald J, Arkes J, Nicosia N, and **RL Pacula**. (2014). "Decomposing Racial Disparities in Prison and Drug Treatment: Commitments for Criminal Offenders in California" *Journal of Legal Studies*, 43(1): 155-187.PMCID: PMC4219536.
- **Pacula RL**, Kilmer B, Wagenaar A, Chaloupka FJ, and JP Caulkins (2014). "Developing Public Health Regulations for Marijuana: Lessons from Alcohol and Tobacco" *American Journal of Public Health*, 104(6), 1021-1028. PMCID: PMC4062005.
- Sevigny E, **Pacula RL**, and P Heaton (2014). "The effects of medical marijuana laws on potency" *International Journal of Drug Policy*, 25(2): 308-319. PMCID: PMC4010875.
- **Pacula RL** and R Lundberg (2014). "Why Changes in Price Matter When Thinking About Marijuana Policy: A Review of the Literature on the Elasticity of Demand" *Public Health Review*, 35(2): 1-18. PMCID: PMC4310503.
- **Pacula RL**, Boustead A, and P Hunt (2014). "Words can be deceiving: A review of variation among legally effective medical marijuana laws in the United States" *Journal of Drug Policy Analysis. ISSN (Online)* 1941-2851, ISSN (Print) 2194-6337,DOI: 10.1515/jdpa-2014-0001, May 2014. PMCID: PMC4314612.
- Galenianos M, **Pacula RL** and Persico N (2012). "A Search-Theoretic Model of the Retail Market for Illicit Drugs" *Review of Economic Studies*, 79, 1239-1269. PMID: 29553231.
- Caulkins JP, Kilmer B, MacCoun R, **Pacula RL**, and Reuter PR (2012). "Design Considerations for Legalizing Marijuana" *Addiction*, 107(5): 865-871. PMID: 21985069.

- Paddock S, Kilmer B, Caulkins JP, Booth M, and **RL Pacula** (2012) "An Epidemiological Model for Examining Marijuana Use over the Life Course" *Epidemiology Research International*, vol. 2012, Article ID 520894, 12 pages, 2012. doi:10.1155/2012/520894. PMCID: PMC3518305.
- Kilmer B, Caulkins JP, **Pacula RL**, and P Reuter (2011) "Bridging Perspectives to Illicit Markets: Estimating the Size of the U.S. Marijuana Market" *Drug and Alcohol Dependence*, 119(1-2): 153-160.
- **Pacula RL** (2011). "Substance Use and Recessions: What can be learned from the alcohol literature?" *International Journal of Drug Policy*, 22(5): 326-334. PMID: 21855312.
- Burgdorf J, Kilmer B and **RL Pacula** (2011). "Heterogeneity in the Composition of Marijuana Seized in California" *Drug and Alcohol Dependence*, 117(1): 59-61. PMCID: PMC3118261.
- Reuter PH, **Pacula RL**, and JC Caulkins (2011). "RAND's Drug Policy Research Center" *Addiction*, 106: 253-259. PMID: 20626722.
- Nunberg H, Kilmer B, **Pacula RL**, and J Burgdorf (2011). "An Analysis of Applicants Presenting to a Medical Marijuana Specialty Practice in California" *Journal of Drug Policy Analysis*, 4(1). DOI: 10.2202/1941-2851.1017 Available at: http://www.bepress.com/jdpa/vol14/iss1/art1. PMCID: PMC3673028.
- Kilmer B, Eibner C, Ringel J and **RL Pacula** (2011). "Costs and savings associated with treating post-combat PTSD and depression: Insights from a microsimulation" *Psychological Trauma: Theory, Research, Practice, and Policy*, 3(2): 201-211.
- **Pacula RL**, Kilmer B, Grossman M, and F Chaloupka (2010). "Risks and prices: The role of user sanctions in marijuana markets" *The B.E. Journal of Economic Analysis & Policy*, 10(1): (Contributions), Article 11. PMCID: PMC3606926.
- McCaffrey D, **Pacula RL**, Han B, and P Ellickson. (2010) "Marijuana Use and High School Drop Out: The Influence of Unobservables" *Health Economics*, 19: 1281-1299.
- MacCoun, R., **Pacula RL**, Chriqui JF, Harris K, and P Reuter (2009) "Do Citizens Know Whether Their State Has Decriminalized Marijuana? Assessing the Perceptual Component of Deterrence Theory" *Review of Law and Economics*, **5**(11): 347-371.
- **Pacula RL**, Ringel J, Dobkins C, and K Truong. (2008). "The Incremental Health Services Cost Associated with Marijuana Use" *Drug and Alcohol Dependence*, 92: 248-257. PMCID: PMC2212669.
- Eibner C, Morral A, **Pacula RL**, and J. MacDonald. (2006) "Is the Drug Court Model Exportable? An Examination of the Cost-Effectiveness of a Los Angeles-Based DUI Court" *Journal of Substance Abuse Treatment*, 31(1): 75-85.
- Ramchand R, **Pacula RL**, and M Iguchi. (2006). "Racial Differences in Marijuana-Users' Risk of Arrest in the United States" *Drug and Alcohol Dependence*, 84(3):264-72.
- Caulkins JP and **RL Pacula** (2006). "Marijuana Markets: Inferences from Reports by the Household Population" *Journal of Drug Issues*, 36(1): 173-200.
- Williams J, **Pacula RL**, Chaloupka FJ, and H Wechsler. (2006). "Cocaine Use in our Colleges" *Substance Use and Misuse*. 41(4): 489-509.

