# 11-5384-cr

# United States Court of Appeals

*for the*

# Second Circuit

UNITED STATES OF AMERICA,

*Appellee,*

– v. –

CAMERON DOUGLAS,

*Defendant-Appellant,*

KELLY SOTT, EDUARDO ESCALERA, DAVID ESCALERA,

*Defendants.*

ON APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK

**BRIEF OF *AMICI CURIAE* NEW YORK SOCIETY OF ADDICTION MEDICINE, AMERICAN ACADEMY OF ADDICTION PSYCHIATRY, CALIFORNIA SOCIETY OF ADDICTION MEDICINE, AMERICAN ASSOCIATION FOR THE TREATMENT OF OPIOID DEPENDENCE, CENTER FOR PRISONER HEALTH AND HUMAN RIGHTS, OSBORNE ASSOCIATION, NATIONAL ALLIANCE FOR MEDICATION ASSISTED RECOVERY, EXPONENTS, THE LEGAL ACTION CENTER, INTERNATIONAL DOCTORS FOR HEALTHY DRUG POLICY, DR. ROBERT G. NEWMAN, DR. BENY PRIMM, DR. DAVID LEWIS, DR. JOSIAH D. RICH, DR. JOSHUA LEE, DR. ERNEST DRUCKER, DR. JOYCE H. LOWNINSON, DR. SHARON STANCLIFF, DR. PETER BANYS, DR. BRUCE TRIGG, DR. CARL HART, DR. DALIAH HELLER AND DR. HERMAN JOSEPH IN SUPPORT OF APPELLANT**

DANIEL N. ABRAHAMSON
DRUG POLICY ALLIANCE
*Attorneys for Amici Curiae*
918 Parker Street, Building A21
Berkeley, California 94710
(510) 229-5211

CERTIFICATE OF INTERESTED PERSONS

AND CORPORATE DISCLOSURE STATEMENT

Pursuant to Rule 26.1 of the Federal Rules of Appellate Procedure, *Amici Curiae* New York Society of Addiction Medicine, American Academy of Addiction Psychiatry, California Society of Addiction Medicine, American Association for the Treatment of Opioid Dependence, Center for Prisoner Health and Human Rights, Osborne Association, National Alliance for Medication Assisted Recovery, Exponents, the Legal Action Center, International Doctors for Healthy Drug Policy, Robert G. Newman, MD, MPH, Beny Primm, MD, David Lewis, M.D., Josiah D. Rich, MD, MPH, Joshua Lee, MD, MS, Ernest Drucker, PhD, Joyce H. Lowninson, MD, Sharon Stancliff, MD, Peter Banys, MD, MSc, Bruce Trigg, MD, Carl Hart, PhD., Daliah Heller, PhD, MPH, Herman Joseph, PhD., hereby certify that:

(1) None of the *Amici* has a parent corporation; and

(2) None of the *Amici* issues stock.

s/ Daniel N. Abrahamson

Daniel N. Abrahamson
Counsel for *Amici Curiae*

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## Statement of Interest[1]

As more completely described in an Appendix to this brief, *Amici Curia*e include professional and advocacy organizations and leading physicians, researchers, scholars and direct service workers in the field of substance abuse treatment, many with a particular focus on the treatment of opioid dependence in correctional settings. Some *Amici* provide or oversee treatment services; others have devoted careers to researching the complex realities of drug and alcohol misuse and to identifying and advocating for interventions and policies that work; and still others are former inmates and persons in recovery who undertake critical outreach to drug-addicted offenders.

A central theme of the work of *Amici* is the need to provide effective, evidence-based treatment to opioid-dependent persons, particularly to those under criminal justice supervision. Time and again, over the past four decades, the provision of appropriate substance abuse treatment to opioid-dependent persons has been shown to profoundly improve not only their health and well-being across a broad range of metrics, but also the health and safety of the larger public. This is especially true of methadone and other opioid substitution treatments. Conversely, *Amici* are acutely aware of the ramifications when such treatment is withheld – the

[1] Both parties consented to the filing of this brief. No party or party's counsel authored the brief in whole or in part or contributed money intended to fund preparing or submitting it; and no person other than *Amici Curiae*, their members, or counsel, contributed money intended to fund its preparation or submission.

suffering, disease, death, and criminal behavior that result when punitive sanctions replace proven medical interventions and opioid dependence is left to fester.

The criminal sentence at issue here – a 54-month prison term for unlawful possession of Suboxone and heroin imposed on an opioid-dependent inmate who lacked treatment behind bars – directly implicates *Amici*'s areas of expertise and concern.

In that spirit, *Amici* wish to assist the Court in its review of the sentence being appealed by providing the Court with a fuller understanding of opioid dependence, the ability to effectively treat such dependence with medication-assisted therapies, the predictable consequences of failing to adequately treat it, and the incongruity of responding to opioid relapse with incarceration, even when the relapse occurs in prison.

*Amici*'s objections to the sentence at issue in this appeal should not be construed as disputing or minimizing the dangers of substance misuse, abuse, and addiction, particularly within criminal justice settings. On the contrary, it is *Amici*'s recognition of the importance, seriousness, and complexity of these problems, and *Amici*'s understanding of what can and cannot effectively address them, that informs and animates *Amici*'s position and *Amici*'s desire to provide the Court with professional insight about the issues implicated in this appeal.

## Summary of Argument

At the heart of this case is Cameron Douglas, who has misused drugs since at least age 13, began using heroin at age 20 and who by age 25 was opioid-dependent. Mr. Douglas ingested heroin five to six times a day in the five years prior to his arrest and was under the influence of heroin at the time of his arrest, at age 30, for drug distribution. Mr. Douglas continued to use heroin while under pre-trial release, causing the revocation of his bail, his incarceration, and the filing of a second federal criminal charge for heroin possession.

For the crimes of drug distribution and heroin possession Mr. Douglas was sentenced to 60-months imprisonment – a sentence with which *Amici* do not take issue. While imprisoned, however, Mr. Douglas was again caught with opioids, this time with small amounts of Suboxone and heroin, two drugs that share similar chemical properties and produce similar effects in the brain. He subsequently tested positive for ingested opioids. At no point during his incarceration has Mr. Douglas been provided substance abuse treatment.

For this new offense – illicit drug possession in a correctional facility – Mr. Douglas was sentenced by the federal district court to an additional prison term of 54 months, to be served consecutively to his 60-month sentence.[2] In explaining

[2] Mr. Douglas was also sanctioned administratively by the Bureau of Prisons which, *inter alia*, ordered him confined to his cell for 23 hours a day for 11 months, denied him contact with the outside world (aside from legal counsel)

this sentence, the district court acknowledged Mr. Douglas' "co-occurring addictions" and "mental health issues," but focused on Mr. Douglas' serial failure to follow – or seeming choice to continually flout – the rules, regulations and laws prohibiting illicit drug use as grounds for extending Mr. Douglas' prison term by an additional four and one-half years.