- Williams J, **Pacula RL**, Chaloupka FJ, and H Wechsler. (2004). "Alcohol and Marijuana Use Among College Students: Economic Complements or Substitutes?" *Health Economics*, 13(9): 825-843.
- Caulkins JP; **Pacula RL**; Paddock S, and J Chiesa. (2004). "What Can We And Can't We Expect from School-Based Drug Prevention?" *Drug and Alcohol Review*, 23(1): 79-87.
- **Pacula RL**, Chriqui JF, Reichman DA, and Y Terry-McElrath (2002). "State Medical Marijuana Laws: Understanding the Laws and their Limitations" *Journal of Public Health Policy*, 23(4): 413-439.
- Gitterman D, Sturm R, **Pacula RL**, and RM Scheffler (2001). "Does the Sunset of Mental Health Parity Really Matter?" *Administration & Policy in Mental Health*, 28(5): 353-369.
- Kenkel D, Mathios AD, and **RL Pacula** (2001). "Economics of Youth Drug Use, Addiction and Gateway Effects" *Addiction* 96, Number 1, Special Issue: 151-164.
- Czart C, **Pacula RL**, Chaloupka FJ, and H Wechsler (2001). "The Impact of Prices and Control Policies on Cigarette Smoking among College Students" *Contemporary Economic Policy*, 19(2): 135-149.
- Sturm R and **RL Pacula** (2001). Private insurance: What has parity brought? *Behavioral Healthcare Tomorrow*, 10(2), SR26-28.
- **Pacula RL** and FJ Chaloupka (2001). "The Effects of Macro-level Interventions on Addictive Behavior." *Substance Use and Misuse*, 36(13): 1901-1922.
- **Pacula RL** and R Sturm (2000). "Mental Health Parity Legislation: Much Ado About Nothing?" *Health Services Research* 35(1 pt 2): 263-275.
- Sturm R and **RL Pacula** (2000). "Mental Health Parity and Employer-Sponsored Health Insurance in 1999-2000: I Limits." *Psychiatric Services*, 51(11): 1361.
- **Pacula RL** and R Sturm (2000). "Mental Health Parity and Employer-Sponsored Health Insurance in 1999-2000: II Copayments and Coinsurance." *Psychiatric Services* 51(12): 1487.
- Sturm R., Gresenz C, **Pacula RL**, and K. Wells (1999). "Labor Force Participation by Persons with Mental Illness." *Psychiatric Services*, 51(11): 1407.
- Sturm R and **RL Pacula** (1999). "State Mental Health Parity Laws: Cause or Consequence of Differences in Use?" *Health Affairs*, 18(5): 182-192.
- Chaloupka FJ and **RL Pacula** (1999). "Sex and Race Differences in Young People's Responsiveness to Price and Tobacco Control Policies." *Tobacco Control*, 8: 373-377 (Winter)
- **Pacula RL** (1998)."Does Increasing the Beer Tax Reduce Marijuana Consumption?" *Journal of Health Economics*, 17(5): 557-586.
- **Pacula RL** (1997). "Women and Substance Use: Are Women More Susceptible to Addiction?" *American Economic Review*, 87(2): 454-459.
- Pacula RL (1997). "Economic Modeling of the Gateway Effect." Health Economics, 6(5): 521-524.

Peer-Reviewed Books, Book Chapters, and Book Reviews

- Powell D and **RL Pacula** (2017). "Prescription Opiates and Opioid Abuse: Regulatory Efforts to Limit Diversion from Medical Markets to Black Markets in the United States" in *Dual Markets Comparative Approaches for Regulation*, edited by E. Savona and M.A.R. Kleiman. New York: Springer.
- Maksabedian E, **Pacula RL**, Stein BD (2017). "Estimating the costs of substitution therapy for heroin and opioid addiction in the United States: Insights and challenges." In European Monitoring Centre for Drugs and Drug Addiction (2017), Drug treatment expenditure: a methodological overview, EMCDDA Insights 24, Publications Office of the European Union, Luxembourg. Doi: 10.2810/052028
- Caulkins, J, Nicosia N and **RL Pacula**. (2014) "Economic Analysis and Policy Studies: Special Challenges in the Prevention Sciences" in *Defining Prevention Science*, edited by Z Sloboda and H Petras. New York: Springer. DOI 10.1007/978-1-489907424-2, chap25, Pgs 571- 596.
- Caulkins JP and **RL Pacula** (2010) "Drug Policy Research" in P.G. Miller, J. Strang and P.M. Miller (eds), *Addiction Research Methods*, Wiley-Blackwell, Oxford UK doi: 10.1002/9781444318852 ch22.
- Kilmer, B and **RL Pacula** (2010). "Drug Prevention and its Impact on Substance Use, Earnings and Educational Outcomes" in Levine P and D Zimmerman (Eds) *Targeting Investments in Children*, University of Chicago Press. Pgs. 181-220.
- **Pacula RL**, Kilmer B and P Hunt (2010). "A framework for thinking about drug markets" in B Kilmer and S Hoorens (eds) *Understanding illicit drug markets, supply-reduction efforts, and drug-related crime in the European Union*. RAND Technical Report TR-755-EC. Cambridge, UK: RAND Europe, pp. 19-44.
- Kilmer B, **Pacula RL**, Hunt P and L Rabinovich (2010). "Indicators for understanding supply-reduction efforts" in B Kilmer and S Hoorens (eds) *Understanding illicit drug markets, supply-reduction efforts, and drug-related crime in the European Union*. RAND Technical Report TR-755-EC. Cambridge, UK: RAND Europe, pp. 45-82.
- Disley E, Hoorens S, Hunt P, Kilmer B, **Pacula RL**, Rabinovich L and J Rubin (2010). "Indicators for understanding drug-related crime" in B Kilmer and S Hoorens (eds) *Understanding illicit drug markets, supply-reduction efforts, and drug-related crime in the European Union*. RAND Technical Report TR-755-EC. Cambridge, UK: RAND Europe, pp. 83-104.
- Burnam A and **RL Pacula**, (2009) "Insurance Parity" in G.L Fisher and N Roget (Eds) *Encyclopedia of Substance Abuse Prevention, Treatment, and Recovery*, Sage Publishing.
- Eibner, C., Ringel, J.S.; Kilmer, B. **Pacula R.L**; and C. Diaz. (2008). "The Cost of Post-Combat Mental Health and Cognitive Conditions." In Tanielian and Jaycox (Eds) *Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery*. RAND: Santa Monica.
- Pacula, RL; MacCoun R; Reuter P.; Chriqui J.F.; Kilmer B.; Harris K; Paoli L; and C. Schaefer. (2005) "What does it mean to decriminalize cannabis? A cross-national empirical examination" in B. Lindgren and M. Grossman (Eds) Advances in Health Economics and Health Services Research Vol. 16: Substance Use: Individual Behavior, Social Interactions, Markets and Politics. Elsevier, Amsterdam pp.347-370
- Hall, W. and **RL Pacula**. (2003). *Cannabis Use and Dependence: Public Health and Public Policy*. Melbourne, Australia: Cambridge University Press.
- **Pacula, RL**; Grossman, M; Chaloupka, F.J.; P. O'Malley; L.D. Johnston and M.C. Farrelly. (2001) "Marijuana and Youth" (pp. 271-326). In Jonathan Gruber (Ed.), *Risky Behavior Among Youths: An Economic Analysis*. Chicago, IL: University of Chicago Press.