But substance abuse treatment professionals and researchers, as well as persons who have experienced opioid dependence directly or through loved ones, view Cameron Douglas' conduct, and the appropriate response to that conduct, in a substantially different light. They recognize Mr. Douglas' actions for what they are – the classic, textbook behaviors of someone suffering from untreated opioid dependence, a chronic medical condition often caused by *permanent* changes to the brain, *defined by repeated drug use and*, after periods of drug use remission, *drug relapse* – behaviors that can persist for decades, or a lifetime, in the absence of proper treatment.

Like other chronic medical conditions, opioid dependence can be effectively managed through appropriate treatment. Opioid dependent persons are encouraged

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during that time, and permitted only one telephone call every 30 days. In addition, Mr. Douglas' social visitation privileges were revoked for four years. Although *Amici* do not focus on these additional punishments, the research discussed herein also calls into question the efficacy and appropriateness of these sanctions. *See generally*, Human Rights Watch, *Barred from Treatment: Punishment of Drug Users in New York State Prisons* 2-3 (2009) (characterizing such disciplinary sanctions, particularly punitive isolation, for drug use behind bars as "grossly disproportionate" to the severity of the offense.).

to complete a continuum of care that typically involves counseling (of which there are various forms) and the acquisition of decision-making and life management skills to constructively deal with life's difficulties. Several medications also are available to help address the neurobiological effects of chronic opioid use including buprenorphine and methadone maintenance treatment, the latter of which has been shown over several decades to be one of the most efficacious and cost-effective interventions in modern medicine.

These medication-assisted therapies are administered, with much success, in corrections institutions in many other countries and have been shown to reduce illicit drug use and criminal behavior while improving health and well-being. Such treatments, however, are almost entirely absent from American correctional facilities despite the over-representation of opioid-dependent persons in U.S. jails and prisons, the documented prevalence of drug use therein, and the unique opportunity that incarceration provides for initiation into (or continuation of) critical medical and counseling services. Notably, *no form of professional treatment* has been given Mr. Douglas since his incarceration.

*Amici* do not contend that reversing Mr. Douglas' 54-month sentence – and offering Mr. Douglas and those like him appropriate treatment behind bars and access to community treatment upon release – would result in a "miracle cure." But experience shows that these important steps would be an "intercession of [one

of] a thousand smaller sanities," Adam Gopnik, *The Caging of America*, The New Yorker (Jan. 30, 2012), that would help reduce the crime, disease, suffering and death that afflict the thousands of opioid-dependent persons enmeshed in our criminal justice system and be a fitting and humane response to Mr. Douglas' conduct.

## Argument

## I. OPIOID ADDICTION IS A CHRONIC, RELAPSING DISORDER.

To understand why Mr. Douglas' 54-month sentence is inappropriate, one must understand Mr. Douglas' underlying medical condition. Such understanding, in turn, requires a short primer on opioids, opioid dependence, opioid relapse, and opioid treatment.

### A. Opioid Types and Actions.

Opioids are among the world's oldest known drugs, with the therapeutic use of the opium poppy predating historical records. Opioids are nothing foreign to the brain. In fact the brain creates and uses its own natural opioids which are functionally identical to morphine or heroin. Two such chemicals produced by the brain are endorphins and endomorphins (the word endorphin means "the morphine within.")

There are several broad classes of opioids in addition to those produced naturally in the body. Natural opiates, such as morphine and codeine, derive from

the alkaloids contained in the resin of the opium poppy[3]. Esthers of morphine, such as diacetylmorphine, better known as heroin, the drug which Mr. Douglas long abused, are opiates that have been slightly chemically altered. Semi-synthetic opioids are partially created from natural opiates and include such drugs as hydrocodone, oxycodone, buprenorphine, and the buprenorphine variant Suboxone, which Mr. Douglas possessed in prison. The class of fully synthetic opioids includes fentanyl and methadone.

Different types of opioids bind to different types of opioid receptor sites on the surface of cells throughout the brain and body to produce various physiological and psychological effects. An analgesic, or pain relieving effect, appears common to all opioids, though it is produced in different degrees and by different mechanisms, depending on the opioid and the receptor. *See generally* David H. Epstein et al., *Opioids*, in Joyce H. Lowinson et al., eds., *Substance Abuse, A Comprehensive Textbook* 161 (5th ed. 2011).

Opioids that turn receptors "on" when they bind to them – that is, they permit or enhance the effects of opioids – are called *agonists*. Opioids that turn receptors "off," – *i.e.*, block or reverse the effects of opioids – are called *antagonists*. And opioids that turn receptors "on" but do so less efficiently than agonists, are called *partial agonists*.

[3] The term *opiate* is often used as a synonym for *opioid*, but it is properly limited to these natural alkaloids found in the opium poppy.

Heroin is a full opioid agonist. It has an immediate onset, a "rush" of euphoria, and duration of only four to six hours, after which it must be taken again to avoid incapacitating symptoms of withdrawal. Because heroin is a relatively short-acting drug, persons dependent on it, like Mr. Douglas, tend to ingest it several times a day when available. Buprenorphine is a partial agonist that blocks acute opioid effects, suppresses the signs and symptoms of opioid withdrawal and has limited euphoric effect. *See generally*, D. Andrew Tompkins & Andrew C. Strain, *Buprenorphine in the Treatment of Opioid Dependence*, in Lowinson, *supra*, at 437.

Naloxone, by contrast, is an opioid antagonist, meaning that when it affixes to an opioid receptor it blocks the effect of opioids such as heroin. First responders and emergency room personnel regularly use naloxone to revive persons experiencing opioid overdose.

Suboxone is the combination of buprenorphine and naloxone. It comes in pill form and when administered under sublingually the naloxone is not significantly absorbed, and the buprenorphine effect occurs slowly over several hours, allowing it to stabilize opioid cravings and withdrawal symptoms. In addition, if the Suboxone pill is dissolved and injected, the naloxone is active and blocks and displaces opioids, preventing euphoria or causing immediate withdrawal symptoms. As a result, the naloxone in the Suboxone is a very strong

deterrent to injected use for the purpose of getting "high." Emily Harrison & Ismene Petrakis, *Naltrexone Pharmacotherapy*, in Lowinson, *supra*, at 447.

This fact has clinical and legal significance for Mr. Douglas' case. Physiologically speaking, Mr. Douglas' use of Suboxone in prison was a probable attempt at self-medication – that is, to fill his opioid receptors with a long-acting opioid of modulated effect in order to stem and stabilize the opioid "craving" that his otherwise empty opioid receptors trigger. *See* Amy Nunn et al., *Methadone and Buprenorphine Prescribing and Referral Practices in U.S. Prison Systems: Results from a Nationwide Survey*, 105 Drug & Alc. Dependence 83, 84 (2009). From a clinical perspective, it appears that in apportioning and using Suboxone Mr. Douglas was not trying to get "high" (with which Suboxone would not have helped), but rather trying to avoid experiencing the many adverse effects of his chemical dependence, discussed more fully below.