- Chaloupka, F.J. and **RL Pacula**. (2001). "The Impact of Price on Youth Tobacco Use" (pp.193-199). In David M. Burns and Donald R. Shopland (Eds.), Changing Adolescent Smoking Prevalence: Where Is It and Why? Smoking and Tobacco Control Monograph No. 14. Bethesda, MD: US Department of Health and Human Services, National Institutes of Health, National Cancer Institute, NIH Pub. No. 02-5086.
- Chaloupka, F.J. and **RL Pacula**. (2000). "Economics and Anti-Health Behavior: The Economic Analysis of Substance Use and Abuse" (pp. 89-111). In W. Bickel and R. Vuchinich (Eds), *Reframing Health Behavior Change with Behavioral Economic*. Hillsdale, NJ: Lawrence Earlbaum Associates.

Peer-Reviewed Monographs, Reports and Congressional Testimony

- Pardo B, Caulkins JP, Kilmer B, **Pacula RL**, Reuter P & BD Stein (2019). "Understanding the Variation in the Synthetic Opioid Surge" RAND Research Report RR-3116-RC, April 15, 2019.
- Pardo B, Kilmer B and **RL Pacula** (2018). "Monitoring and Evaluating Change in Cannabis Policies in the America: Insights for Europe" A report for the European Monitoring Centre for Drugs and Drug Addiction (November 30, 2018).
- Carnevale, J, Mackie K, **Pacula RL**, Caulkins J, Ware M, Gitlow S, Hasin D and A Terrillion (2018).

 Recommendations for NIDA's Cannabis Policy Research Agenda: Report from the Cannabis Policy Research Workgroup. National Advisory Council on Drug Abuse (February 6, 2018). Available online at: https://d14rmgtrwzf5a.cloudfront.net/sites/default/files/nacda_cannabis_policy_research_workgroup_report_feb_2018.pdf
- **Pacula RL** (2017). Funding Considerations in the Fight Against the Opioid Epidemic: What the Science Tells Us. Testimony presented before the House Appropriations Committee, Subcommittee on Labor, Health and Human Services, Education and Related Agencies, April 5, 2017. RAND Congressional Testimony CT-469.
- Pacula RL (2017). Regulating Medical Marijuana Markets: Insights from Scientific Evaluations of State Experiments. Testimony presented before the Florida House of Representatives Health & Human Services Committee, Subcommittee on Health Quality, Tallahassee Florida, January 25, 2017. RAND Congressional Testimony CT-461.
- **Pacula RL**, Hunter SB, Ober AJ, Osilla KC, Vardavas R, Blanchard JC, Drabo EF, Leuschner KJ, Stewart W and J Walters. (2016). *Preventing, Identifying, and Treating Prescription-Drug Misuse Among Active-Duty Service Members*. RAND Report RR-1345-OSD. Santa Monica, CA March 2016.
- Caulkins JC, Kilmer B, Kleiman MAR, MacCoun RJ, Midgette G, Oglesby P, **Pacula RL** and PH Reuter. (2015). *Considering Marijuana Legalization Insights for Vermont and Other Jurisdictions*, RAND Report RR-864. Santa Monica, CA, January 2015.
- Kilmer B, Everingham S, Caulkins JP, Midgette G, Reuter P, **Pacula RL**, Burns R, Han B and R Lundberg. (2014). *What America's Users Spend on Illicit Drugs:* 2000-2010. RAND Report RR-534-ONDCP. Santa Monica, CA, February 2014.
- Kilmer B, Caulkins JP, Midgette G, Dahlkemper L, MacCoun RJ, and **RL Pacula**. (2013). Before the Grand Opening: Measuring Washington State's Marijuana Market in the Last Year Before Legalized Commercial Sales" RAND Report RR-466, December 2013.