### B. Chronic Opioid Use Causes Permanent Brain Changes and High Propensity for Opioid Relapse.

While opioids are endogenous to the brain, one of the chief distinguishing features of chronic, heavy opioid use is that such use can cause profound and *permanent* chemical changes in the brain. Over time, opioid receptors of chronic opioid users become accustomed to the continued presence of opioids and undergo molecular and neurochemical adaptations, such that users becomes physically

dependent on the drug, "crave" the drug, and experience severe withdrawal symptoms when those receptors go unfilled or only partially filled by an opioid. *See* National Institute on Drug Abuse, *Research Report Series – Heroin: Abuse and Addiction* 3 (updated 2005). For these reasons, the medical profession regards opioid dependence to be "a brain related disorder," Herbert D. Kleber, *Methadone Maintenance 4 Decades Later*, 300 J. Am. Med. Ass'n 2303, 2304 (2008).

The physical effects of dependence, craving and withdrawal, when left untreated, include "needless pain and suffering, medical morbidity, and in some instances, death," Kevin Fiscella et al., *Benign Neglect or Neglected Abuse: Drug and Alcohol Withdrawal in U.S. Jails*, 32 J. L. Med. & Ethics 129 (2004). *See also Kelly v. County of Wayne*, 325 F.Supp.2d 788, 791 (E.D. Mich 2004) ("heroin withdrawal is a serious medical condition."); *Foelker v. Outagamie Cnty*., 394 F.3d 510, 513 (7th Cir. 2005) (same); *Davis v. Carter*, 452 F.3d 686, 692 (7th Cir. 2006) (same). This is also true in incarceration settings, where opioid withdrawal is a "serious, but neglected, problem," with reported "deaths in jail due to inadequate[]" treatment of withdrawal. Fiscella, *supra*, at 129. *See generally*, Joshua D. Lee & Josiah D. Rich, *Opioid Pharmacotherapy in Criminal Justice Settings: Now is the Time*, 33 Substance Abuse 2 (2012) (equating opioid withdrawal with "human suffering").

Moreover – and with relevance to the facts of this case – the alterations in the brain caused by chronic opioid use "increase vulnerability" to craving and relapse "*even months or years* after . . . detoxification," Jordi Camí & Maggí Farré, *Drug Addiction*, 349 New Engl. J. Med. 975, 983 (2003) (emphasis added). Relapse is common precisely because the brain's opioid receptors have been "rewired" to require filling by an opioid. Indeed, opioid addiction is *defined* as a chronic, *relapsing* medical disorder. *See* Heath D. Schmidt et al., *Neurobiological Factors of Drug Dependence and Addiction*, in Lowinson, *supra*, at 55 ("Drug addiction is a *chronically relapsing* disorder characterized by compulsive use of one or more drugs of abuse, the *inability to control drug intake*, and continued drug use *despite its associated negative consequences*.") (emphases added).

Thus, when opioid-dependent persons are suddenly deprived of their drug, (for example, upon arrest), they seek to replace that opioid at the earliest opportunity. This appears to have happened when Mr. Douglas was released on bail and soon procured more heroin with which to activate his opioid receptors.

The medical research is also clear that the potential of relapse for someone like Mr. Douglas, a chronic, heavy user of heroin who never successfully participated in treatment, was not lessened simply because he may have been opioid-free for several months while incarcerated. *See* Redonna K. Chandler et al., *Treating Drug Abuse and Addiction in the Criminal Justice System*, 301 J. Am.

Med Ass'n 183, 187 (2009) (discussing need to provide effective opioid treatment "even for individuals who have been under enforced abstinence during incarceration."). In fact, the overlapping stresses of adapting to and enduring the deprivations of prison while serving as a federal government informant may have helped trigger Mr. Douglas' relapse. *See* Camí, *supra,* at 983 (noting that "exposure to environmental stressors" is a "factor[] involved in relapse and craving"); George F. Koob & Michael Le Moal, *Drug Addiction, Dysregulation of Reward, and Allostasis*, 24 Neuropsychopharmacology 97, 118 (2001) (reporting that relapse often "occur[s] during states of stress . . . .").

In light of these circumstances, Mr. Douglas' succumbing to heroin and Suboxone in prison is understood as a complex physiological response; or, in the candid lay assessment of the U.S. Probation Office, "a 'moment of weakness' in which he could not resist the opportunity to obtain, and use, illicit substances." (PSR 12/13/11 at 21). *Cf.* Ernest Drucker, *A Plague of Prisons: The Epidemiology of Mass Incarceration in America* 116 (2011) (noting that prison "tends to worsen the preexisting condition, especially in the case of addiction" and that "drug use often continues throughout prison stays").

### C. Opioid Dependence and Relapse are not Weaknesses of Character or Will.

A straightforward conclusion can be drawn from the facts that opioid use can permanently alter brain chemistry and that opioid relapse is an inextricable feature of opioid dependence. **Opioid dependence and relapse are "not a weakness of character or will."** World Health Organization & United Nations Office on Drugs & Crime et al., *Substitution Maintenance Therapy in the Management of Opioid Dependence and HIV/AIDS Prevention* 7 (2004). Relapse – which Mr. Douglas has experienced at least twice since his arrest – typically does not, in and of itself, reflect a lack of will or an absence of desire to "get clean."

Mr. Douglas' sentencing court viewed the situation differently. The court correctly characterized Mr. Douglas' conduct as "totally reckless" in "pursuit of drugs," "destructive," "non-compliant" (Tr. 12/21/11 at 4), "wanton[]," "flagrant[]," "manipulative," *id*. at 18, "dangerous" and "deceitful," *id*. at 57-58. But the court was wrong to distance this litany of bad behavior from Mr. Douglas' medical condition, as it did when it declared that Mr. Douglas:

> "has . . . by all measures . . . been continuously reckless, disruptive and non-compliant ***notwithstanding*** [his] co-occurring addictions and mental health issues, which are no doubt serious."

*Id*. at 4 (emphasis added).

The word "notwithstanding" is telling. As used here, it separates Mr. Douglas' brain related "disorder", Kleber, *supra*, at 2304, from his actions, and

allows the court to attribute Mr. Douglas' conduct not to his "no doubt serious" (albeit untreated) medical condition but to a flawed character and/or weak will.

The court's frustration with Mr. Douglas' behavior is understandable. It is the attitude of a boss or co-worker who can no longer countenance the absences, screw-ups, fabrications and excuses of an employee whose life is spinning out of control because of an addiction to drugs; it is the sentiment of a parent at the end of her rope when a child has, for the umpteenth time, squandered an opportunity or inflicted deep hurt in search of a "high."

Medically speaking, however, there is no "notwithstanding." Research and clinical experience make clear that reckless, deceitful, manipulative conduct cannot be severed from the chronic, untreated medical condition of opioid dependence. The behavior is the byproduct of the addiction. While the court's response – a 54-month prison sentence – is understandable, it is not reasonable and *not defensible*.

## II. OPIOID DEPENDENCE IS HIGHLY TREATABLE; AND WITHHOLDING TREATMENT RISKS SERIOUS HEALTH CONSEQUENCES.

Opioid dependence is a highly treatable medical disorder. A fundamental element of substance abuse treatment, generally, is a thorough clinical and comprehensive needs assessments to establish a patient's baseline level of functioning, to identify the type and severity of the medical, psychosocial and other problems confronting the patient, and to develop an appropriate treatment

plan. Treatment itself can comprise one or several (often overlapping) modalities, depending on the needs and preferences of the patient. For example, individual psychotherapy, group therapy, family therapy, cognitive behavioral therapy, therapeutic communities, contingency management interventions and self-help programs all have a place in the treatment of substance use disorders. *See generally* Lowinson, *supra*. When done well, counseling can assuage feelings of hopelessness that often afflict people with addictions (especially those who are incarcerated), tap into unrecognized personal strengths, resurrect lost meaning and purpose, and motivate him or her to start down – and continue on – the long and often circuitous path to recovery.

In addition to these non-pharmacological interventions, various substance abuse disorders, and opioid dependence in particular, respond well to medication. Vincent P. Dole & Marie E. Nyswander, *Heroin Addiction – A Metabolic Disease*, 120 Arch. Internal Med. 19 (1967). Just as the chronic and persistent (and relapsing) medical conditions of diabetes, asthma, hypertension, depression, and schizophrenia can be treated and stabilized with medications, opioid-dependent persons can be treated and stabilized with opioid substitution therapies, typically involving either the agonist methadone or the partial agonist buprenorphine (of which Suboxone, a chemical variant, was used by Mr. Douglas in prison). Laura Amato et al., *An Overview of Systematic Reviews of the Effectiveness of Opiate*

*Maintenance Therapies: Available Evidence to Inform Clinical Practice and Research, 28 J. Subst. Abuse Treatment* 321, 322 (2005); Thomas McLellan et al., *Drug Dependence, A Chronic Medical Illness*, 284 J. Am. Med. Ass'n 1689 (2000). *See generally* Subst. Abuse & Mental Health Servs. Admin & Ctr. for Subst. Abuse Treatment, *Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs, Treatment Improvement Protocol Series, No. 43* (2005).

Unlike heroin, methadone and buprenorphine have more gradual onsets of action, relatively long durations (24 to 36 hours for methadone and even longer for buprenorphine), and do not produce euphoric effects and respiratory depression in proper dosages. This means that when used as medically indicated, methadone and buprenorphine do for the brain functioning of an opioid dependent person what insulin does for the blood sugar level of the diabetic: they stabilize the person's chemistry so that he or she can function autonomously and effectively without producing significant side-effects.[4]

The efficacy of medication-assisted treatment for opioid dependence is "so well supported by so many years of data across so many different treatment

[4] *See* Herman Joseph & Sharon Stancliff, *Methadone Maintenance Treatment: A Review of Historical and Clinical Issues*, 67 Mount Sinai J. Med. 347, 356-357 (2000) (noting persons receiving opioid maintenance treatment "are employed in a wide variety of jobs and "can perform any job for which they are qualified.").

settings that its cost-effectiveness and ability to save lives are beyond dispute," Lee, *supra*, at 1.[5]

While opioid dependence is highly treatable, the consequences of failing to provide treatment are often calamitous. Opioid dependence generally, and heroin dependence in particular, are "associated with increased risk of premature death mainly resulting from drug overdose . . . blood borne viral infections that are transmitted by sharing contaminated injecting equipment, as well as property crime and increased incarceration rates." Emma Warren et al., *Value for Money in Drug Treatment: Economic Evaluation of Prison Methadone*, 84 Drug & Alc. Dependence 160 (2006).

The risk of death is hard to overstate. The mortality rate for regular heroin users is 13 times greater than for the general population. Amato, *supra*, at 326.

[5] Methadone, in particular, is distinguished as "the most widely studied medication and treatment for any disease in the world," Am. Ass'n. for the Treatment of Opioid Dependence, *Drug Court Fact Sheet: Methadone Maintenance and other Pharmacotherapeutic Interventions in the Treatment of Opioid Dependence*, and is considered "one of the most efficacious and cost-effective interventions in all of modern medicine." Andrew J. Saxon & Karen Miotto, *Methadone Maintenance*, in Lowinson, *supra*, at 419. It is endorsed by virtually all the leading domestic and international medical and scientific bodies, including the World Health Organization, the Institute of Medicine of the National Academy of Sciences, and the American Medical Association. *See* Bruce G. Trigg & Samuel L. Dickman, *Medication-Assisted Therapy for Opioid-Dependent Incarcerated Populations in New Mexico*, 33 Substance Abuse, 76, 77 (2012).

*See also*, *id*. (putting the cumulative risk for death among heroin users at 29% by age 40 and 53% by age 50).

Many of the risks associated with opioid dependence are amplified in prison and jail, not least because "[u]ntreated [opioid]-addicted persons are at risk of engaging in drug-seeking behaviors during their incarceration," Trigg, *supra*, at 77. Moreover, the risk of relapse, and especially overdose, continues and is heightened upon release from incarceration. *See* Chandler, *supra*, at 184 ("…many drug-addicted individuals rapidly return to drug use following long periods of abstinence during incarceration…"); Michael S. Gordon et al., *A Randomized Clinical Trial of Methadone Maintenance for Prisoners: Findings at 6 Months Post-Release*, 103 Addiction 1333 (2008) ("[R]apid relapse to opioid (primarily heroin) addiction following incarceration is a continuing, world-wide problem.").

The numbers are grim. "Approximately 55% of individuals with a history of substance use will relapse to substance use within 1 month of release from incarceration," Nunn, *supra*, at 84. And the implications for health are bleak. Centers for Disease Control, *Methadone Maintenance Treatment* 1 (February 2002) (reporting that many of the "estimated . . . 5,000 to 10,000 injection opioid users who die of drug overdoses every year" "are involved with the criminal justice system.").

For this reason, *Amici* emphasize not only that inmates should be properly assessed for their substance abuse treatment needs and offered appropriate treatment and counseling while incarcerated, but that corrections staff help offenders secure appropriate treatment and counseling in the community *before release* so that the transition from incarceration is accompanied by unbroken access to critical support and medications. *See* Am. Soc'y. Addiction Med., *Public Policy Statement on Treatment for Prisoners with Addiction to Alcohol or Other Drugs* (2000).

## III. THOUGH A LARGE PERCENTAGE OF INMATES SUFFER FROM SUBSTANCE ABUSE, FEW RECEIVE ADEQUATE TREATMENT AND MANY CONTINUE TO USE DRUGS BEHIND BARS.

"Individuals with a history of heroin-dependence are overrepresented in American correctional facilities." Carmen E. Albizu-García et al., *Assessing Need for Medication-Assisted Treatment for Opioid-Dependent Prison Inmates*, 33 Substance Abuse 60 (2012) (noting that 12-15% of the more than two million adults incarcerated in the U.S. have pre-incarceration histories of heroin addiction, compared to an estimated lifetime prevalence of heroin use of 1.5% among adults in the general U.S. population).