- **Pacula RL**, Lundberg R, Caulkins JP, Kilmer B, Greathouse S, Fain T and P Steinberg (2013). *Improving the Measurement of Drug-Related Crime*. Office of National Drug Control Policy, February 2013.
- Caulkins J, Kilmer B and **RL Pacula** (2012). "Marijuana Legalization: What We Know and What We Don't" Congressional Briefing held July 17, 2012 in Rayburn Building, Capitol Hill. Washington DC.
- Ridgely, MS, **Pacula RL** and MA Burnam (2012). *Short Term Analysis to Support Mental Health Parity Implementation*. U.S. Department of Health and Human Services, Assistant Secretary for Planning and Evaluation, Office of Disability, Aging and Long-Term Care Policy. February 2012. Available at: http://aspe.hhs.gov/daltcp/reports/2012/mhsud.shtml.
- Hoorens S, Hunt P, Malchiodi A, **Pacula RL**, Kadiyala S, Rabinovich L and B Irving (2012). *Measuring IPR infringements in the internal market: Development of a new approach to estimating the impact of infringements on sales.* RAND Technical Report TR-1279-EC. Cambridge, UK-RAND Europe.
- Kilmer B, JP Caulkins, **RL Pacula**, RJ MacCoun and PH Reuter (2010). *Altered State? Assessing How Marijuana Legalization in California Could Influence Marijuana Consumption and Public Budgets*. RAND Occasional Paper OP315. Santa Monica, CA: RAND
- Cave J, P Hunt, S Ismail, R Levitt, **RL Pacula**, L Rabinovich, J Rubin, K Weed and B Kilmer. (2010). *Tackling problem drug use*. RAND Technical Report TR-795-NAO. Cambridge, UK: RAND Europe.
- Pacula RL (2010). "An Assessment of the Scientific Support Underlying the FY2011 Budget Priorities of the Office of National Drug Control Policy" Testimony Presented before the House Oversight and Government Reform Committee, Subcommittee on Domestic Policy, Washington DC, April 14, 2010. RAND Congressional Testimony CT-344.
- Reuter PH, F Trautmann, **RL Pacula**, B Kilmer, A Gageldonk, D van der Gouwe (2009). *Assessing Changes in Global Drug Problems*, 1998-2007: *Main Report*. RAND Technical Report TR-704-EC. Cambridge, UK: RAND Europe.
- Kilmer B and **RL Pacula** (2009). *Estimating the size of the global drug market: A demand-side approach*. RAND Technical Report TR-711-EC. Cambridge, UK: RAND Europe.
- **Pacula RL**, S. Hoorens, B Kilmer, PH Reuter, JR Burgdorf, and P Hunt (2009) "Issues in Estimating the Economic Cost of Drug Abuse in Consuming Nations" RAND Technical Report TR-709-EC. Cambridge UK: RAND Europe.
- Nicosia, N, **RL Pacula**, B Kilmer, R Lundberg, and J Chiesa (2009) *The Economic Cost of Methamphetamine Use in the United States*, 2005. RAND Research Monograph MG-829-MPF/NIDA. Santa Monica CA: RAND.
- **Pacula RL** "The Economic Cost of Methamphetamine Use in the United States, 2005" Congressional Briefing held July 13, 2009, in Rayburn Building, Capitol Hill. Washington DC.
- **Pacula RL** (2009) "Legalizing Marijuana: Issues to Consider Before Reforming California State Law" Testimony presented before the California State Assembly Public Safety Committee, Sacramento, CA October 28, 2009. RAND Congressional Testimony CT-334. Santa Monica, CA: RAND.
- **Pacula RL** (2008). "What Research Tells Us About the Reasonableness of the Current Priorities of National Drug Control" Testimony presented before the House Oversight and Government Reform Committee,

- Subcommittee on Domestic Policy, Washington DC, March 12, 2008. RAND Congressional Testimony CT-302.
- **Pacula, RL** and JP Caulkins, "How Well are Drug Prices Measured and Why do We Care?" Presentation to the National Academy of Sciences and Engineering, Committee on Law and Justice, October 12, 2007.
- Caulkins JC, **Pacula RL**, Arkes J, Reuter P, Paddock S, Iguchi M, and J Riley. (2004). *The Price and Purity of Illicit Drugs: 1981 Through the Second Quarter of 2003*. Office of National Drug Control Policy. November.
- Arkes J, **Pacula RL**, Paddock S, Caulkins JC, and P Reuter. (2004). *Technical Report for the Price and Purity of Illicit Drugs Through 2003*. Office of National Drug Control Policy. November.
- Ringel J, Wasserman J, and **RL Pacula** (2003), *The Relationship Between Cigarette Use and Other Tobacco Products: Results from the 2000 National Youth Tobacco Survey*. Legacy First Look Report 10. Washington, DC: American Legacy Foundation.
- Caulkins J., **Pacula RL**, Paddock S and J. Chiesa (2002), *School-Based Drug Prevention: What kind of drug use does it prevent?* MR-1459-RWJ, RAND. Santa Monica, CA: RAND.
- Chriqui, JF; **Pacula, RL**; McBride, DC; Reichmann DA; VanderWaal CJ and Y Terry-McElrath (2002). *Illicit drug policies: Selected laws from the 50 states and the District of Columbia*, Berrien Springs, MI: Andrews University.
- **Pacula, RL** Addictions: Entries and Exits. *Journal of Mental Health Policy and Economics*. 3(3): 165-166, 2000.
- Ringel J, **Pacula RL**, and J. Wasserman (2000), *The Relationship Between Cigarette Use and Other Tobacco Products: Results From the 1999 National Youth Tobacco Survey*, Legacy First Look Report 4. Washington, DC: American Legacy Foundation.
- Ringel, J, **Pacula RL**, and J. Wasserman (2000), *Youth Access to Cigarettes: Results from the 1999 National Youth Tobacco Survey*. Legacy First Look Report 10. Washington, DC: American Legacy Foundation.
- Caulkins JP, Everingham S.S., and **RL Pacula** (1999), *Modifications to ADAM That Would Enhance Its Capacity to Inform Policy Modeling and Analysis*, RAND Santa Monica, CA: RAND.

RAND Reports Delivered to Clients

Pacula RL, Totten M, Hickey S, Burnam MA and MS Ridgely (2011). "Actuarial Analysis of How Alternative Coverage for Behavioral Health Services Affects Premiums" Confidential Technical Memo for the Assistant Secretary of Planning and Evaluation (DHHS), RAND, Santa Monica, CA: RAND.

Working Papers, Presentations

- **Pacula RL** (2019). "How the cannabis industry is responding to legalization, and what that means for research" Keynote address given at the International Society of Addiction Journal Editors Annual Meeting, Banff Canada (September 6, 2019).
- **Pacula RL**, Buttorff C, Kress S, Tung G, Wang S, C Firth. (2019). "The Development of New Measures of Cannabis Market Exposure: A Case Study in Colorado" Paper to be presented at the 2019 Lisbon

- Addictions Conference, Lisbon Portugal (October, 2019) and Addiction Health Services Research Annual Meeting, Park City, Utah (October, 2019).
- Griffin BA, Schuler M, **Pacula RL**, Patrick S, Schell T, Morral A, McNeer E, Smart R, Powell D, Stein B, and EA Stuart (2019). "It's a Matter of Choice: Relative performance of statistical methods used for estimating effectiveness of state-level opioid policies on opioid-related mortality." OPTIC Working Paper.
- **Pacula RL**, Powell D and R Smart (2019). "The Dynamics of Local Opioid Markets and Their Response to State Policies" Paper presented at the American Society for Health Economics (ASHEcon) Annual Meeting, June 25, 2019 (Washington DC).
- Smart R and **RL Pacula** (2019). "Problem of Defining and Evaluating State Opioid Policies" Paper presented at the American Society for Health Economics (ASHEcon) Annual Meeting, June 25, 2019 (Washington DC).
- Hunt P, **Pacula RL** and G Weinberger (2019). "High on Crime? Exploring the Effects of Marijuana Dispensary Laws on Crime in California Counties" Paper presented at WEA (June, 2019). Also available as an IZA Discussion Paper No. 11567. (May, 2018).
- **Pacula RL** (2019). "Cannabis and Opioids: What is the Role of Cannabis in the Evolving Opioid Epidemic" Keynote address at the North American Cannabis Summit (Los Angeles, CA, January 29, 2019).
- **Pacula RL** (2018). "The Consequences of Expanded Marijuana Access" Presentation at the American Society for Addictive Medicine (ASAM) State of the Art Course in Addiction Medicine (Washington DC October 11, 2018).
- **Pacula RL** (2018). "The Public Health Impacts of Legalization of Cannabis in the United States: Lessons for Canada" Presentation at the Canadian Society for Addiction Medicine Annual Meeting and Scientific Conference (Vancouver BC, October 25, 2018).
- **Pacula RL** (2018). "Evaluating the Public Health Effects of Cannabis Policy: Where Science Needs to Go For Better Answers" Keynote presentation at the Addiction Health Services Research (AHSR) Annual Meeting (Savannah, GA, October 19 2018).
- Smart R and **RL Pacula** (2018). "Approximating alcohol dependence in the absence of DSM criteria: The value of alcohol consumption history." Paper presented at the 2018 Addiction Health Services Research Annual Meeting (Savannah GA, October 2018).
- **Pacula RL** (2018). Invited panel participant for the APHA Global Film Fest Session on Opioids (San Diego CA, November 13, 2018).
- Whaley C, **Pacula RL**, Ridgely MS, et al. (2018). "State Differences in Trends in Physician-Hospital Integration: The hidden story behind national trends."
- **Pacula RL** (2018). "The Uncertainty Underlying Early Policy Evaluations: A Cautionary Tale for Cannabis and Opioids." Presentation at Cannabis and Opioid Crisis Symposium, UC Irvine, February 9, 2018.
- **Pacula RL.** (2017). "U.S. Cannabis Policy: Change Ahead of the Science and Implications for Society" Presentation at the Annual Meeting of ACR/ARHP. San Diego, November 6, 2017.
- **Pacula RL** and C Costa (2017). "Impact and Cost of Addiction" TWIST Training with Stakeholders presentation at the Lisbon Addictions Conference, October 25, 2017.