"State and Federal prisoners [are] more likely than other adults in the U.S. resident population to meet the criteria for drug dependence or abuse," Christopher

J. Mumola & Jennifer C. Karberg, U.S. Dept. of Justice, Office of Justice Programs, *Drug Use and Dependence, State and Federal Prisoners*, 7 (Oct 2006, rev. 2007), and opioid disorders, in particular "are among the most prevalent health conditions in large jail and prison systems." Lee, *supra*, at 2.

Nevertheless, drug treatment is scarce – and drug use is common – in U.S. correctional facilities. As a general matter, fewer than 17% of incarcerated offenders with drug problems receive professional treatment while in prison. Mumola, *supra*, at 9.

The situation is even bleaker when it comes to providing effective treatment for opioid-dependent inmates. "[M]ost heroin-dependent people do not receive [drug abuse] treatment while incarcerated or upon release, contributing to the vicious cycle of relapse, recidivism and incarceration." Gordon, *supra*, at 1333. While comprehensive assessments and skilled counseling tailored to inmate needs are hard to come by, medication-assisted treatments are in particularly short supply. Indeed, "opioid agonist treatment programs have rarely been implemented in jail and prison settings in the United States," *id.* at 1334. This scarcity persists "despite substantial evidence of [their] effectiveness in reducing opioid . . . use, criminal behavior and arrest . . . ." Peter D. Friedman et al., *Medication-Assisted Treatment in Criminal Justice Agencies: Availability, Barriers and Intentions*, 33 Substance Abuse 9, 10 (2012).

By contrast, "a number of other countries have routinely offered methadone maintenance treatment in prisons and jails." Timothy W. Kinlock et al., *A Randomized Clinical Trial of Methadone Maintenance for Prisoners*, 37 J. Subst. Abuse Treatment 277, 278 (2009). *See also* Human Rights Watch, *supra*, at 14 (reporting that prisons in at least 33 countries have methadone programs); World Health Organization, *Guidelines for the Psychosocially Assisted Pharmacological Treatment of Opioid Dependence*, 11 (2009) (noting the efficacy of opioid agonist maintenance treatment is "well-documented" in the prison setting).[6] Multiple important benefits accrue when prisons provide such treatment: "Offering inmates pharmacological treatment and counseling for opiate dependence prior to release *decreases the likelihood of drug relapse, overdose, recidivism, and HIV risk behaviors* . . . ." Nunn, *supra*, at 84 (emphasis added).

Though only a handful of U.S. jails and prisons employ opioid maintenance therapies, their results have been positive. *See* Nat'l Ass'n of State Alc & Drug Abuse Dir., Issue Brief 13-17, *Methadone Maintenance Treatment and the Criminal Justice System* (April 2006) (describing methadone maintenance in six U.S. correctional settings); Andie Harris et al., *Rate of Community Methadone Treatment Reporting at Jail Reentry Following a Methadone Increased Dose*

[6] *See also* Kinlock, *supra*, at 283 (". . . studies and experiences . . . indicate that it is quite feasible and effective to provide opioid agonist therapy to inmates with heroin addiction histories."); Warren, *supra*, at 164 (noting fiscal savings of in-prison opioid treatment).

*Quality Improvement Effort*, 33 Substance Abuse 70, 71 (2012) (describing the successful Key Extended Entry Program ("KEEP") begun in 1987, which provides methadone to 4,000 inmates in Rikers Island jail.).

For these reasons, major public health and medical organizations, including the National Institutes of Health, the American Medical Association, and the National Institute on Drug Abuse, all encourage the use of medication-assisted therapies like methadone to treat incarcerated persons who suffer from opioid dependence. Trigg, *supra*, at 77. *See, e.g.*, Nat'l Inst. of Health, *Effective Treatment of Opiate Addiction*, 15 NIH Consensus Statement 6 (Nov 17-19, 1997) (U.S. Department of Health and Human Services stating "[a]ll opiate-dependent persons under legal supervision should have access to methadone maintenance therapy . . . and the U.S. Department of Justice should take the necessary steps to implement this recommendation.")[7]

Indeed, "[p]risons and jails provide an important opportunity for delivering substance abuse treatment . . .," Nancy Mahon, *Treatment in Prisons and Jails*, in Joyce H. Lowinson, et al., *Substance Abuse, A Comprehensive Textbook*, 455, 456 3d ed. (1997), and "[n]ot treating a drug-abusing offender is a missed opportunity

[7] *See also*, Nat'l Comm'n. on Correctional Health Care & Subst. Abuse & Mental Health Servs. Admin., *Straight Talk on Opioid Treatment in Corrections* (encouraging corrections facilities to establish opioid treatment programs); Correctional Ass'n of New York, *Treatment Behind Bars*: *Substance Abuse Treatment in New York Prisons 2007-2010*, 145 (2011) (recommending that New York correctional facilities incorporate medication-assisted therapy).

to simultaneously improve both public health and safety." Chandler, *supra*, at 183. *See also* Nat'l Inst. on Drug Abuse *Principles of Drug Addiction Treatment* (1999) (same).

The acute shortage of drug treatment behind bars plus the prevalence of inmates with serious drug use histories renders rather fanciful the district court's "expectation" that persons would not be able to obtain drugs in prison, (Tr. 10/20/11 at 3). As the U.S. Probation Office candidly admitted in Mr. Douglas' case, "unfortunately, [drug use is] not uncommon in institutional settings . . ." (PSR 12/13/11 at 21.) Research bears out the Probation Office's experience. David W. Seal et al., *Substance Use and Sexual Behavior During Incarceration Among 18-29 year-old Men*, 12 AIDS Behav. 27 (2008) ("prisoners often engage in substance use during incarceration."); Correctional Ass'n of New York, *supra*, at 141 (reporting that 42% of survey respondents from New York state prisons stated that contraband drug use was *very common*, and that only 14% of inmates said drug use in prison was *very rare* or nonexistent) (emphases in original).

Despite the myriad benefits of substance abuse treatment and counseling for improving health and reducing criminal behavior, the proven track record of medication-assisted treatments such as methadone in addressing opioid dependence (including among inmates), and the sustained calls by medical and corrections experts for evidence-based drug treatment and counseling to be made

more widely available in American correctional facilities, the U.S. falls woefully short in providing effective treatment to its incarcerated population, not least its opioid-dependent inmates. The "large disconnect . . . between addiction research and the treatment of addiction . . . within the criminal justice system," Chandler, *supra*, at 183, contravenes sound medical practice and finds no basis in bureaucratic necessity or institutional safety.

## IV. THE IMPOSITION OF INCARCERATION SANCTIONS FOR OPIOID RELAPSE SERVES NO PENOLOGICAL PURPOSE.

The 54-month prison sentence fashioned by the district court for Mr. Douglas' opioid drug transgressions fails to achieve any of the purposes of punishment –retribution, deterrence/incapacitation, and rehabilitation – that undergird the Federal Sentencing Guidelines. *See* 18 U.S.C. § 3551(a); *Tapia v. U.S.*, 131 S. Ct. 2382, 2387 (2011).