- Midgette G, Vardavas R, Katkar P, Graf M, Smart R, Rutter C and **RL Pacula** (2017). "A Microsimulation Platform for Assessing the Impact of Policy on U.S. Alcohol Consumption and its Consequences." Paper presented at Annual Meeting of the Research Society on Alcoholism, June 2017.
- Graf M, Pacula RL, Midgette G, Vardavas R and S Paddock (2016). "Assessing the Effects of Alcohol Policies on Consumption: Why the Measurement of Consumption Is Important" Paper presented at forthcoming Addiction Health Services Research Conference (Oct 2016) and APPAM meeting (Nov 2016).
- **Pacula RL** "The Effects of Liberalizing Marijuana Policies on Use & Harms: Why Research Has Not Told us Much" Invited Presentation at the NIH Marijuana and Cannabinoids: A Neuroscience Research Summit (March 23, 2016)
- **Pacula RL** "Heterogeneity of Marijuana Policies and What We are Learning that Really Matters for Use and Harms" Presentation given to the NIDA Cannabis Special Interest Group Speaker Series (September 18, 2014).
- **Pacula RL**, Kadiyala S, Hunt P and A Malchiodi (2012). "An Alternative Framework for Empirically Measuring the Size of Counterfeit Markets" National Bureau of Economic Research Working Paper #18171, June 2012.
- **Pacula RL** (2012). "Marijuana Legalization in the United States? State Initiatives and An Assessment of Impacts in California" Keynote address presented at SIRUS sponsored conference, "What do we know about Cannabis?" Oslo, Norway, May 2012.
- **Pacula RL** (2011). "Substance Use and Recessions: Insights from economic analyses of alcohol and how drug use differs" Invited to give the "Alison Chesney and Eddie Killoran Memorial Lecture" at London School of Hygiene and Tropical Medicine, London UK, October 19, 2011.
- **Pacula RL** "Why Existing Studies of the 'War on Drugs' Provide Little Guidance for Informing Policies Using a U.S.-Mexico perspective" Invited presentation at the Yale Center for the Study of Globalization's Conference "Rethinking the 'War on Drugs' through the US-Mexico Prism" May 13, 2011.
- **Pacula, RL** "Examining the Impact of Marijuana Legalization on Marijuana Consumption: Insights from the Economics Literature" RAND Working Paper Series WR-770-RC, July 2010.
- **Pacula, RL** "Examining the Impact of Marijuana Legalization on Harms Associated with Marijuana Use" RAND Working Paper Series WR-769-RC, July 2010.
- **Pacula, RL** "An Economic Perspective of Data and Analysis Needs for Public Stakeholders" Invited Presentation at the NIDA Clinical Trials Network (CTN) Cost-Effectiveness Evaluation in Addiction Treatment Trials Workshop, July 2009.
- **Pacula, RL** "Why Economics Matters When Developing Drug Policy" Keynote Address given at the Workshop on the Economics of Alcohol, Tobacco and Illicit Drugs, Melbourne Australia, November 2005.

Papers Under Review

- Powell D and **RL Pacula** (2019). "The Evolving Consequences of OxyContin Reformulation on Drug Overdoses" Paper submitted to *American Economic Review Insights* (September, 2019).
- Young SD, Zhang Q, Zhou J, and **RL Pacula**. "Internet Search and Medicaid Prescription Drug Data as Predictors of Opioid Emergency Department Visits." Paper submitted to *New England Journal Medicine* (September,

2019).

- Williams J, **Pacula RL** and R Smart (2019). "De Facto or De Jure? Ethnic differences in quit responses to legal protections of medical marijuana dispensaries." Paper submitted to *Journal of Health Economics* (August, 2019). Also available as an NBER Working Paper #25555 and IZA Discussion Paper No. 12114.
- Powell D, **Pacula RL**, and E Taylor. "Did Medicare Part D Contribute to the Rise in Opioid Overdose Deaths in the US?" Received revise and resubmit from *Journal of Health Economics* (August 2019). Also available as an NBER Working Paper #21072 (April 2015).
- Hunt P, **Pacula RL**, and R Smart. "Are Alcohol Taxes Still an Effective Policy Lever for Raising Alcohol Prices and Improving Health? Evidence from the Great Recession." Submitted to *American Journal of Health Economics* (May 2019).

THESIS ADVISING

Alexandra Kirtikos, Ph.D. Expected 2021. Heller School of Social policy and Management, Brandies University (Committee Member) "The Impact of Cannabis Legalization and Markets on Cannabis Use, Vaping and Product Choice Among Youth."

Lisa Johnsson, Ph.D. Expected 2020. Pardee RAND Graduate School (Committee Chair) "3 Essays Examining the Importance of Local Governance on Economic and Social Wellbeing: Affordable Housing, Sustainable Energy and Marijuana Policy."

Nima Shahidimia, Ph.D. Expected 2020. Pardee RAND Graduate School (Committee Chair) "The Public Health Impact(s) of Retail Marijuana on Opioid Use."

Yan Wang, Ph.D. 2019. Pardee RAND Graduate School (Committee Member) "Understanding Home and Community-based Services: An Evaluation of Medicaid's Balancing Incentive Program."

Gabriel Weinberger, Ph.D. 2018. Pardee RAND Graduate School (Committee Chair) "3 Essays on Changes to Dealing with Drug Use Within the Criminal Justice System in California."

Ervant Maksabedian, Ph.D. 2017. Pardee RAND Graduate School (Committee Chair) "The effects of MHPAEA on Access to Medication-Assisted Treatments for Opioid Use Disorders."

Julie Johnson, Ph.D. 2015. Heller School of Social Policy and Management, Brandies University (Committee Member) "Do Liberalized Marijuana Policies Affect Adolescent Tobacco, Alcohol, Marijuana and Other Drug Use?: A State-Level Analysis."

James Burgdorf, Ph.D. 2013. Pardee RAND Graduate School (Committee Chair) "Health Insurance and Poor Health: Bleeding the Stock of Self-Employed Workers?"

Jennifer Wong, Ph.D. 2009. Pardee RAND Graduate School (Committee Member) "No Bullies Allowed: Understanding Peer Victimization, the Impacts on Delinquency, and the Effectiveness of Prevention Programs."

Khoa D Truong, Ph.D. 2008. Pardee RAND Graduate School (Committee Member). "Essays on Environmental Determinants of Health Behaviors and Outcomes."

Beau Kilmer, Ph.D. 2007. Kennedy School of Government, Harvard University (Committee Member). "Essays on the Consequences of Drug Use and Drug Testing."

OTHER PROFESSIONAL ACTIVITIES

President, International Society for the Study of Drug Policy (ISSDP), May 2019 - present.

Vice President, International Society for the Study of Drug Policy (ISSDP), 2015-2019.

Invited Member, National Institute on Drug Abuse Marijuana Policy Research Workgroup, 2017.

Faculty Mentor, American Society for Health Economics, 2015 -present.

Assistant Editor, Addiction, December 2005 - present.

Associate Editor, Journal of Drug Policy Analysis, Fall 2010 – present.

Editorial Board, *International Journal of Drug Policy*, Fall 2015 – present.

Elected Board Member, International Society for the Study of Drug Policy (ISSDP), 2011-2019.

Member, Monitoring the Future National Advisory Committee, March 2014 – present.

Program Chair, Tobacco, Alcohol and Other Drugs, *American Society for Health Economics* Biennial Conference, Philadelphia PA, June 2016.

Program Chair, *International Society for the Study of Drug Policy* 2016 Regional Meeting, New York City, NY, April 2016

Consultant, Robert Wood Johnson Foundation funded, LawAtlas Medical Marijuana Dataset, July 2013 – 2017.

Faculty Mentor, Titus Galama's K Award from the National Institute on Aging, March 2013 – 2017.

American Society for Health Economics (ASHE) 2014 Host Committee Member, Fifth Biennial Conference, 2013-2014.

Conference organizer, RAND BING Conference on Health, Aging and Human Capital to be held in Santa Monica, CA December 2-3, 2011.

American Society for Health Economics (ASHE) Awards Committee, December 2009 – 2013.

Member of the APPAM Conference Program Committee, Fall 2008 and Fall 2009.

Conference Host and Program Chair for 4th Annual Meeting of the *International Society for the Study of Drug Policy* (ISSDP), to be held at RAND Santa Monica, CA., March 2010.

One of 13 members appointed to the Health Services Research Subcommittee, *National Institute on Drug Abuse* Initial Review Group-F, June 2003 – June 2007.

Conference Planner for 2005 Addiction Health Services Research Meeting co-hosted by UCLA and RAND, Santa Monica, CA, October 2005.

One of 11 people appointed to review the 2003 National Research Council and Institute of Medicine's report *Reducing Underage Drinking: A Collective Responsibility*, Committee on Developing a Strategy to Reduce and Prevent Underage Drinking, Richard J. Bonnie and Mary Ellen O'Connell Editors.

One of 12 members appointed to the Health Services Research Review Subcommittee of the *National Institute* on *Alcohol Abuse and Alcoholism* Initial Review Group, (AA-2), July 2001-October 2002.

Regular reviewer for the following journals and foundations: Addiction, American Economic Journal-Economic Policy, American Economic Review, American Journal of Health Economics, American Journal of Public Health, Health Affairs, Drug and Alcohol Dependence, Health Economics, Health Services Research, International Journal of Drug Policy, Journal of Health Economics, Journal of Human Capital, Journal of Policy Analysis and Management, Journal of Law and Economics, Journal of Political Economy, Journal of Research in Crime and Delinquency, Law and Economics, New England Journal of Medicine, Review of Economics and Statistics, and Review of Law and Economics.

CURRENTLY FUNDED RESEARCH

Co-Principal Investigator (with Brad Stein) on a P50 Center grant from the National Institute on Drug Abuse entitled "RAND Opioid Policy Tools and Information Center (OPTIC)" August 2018 through July 2023. (P50: \$7,201,999)

Principal Investigator on a grant from the National Institute on Drug Abuse entitled, "Impact of Marijuana Legalization on Opioid Prescribing and Poisoning in Colorado" July 2018 through April 2021. (R01: \$1,349,688)

Investigator on a grant from National Institute on Drug Abuse (with Kosali Simon and Dhaval Dave) entitled "Hospital Payment Incentives and Opioid Prescribing" July 2018 through June 2020. (R21: \$275,000)

Investigator on a grant from National Institute on Drug Abuse (with Ricky Bluthenthal) entitled "Cannabis use and health outcomes among opioid-using people who inject drugs in the context of legalization" February 2019 through January 2023 (R01: \$722,335).

Investigator on a grant from National Institute on Mental Health (with Doug Leslie and Brad Stein) entitled "Opioid use disorders in adolescents: Individual and family characteristics associated with treatment and outcomes" February 2019 through January 2022. (R01: total amount unknown, my budget \$123,000).

Co-Principal Investigator (with Tim Naimi) on a grant from the National Institute on Alcohol Abuse and Alcoholism entitled "Impact of Marijuana Policies on Alcohol Use and Alcohol Related Mortality" September 2018 through June 2022 (R01: \$633,007).