Under the retributive principal of justice punishment should be scaled to the offender's culpability and the harm caused. The preceding discussion, however, makes apparent that the opioid- seeking and using behavior of an opioid dependent person, particularly when the person has not been afforded adequate treatment and is subjected to several stressors, is not fully "culpable" behavior as traditionally conceived warranting the punitive response of the court below; rather, it is a core symptom of a serious medical condition over which the sufferer has substantially

*diminished* control. The principal harm caused by Mr. Douglas' possession of opioids, including Suboxone, a drug used to *treat* heroin-dependence, fell not on a third party but on Mr. Douglas himself, whose drug relapse risked serious health consequences. In sum, principles of retribution do not support the severe sentence meted out by the district court for Mr. Douglas' behavior.

Nor can the sentence be justified as a likely deterrent to future such conduct. Under deterrence theory, appropriate sentences are those that most effectively lessen the likelihood that future such crimes will be committed by the particular offender (specific deterrence) or other potential offenders (general deterrence). But as described above, the medical condition of opioid dependence does not lend itself to deterrence principles. In the argot of behavioral science, persons grappling with addiction "are gripped by unusual emotional states, they compulsively have urges to abuse and they are remarkably unencumbered by the memory of negative consequences of drug-taking." Koob, *supra*, at 98.

In other words, the very nature of opioid addiction is that it confounds even highly punitive attempts to deter opioid drug-seeking and taking. *See also* Chandler, *supra*, at 186 ("Addiction . . . decreases sensitivity in the reward and motivational circuits, which modulate response to . . . negative reinforcers," allowing "one [to] . . . predict that . . . an addicted person's motivation to abstain

from drug use [is reduced] because . . . negative consequences (e.g., incarceration) are less salient.").

Justice Douglas touched on this futility over one-half century ago, when he observed that the "'belief that fear of punishment is a vital factor in deterring an addict from using drugs rests upon a superficial view of the drug addiction process and the nature of drug addiction. . . .'" *Robinson v. California*, 370 U.S. 660, 675 (1962) (Douglas, J., concurring) (citation omitted).

Rehabilitation of the offender is a final purpose of punishment. But as discussed herein, the imposition of punitive sanctions, especially incarceration, for opioid relapse is widely regarded by medical and corrections experts as antithetical to rehabilitation, as such sanctions typically delay the provision of critical treatment, subject the offender to multiple additional stressors that can trigger drug relapse, and increase the attendant risks of drug overdose and injection-related illnesses. To consider the court's sentence "rehabilitative" strains grammar.

In failing to advance any of the traditional purposes of punishment, the court's 54-month sentence for possession of Suboxone and heroin comes perilously close to making "a criminal offense of … a disease." *Robinson*, 370 U.S. at 666, a practice that American jurisprudence considers abhorrent. *Cf. Robinson*, 370 U.S. at 669-670 (Douglas, J., concurring) (comparing the treatment of drug-dependent persons by the criminal justice system to the "chamber of horrors" once

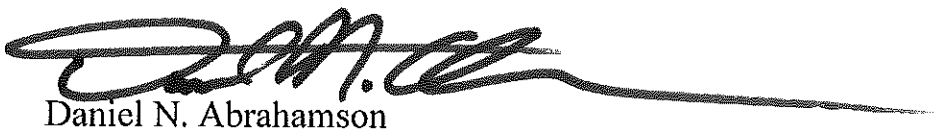
inflicted on the mentally ill by the medical profession); *Linder v. U.S.*, 268 U.S. 5 (1925) (describing "addicts" as "proper subjects of . . . treatment" and reversing conviction of a physician for prescribing opioids to treat an opioid-dependent patient). And, in disregarding the substantial body of scientific evidence regarding the biology of opioid dependence, the ability to medically manage this condition, and the failure of the prison system to offer an appropriate treatment intervention, the court, in imposing its sentence, effectively silenced the "productive dialogue" between law and medicine, *Powell v. Texas*, 392 U.S. 514, 537 (1968). *See also id*. at 535-536 (cautioning against "cast[ing] aside the centuries-long evolution of the collection of interlocking and overlapping concepts which the common law has utilized to assess the moral accountability of an individual for his antisocial deeds.") (citation omitted).

The medical profession is today prepared to declare that this sentence "simply offends humanity," 3 E. Coke, Institutes 6 (6th ed. 1680). The legal profession should do the same.

## Conclusion

For the reasons stated above, *Amici* respectfully request that this Court set aside the 54-month sentence imposed by the court below upon Mr. Douglas.

Respectfully submitted,



Daniel N. Abrahamson
Theshia Naidoo
Tamar Todd
Drug Policy Alliance
918 Parker St., Bldg A21
Berkeley, CA 94710
(510) 229-5211

Counsel for *Amici Curiae*

## CERTIFICATE OF COMPLIANCE WITH RULE 32(a)

Pursuant to Federal Rule of Appellate Procedure 32(a)(7)(C), I hereby certify that the foregoing brief was produced using the Times New Roman 14-point font and contains 6,060 words, excluding the parts of the brief exempted under Federal Rule of Appellate Procedure 32(a)(7)(B)(iii).

Daniel N. Abrahamson
Counsel for *Amici Curiae*

## DESCRIPTION OF *AMICI CURIAE*

*Amicus Curiae* American Academy of Addiction Psychiatry ("AAAP") is an international professional membership organization founded in 1985 with approximately 1,000 members consisting of psychiatrists working with addiction, faculty at various academic institutions, medical students, residents and fellows, and related health professionals making a contribution to the field of addiction psychiatry. AAAP dedicates itself to promoting accessibility to the highest quality treatment for all who need it, promoting excellence in clinical practice in addiction psychiatry, educating the public and influencing public policy regarding addictive illness, providing continuing education for addiction professionals, disseminating new information in the field of addiction psychiatry, and encouraging research on the etiology, prevention, identification and treatment of addiction.

*Amicus Curiae* American Association for the Treatment of Opioid Dependence ("AATOD") was founded in 1984 to enhance the quality of patient care in treatment programs by promoting the growth and development of comprehensive opioid treatment services throughout the United States. AATOD is an organization of treatment providers joined together to support the legitimacy of methadone maintenance treatment for opioid dependence and to increase the availability of comprehensive treatment services to people in need of care. AATOD works with federal agencies and state substance abuse authorities concerning opioid treatment policy. AATOD developed the State Methadone Guidelines (1993) in conjunction with the American Society of Addiction Medicine (ASAM) and the Center for Substance Abuse Treatment (CSAT). AATOD has been working with partners in the criminal justice system for the past ten years. Among other goals, AATOD encourages appropriate federal agencies to increase access to federally approved medications to treat chronic opioid addiction through drug courts, correctional facilities, and through probation and parole officers.

*Amicus Curiae* California Society of Addiction Medicine ("CSAM") is a specialty society of nearly 400 physicians and a State Chapter of the American Society of Addiction Medicine (ASAM). CSAM's mission is to advance the treatment of alcoholism and other addictions through education of physicians, physicians-in-training, and other health professionals. Additionally, CSAM

promotes research, prevention, and implementation of evidence-based treatment. CSAM has long advocated for an effective, health-centered approach to addictive disease that is guided by scientific principles and evidence-based practices. In the context of prisons and jails, CSAM believes that persons in the criminal justice system must be provided with appropriate medical and psychiatric services, including adequate diagnosis, counseling and treatment of substance abuse and addiction, as well as co-occurring mental health disorders. CSAM supports methadone, buprenorphine and other medication-assisted treatments for opioid dependence, including for persons behind bars and on supervised release.

*Amicus Curiae* Center for Prisoner Health and Human Rights ("the Center") seeks to advance the health and human rights of criminal justice populations through research, education, and advocacy. The Center is a collaboration of physicians and other health care professionals, researchers and others from a variety of academic disciplines and institutions who are dedicated to shaping the interdisciplinary response to the public health and human rights crisis caused by the epidemic of incarceration and recidivism in America's criminal justice system. Harnessing the passion, skills, and training of these individuals, the Center educates health professionals, students, policy and opinion makers and the general public. The Center also supports world-class research on health issues affecting criminal justice populations and helps translate this research into sound, evidence-based policies and practices.

*Amicus Curiae* Exponents is a racial minority-led, community-based organization in New York City dedicated to improving the quality of life of individuals affected by drug addiction, incarceration and HIV/AIDS. Exponent's programs are designed to support successful life transitions through engagement in services which ignite hope and promote awareness. Its activities gradually move individuals along a progressive path of life stabilization while fostering a sense of community and individual responsibility. For more than 20 years, Exponents has had unprecedented success in voluntarily engaging and retaining New York City substance users and their families in therapeutic services. Through strength-based, holistic, non-coercive education and training programs, Exponents helps reduce relapse to addictive behavior and recidivism, and prevents undo strain on our health care systems by helping program participants to self-manage their chronic health condition and reenter society after incarceration.

*Amicus Curiae* International Doctors for Healthy Drug Policy ("IDHDP") is a network of medical physicians who share expertise and good practice in reducing the health, social and economic harms of people who use drugs. IDHDP helps doctors advocate for changes in harmful drug policies and promote harm reduction and healthy drug policies based on evidence, human rights and compassion. IDHDP also offers support to doctors in their home countries or regions by providing a forum for doctors to seek and get help from experienced colleagues.

*Amicus Curiae* The Legal Action Center ("LAC") is a nonprofit law firm and policy organization, with offices in New York and Washington, D.C., focusing on a wide variety of legal issues of concern to persons in recovery from, or being treated for, alcohol or drug dependence and the prevention/treatment communities which serve them. LAC has published widely and provided public and professional seminars about the need to improve access to and remove stigma from medication-assisted therapies. LAC believes that the long-standing practice of American criminal justice institutions of denying access to such therapies has devastating consequences, including unnecessary incarceration, increased spread of HIV, hepatitis and other infectious diseases, and drug overdose morbidity and mortality.

*Amicus Curiae* National Alliance for Medication Assisted Recovery ("NAMA-Recovery") is an organization composed of medication assisted treatment patients and health care professionals who support quality opiate agonist treatment. NAMA-Recovery has thousands of members worldwide with a network of international affiliated organizations and chapters in many regions of the United States. NAMA-recovery's goals are to promote quality methadone maintenance treatment as the most effective modality for the treatment of opiate dependence, to eliminate discrimination toward methadone patients, to create a more positive image about methadone maintenance treatment, to help preserve patients' dignity and their rights, to make treatment available on demand to every person who needs it, and to empower methadone patients with a strong public voice.

*Amicus Curiae* New York Society of Addiction Medicine ("NYSAM"), a State Chapter of the American Society of Addiction Medicine, is an organization of physicians from all medical specialties dedicated to understanding and preventing addiction problems, improving addiction treatment, and promoting

research and education. NYSAM's members regularly gather together, share their experience and expertise, associate with noted researchers in addiction medicine, and organize themselves to contribute to effective solutions to addiction problems for their communities and patients. NYSAM does not have an official policy position regarding the provision of opioid-substitution treatment generally, or methadone/buprenorphine specifically, to opioid-dependent persons incarcerated in prison. There are divided opinions with many favoring such treatment for people with short sentences or prior to release provided they can receive such medications after release. Some members favor long term agonist treatment during an offender's entire sentence, but this is a complex issue and not something that NYSAM's membership has formally discussed. Nevertheless, NYSAM is committed to providing appropriate evidence-based treatment under the supervision of qualified treatment professionals for persons suffering from substance abuse wherever they reside, and believes, at the very least, that everyone who is in prison for a drug-related offense must be offered counseling soon after entering prison and offered support and hope—regardless of whether the circumstances also justify the offer of medications.

*Amicus Curiae* Osborne Association ("Osborne") is a New York nonprofit organization established more than 80 years ago by Thomas Mott Osborne, who was Warden of Sing Sing prison in the early 1900's. Osborne serves 6,500 people a year, through a wide range of prevention, treatment, vocational and family services for currently and previously incarcerated individuals and their children and families. Osborne operates a licensed substance abuse treatment program that serves as an alternative to incarceration for men and women whose criminal behavior is related to their addiction to illicit drugs. Osborne also operates programs in 10 prisons and jails. Osborne is well aware of the pervasive nature and availability of illicit drugs and drug paraphernalia in every secure facility. Osborne believes that to incarcerate a person with a known history of addiction without access to treatment contravenes accepted principles of medicine, endangers health, and serves no penal purpose.

*Amicus Curiae* Peter Banys, MD, MSc, is the former Director of Substance Abuse Programs at the San Francisco VA Medical Center and the VA/University of California, San Francisco Medical Center's Substance Abuse Fellowship for Physicians. Dr. Banys is a past president of the California Society of Addiction

Medicine and a member of the Executive Board of the American Society of Addiction Medicine. He is active in the NIDA-sponsored clinical research centers and, since 2006, has been active in increasing access to and delivery of methadone maintenance treatment in Vietnam.

*Amicus Curiae* Ernest Drucker, MD, is Professor of Epidemiology and Social Medicine and Professor of Psychiatry at Montefiore Medical Center/Albert Einstein College of Medicine in New York City. His research examines AIDS, drug use, and drug policy in the US and abroad. Dr. Drucker was founding Director (from 1970 to 1990) of a 1000-patient drug treatment program in the Bronx, and for the past 15 years has been an NIH-funded researcher of AIDS and drug addiction. He is author of over 100 scientific articles and book chapters and in 2011 published *A Plague of Prisons: The Epidemiology of Mass Incarceration in America*. Dr. Drucker serves as Editor in Chief of the international journals Addiction Research and Theory and the on-line Harm Reduction Journal. Dr. Drucker was a founder of the International Harm Reduction Association and served as Chairman of Doctors of the World / USA (1993-1997).

*Amicus Curiae* Carl Hart, PhD, is an Assistant Professor of Clinical Neuroscience in the Department of Psychiatry and an adjunct faculty member in the Department of Psychology at Columbia University. He is also a Research Scientist in the Division of Substance Abuse at the New York State Psychiatric Institute. He has published widely on various topics pertaining to drug effects and drug addiction.