Investigator on a grant from the Centers for Disease Control & Prevention (with David Powell) entitled "Improving Naloxone Access and Its Effects on Drug Abuse and Overdoses" September 2018 through August 2020 (R01: \$434,601).

Co-Principal Investigator (with David Powell) on a grant from the National Institute on Drug Abuse entitled "Prescription Drug Coverage, Access to Opioids and Drug Abuse" September 2017 through August 2019. (R21: \$511,565)

Investigator on a U19 Center grant from the Agency for Healthcare Research and Quality entitled "Understanding Health Care Delivery Systems PCOR Adoption and System Performance" September 2015 through August 2020. (U01: \$17,427,342)

Principal Investigator on a grant from the National Institute on Drug Abuse entitled "RAND Alcohol Policy Platform" December 2016 through April 2019. (R01: \$2,453,528)

ADDITIONAL FUNDED RESEARCH COMPLETED IN THE LAST 5 YEARS

Investigator on a contract from the Pew Charitable Trust to study "Opioid State Policies, Use Disorders, and Treatment" September 2017 through February 2019

Investigator on a contract from the Office of National Drug Control Policy entitled "What American Users Spend on Illicit Drugs" August 2017 through October 2018

Investigator on an R01 grant from the National Institute on Drug Abuse entitled "The Impact of Benefit Design and Formulary Practices on Opioid Abuse and Overdose" September 2014 through September 2016.

Principal Investigator on an R01 grant from the National Institute on Drug Abuse entitled "International Alcohol Policy Model" May 2014 through November 2016.

Principal Investigator on a contract from the Department of Defense entitled "Preventing and Managing Prescription Drug Misuse Among Military Personnel" May 2012 through July 2015.

Investigator on an R01 grant from the National Institute on Drug Abuse entitled "Opioid Agonist Treatment (OAT) Expansion in Medicaid – The Role of Buprenorphine" August 2012 through July 2016.

Principal Investigator on an R01 grant from the National Institute on Drug Abuse entitled "Implementation of Medical Marijuana and its Impact on Health" September 2011 through August 2016.

Principal Investigator on Administrative Supplement to an R01 from the National Institute on Drug Abuse entitled "Research on Marijuana Legalization in the US (Admin Suppl)" September 2013 through August 2014.

Co-Investigator (PI on subcontract to RAND) on a grant from the National Institute on Drug Abuse entitled "Parity and Addiction Act: Impact on Benefits, Use and Costs" September 2011 through September 2014.

HONORS AND AWARDS

- 2019 Nominated by NIH Director, Dr. Collins, to the National Advisory Council on Alcohol Abuse and Alcoholism.
- 2019 Named Elizabeth Garrett Endowed Chair in Health Policy, Economics and Law, University of California's Sol Price School of Public Policy (Full Professor, with Tenure, to begin in August 2019).
- 2019 Keynote Speaker at the North American Cannabis Summit, January 29, 2019, Los Angeles, California.
- 2017-2018 JPAM top downloaded recent paper for paper with D Powell "A Supply-Side Perspective on the Opioid Crisis"
- 2018 Keynote Speaker at the Addictions Health Services Research Conference, October 19, 2018, Savannah, Georgia.
- 2017 Keynote Speaker at the Lisbon Addictions Conference, October 26, 2017, Lisbon, Portugal.
- 2017 Keynote Speaker at the 11th Annual International Society for the Study of Drug Policy (ISSDP) Scientific Meeting, May 18 Aarhus, Denmark.
- 2016 UK Prospect Magazine Think Tank Best Paper Award in the area of US Social Policy for paper with B Stein, et al (2016) "Underutilized physician capacity to treat opioid use disorder with buprenorphine opioid agonist medication assisted treatment." *JAMA*, 316(11): 1211-1212.
- 2015 Stanley Reiter Best Paper Award for paper with M Galenianos and N Persico (2012) "A Search-Theoretical Model of the Retail Market for Illicit Drugs." *Review of Economic Studies*. 79(2): 1239-1269.
- 2014 first speaker to kick off NIDA- sponsored Cannabis Special Interest Group Speaker Series, September 18. Rockville, Maryland.
- 2013 invited expert to first ever ONDCP Conference on Drug Policy Reform, December 9, 2013, The White House, Washington DC.
- 2013 invited Seminar Speaker at Columbia University's "Grand Rounds", September 29, New York City.
- 2012 invited Seminar Speaker at organized "The Price of Alcohol and Related Harms" Meeting with UK Policy Makers, February 23, London.
- 2012, invited Keynote Speaker at SIRUS sponsored conference, "What do we know about Cannabis?" Oslo, Norway, May 16.
- 2011 invited to give "The Alison Chesney & Eddie Killoran Memorial Lecture" London School of Hygiene and Tropical Medicine, London UK
- 2010 recipient of RAND President's Award, recognizing individuals exemplifying RAND's core values of quality and objectivity and who have made exemplary contributions to the RAND community
- Selected to be the Keynote Speaker at the 2008 Australian Professional Society on Alcohol and Other Drugs (Sydney, November 2008)
- Featured in a research summary the *NBER Reporter* publication (Winter 2005).
- 2004 Winner of RAND Bronze Merit Award for contributions to RAND's Mission Statement through expansion of research, July 2004.
- Participant in first "Creating Career Opportunities For Female Economists" Conference sponsored by CWEP and the National Science Foundation, January 5-7, 1998.
- University of San Diego School of Business *Top Teachers* List, Fall, 1995
- Magna Cum Laude, 1990.

- Phi Beta Kappa, 1990. Alpha Sigma Nu, 1990.