*Amicus Curiae* Daliah Heller, PhD, MPH, has worked at the intersection of public health and substance use for the past fifteen years in New York City, spanning leadership roles in both the governmental and not-for-profit sectors, including developing and managing community-based programs, conducting epidemiologic research and program evaluation, implementing system-wide initiatives, and analyzing and advancing public policy. Until November 2011, Dr. Heller served for four years as an Assistant Commissioner at the New York City Health Department, responsible for the Bureau of Alcohol and Drug Use Prevention, Care, and Treatment. Dr. Heller currently is a Visiting Scholar, Center for Health Media and Policy and Hunter-Bellevue School of Nursing, City

University of New York (CUNY) where she is promoting opportunities for mainstreaming substance use services in health care and public health systems.

*Amicus Curiae* Herman Joseph, PhD, is a research scientist who for several decades has studied addiction treatment with a particular focus on methadone maintenance therapy. Dr. Joseph helped start the KEEP Program at Riker's Island, the first prison-based methadone program. He also created and ran a methadone clinic for patients on probation or parole. In recognition of his research, publications, program and policy work, he was awarded the Dole-Nyswander Award ("The Marie") and has been acknowledged world-wide for his contributions to the treatment of opioid dependence.

*Amicus Curiae* Joshua Lee, MD, MS, Assistant Professor of Medicine at NYU School of Medicine, is a researcher and clinician focused on addiction and correctional health issues. Since 2005, Dr. Lee has worked on a variety of federal, city, and foundation-funded research focused on substance abuse medical education, buprenorphine and naltrexone therapies for opioid and alcohol dependence, and treatment trials among persons released from NYC jails and state prisons.

*Amicus Curiae* David C. Lewis, MD, is a professor of Medicine and Community Health and the Donald G. Millar Distinguished Professor of Alcohol and Addiction Studies at Brown University. In 1982 he founded the Center on Alcohol and Addiction Studies, which he directed until 2000. Dr. Lewis is a fellow of the American College of Physicians and chair of the Professional Advisory Committee, Caron Foundation. He serves on the board of directors of the American Society of Addiction Medicine, the Association for Medical Education and Research in Substance Abuse and is Vice Chairman of the National Council on Alcoholism and Drug Dependence. Dr. Lewis has authored over 400 publications and he is the founding editor of the Brown University Digest of Addiction Theory and Application. Dr. Lewis is the 1997 recipient of the American Medical Association’s Education and Research Foundation Award in recognition of "outstanding contributions and leadership in championing the inclusion of alcohol and other drug problems into the mainstream of medical practice and medical education."

*Amicus Curiae* Joyce H. Lowinson, MD, is a Professor Emerita, Department of Psychiatry and Behavioral Sciences, and Associate Professor Emerita, Department of Epidemiology & Population Health, at the Albert Einstein College of Medicine of Yeshiva University in New York. Dr. Lowinson is co-editor of the standard reference textbook, Lowinson and Ruiz's *Substance Abuse: A Comprehensive Textbook*, now in its fifth edition. Dr. Lowinson serves on the International Certification Advisory Committee of the American Academy of Health Care Providers in the Addictive Disorders, is Trustee of the Institute for Cancer Prevention and is the Medical Co-Chair of the Conferences of Pain Management and Chemical Dependency.

*Amicus Curiae* Robert G. Newman, MD, MPH, has helped implement and direct some of the largest addiction treatment programs in the world. Dr. Newman is President Emeritus of Continuum Health Partners, Inc., a corporation which controls Beth Israel Medical Center, St. Luke's-Roosevelt Hospital Center, The Long Island College Hospital and The New York Eye and Ear Infirmary. Previously, Dr. Newman was President and Chief Executive Officer of the Beth Israel Health Care System overseeing for nearly 20 years a provider network with an annual budget of $2.2 billion and a medical staff of more than 5,200. In January 2001, Dr. Newman was named the first Director of The Baron Edmond de Rothschild Chemical Dependency Institute. Dr. Newman is Professor of Epidemiology and Population Health and Professor of Psychiatry and Behavioral Sciences at the Albert Einstein College of Medicine of Yeshiva University, an adjunct faculty member of the Rockefeller University and is board certified by the American College of Preventive Medicine. Dr. Newman is the past Chairman of the Boards of Directors of both the Healthcare Association of New York State and the Greater New York Hospital Association. As Assistant Commissioner for Addiction Programs in the New York City Department of Public Health, Dr. Newman created the City's Methadone Maintenance and Ambulatory Detoxification Programs. As a physician in the New York prison system, particularly Brooklyn House of Detention for Men, Dr. Newman saw first-hand the need for effective treatment, especially methadone maintenance, in the criminal justice system.

*Amicus Curiae* Beny Primm, MD, founder of the Addiction Research Treatment Center, served until 2011 as its Executive Director for more than 40

years, and as President of Urban Resources Institute (URI) since its creation in 1980. An expert in the field of substance abuse treatment, Dr. Primm received his medical degree from the University of Geneva in Switzerland and has been widely published in numerous medical journals and textbooks. Selected by four U.S. presidents to serve as consultant on a variety of substance abuse and public health issues, Dr. Primm was appointed to the Commission on AIDS by President Ronald Reagan, selected as the first director of the Center for Substance Abuse Treatment of the US Department of health and Human Services by President George Bush, and named U.S. representative on issues of drug addiction and AIDS to the World Health Organization in Geneva.

*Amicus Curiae* Josiah D. Rich, MD, MPH is a Professor of Medicine and Community Health at Brown Medical School and Attending Physician at The Miriam Hospital. Dr. Rich has published over 140 peer-reviewed publications, predominantly in the overlap between infectious diseases, addictions, and incarceration, and conducts numerous federally-funded research projects and interventions in this field

*Amicus Curiae* Sharon Stancliff, MD, is an internationally known expert on opioid overdose prevention and buprenorphine use. Since 1990, Dr. Stancliff has worked with people who use drugs, including providing primary care, drug treatment, HIV care and syringe access in New York State and abroad through affiliations with the AIDS Institute and New York State Department of Health. Dr. Stancliff is board certified in Family Medicine, a Fellow of the American Academy of Family Practice, and certified by the American Board of Addiction Medicine. She has published numerous articles related to harm reduction and drug treatment.

*Amicus Curiae* Bruce Trigg, MD, is the Medical Director of the Public Health Program at the Bernalillo County Metropolitan Detention Center in Albuquerque, New Mexico, a Clinical Assistant Professor, Department of Pediatrics and Associate Professor of Nursing at the University of New Mexico Health Sciences Center and the author of "Opioid Replacement Therapy and Other Harm Reduction Interventions in Jails and Prisons" (2nd ed. 2006). In 2004, Dr. Trigg initiated a public health program, including a publicly funded methadone maintenance program, at the Bernalillo County Jail. Since November 2008, Dr.

Trigg has directed a low-threshold buprenorphine induction program at the Department of Health that actively recruits persons released from jail and prison.