Discovering Addiction

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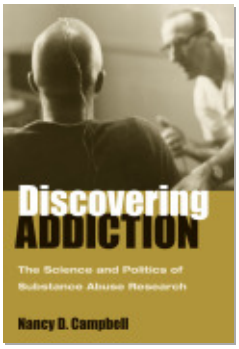

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Conclusion

ARC researcher Abraham Wikler maintained:

> We must be able to give up our time-hallowed but useless quest for "ultimate realities" in exchange for limited, but useful patches of knowledge. But even a patch-work quilt may be beautiful as well as warm. (1952c, 98)

All knowledge is partial, limited, produced from multiple standpoints. Taking more perspectives into account yields more useful knowledge—this is one of the lessons of situated knowledges. Without the "junkie monkeys" of Michigan or the postaddicts of Lexington, researchers would have discovered addiction differently. Scientific concepts and claims emerge as retrospective products of the social process of discovery—they are socially constituted products that cannot be said to pre-exist their discovery in any simple way. Barbara Herrnstein Smith has characterized the process of "discovery" thusly:

> [T]his image of scientific agency and alignment of intentions, actions, and outcomes is clearly the product of retrospective selection and schematization. If one looks at the record of the events leading to the discovery, one sees not a straight line but a "meandering path" that includes false assumptions, vague hunches, unsuccessful experiments, lucky accidents, and, at every point, the contribution of useful ideas, methods, and technical adjustments by many different people. (2005, 54)

"Addiction" evolved from the meandering interplay of multiple methods, subfields, experimental subjects, and objects of knowledge. Like the Wasser-

man test about which Ludwik Fleck wrote in *Genesis and Development of a Scientific Fact,* the concept of "addiction" has been produced and reproduced through a "harmony of illusions" (1979, 28). The task of a sociology of knowledge or "comparative epistemology" is to follow the trail of hazy protoideas as they move from one thought style to another on their way to being "preserved as enduring, rigid structures" (Fleck 1979, 28).

Understanding the tenacious grip exerted by the conceptual frameworks through which "addiction" has been discovered and rediscovered has been one goal of this book. Fleck argued that "evidence conforms to conceptions just as often as conceptions conform to evidence" (1979, 28). If we are amnesiac about the degree to which "addiction" is a social construct in this age of evidence-based medicine, that forgetfulness marks the success of the "creative fictions" to which we subscribe (Fleck 1979, 32). The harmony of illusions does not undermine the lived realities of addiction so much as cast them as historical products subject to change. The ongoing work of the scientific communities concerned with addiction lies in fashioning laboratory logics that better recognize lived realities and cultural differences in ways that can be reconciled with both individual variation and social patterning. Outside the walls of Lexington or the cages of the monkey colony, drug dependence looks and feels different from how it looks and feels in the closed worlds of addiction researchers. Although researchers were and are aware that different forms of addiction are discovered and enacted in the laboratory as opposed to those witnessed outside institutions, their science could not stretch to encompass perspectives that might have given them other insights.

What if knowledge about psychoactive drugs had been produced via logics, practices, and perspectives beyond those related in this book? The science of substance abuse would look different if the research enterprise worked from social contexts in which people use drugs or if it considered how experiences of drug effects vary between social groups and cultural geographies. Drug policy would look different if it was not based on controlling supply, convincing people to abstain from drugs to which they have easy access, and punishing those who do not meet that standard. Policing, prohibition, and abstinence are powerless in the face of drug markets that proliferate availability, decrease price, and increase purity. What if knowledge was produced in order to be more useful to those who use psychoactive drugs?

When the relative of a close friend died from a heroin overdose, my friend peppered me with questions in the struggle to make sense of his death: How long did he suffer? What did he really die from? Was there anything that any-

one could have done? Did his most recent detox have anything to do with his death? Was there something different about his brain, mind, or body? What do we know about what went wrong for him? How do we know it? Who knows it? As I answered as best I could, my mind reeled back to the night that two comatose prisoner patients at Lexington were brought back to life by administration of a narcotic antagonist that can prevent overdose deaths. I found myself asking my own questions: Where was the political will to step in to prevent overdose deaths, slow down transmission of HIV, or reduce other adverse health consequences associated with drug use? How can policy makers be persuaded to craft and implement harm-reducing public health policies? What role can science play in constituting addiction in ways that could redirect the trajectory of U.S. drug policy?

Discovering Addiction was written to jog conversations about drug policy and science beyond venues currently dominated by the criminal justice enterprise, the Drug Enforcement Administration, the FDA, and the pharmaceutical industry. The social privilege of science is such that substance abuse researchers and treatment professionals potentially could offer an untapped force for changing global drug policy regimes. But there are numerous obstacles to alliances between scientific communities, treatment providers, multiple publics, policy makers, and activist communities. These obstacles first need to be addressed before there is much chance of enrolling scientific communities in taking a leadership role to change regulatory regimes, the conduct of clinical trials, the treatment of persons living with addictions, or the outcomes of problematic opiate use.

Science speaks with plural voices concerning mind-shaping and mood-altering drugs, but few people even hear these voices. Ordinary citizens could use better understandings of the scientific claims made about the strengths and weaknesses, promises and failures, and possibilities and shortcomings of the drugs they consume. Disagreement within science and between science and its publics can engender wider conversations about the governance of drugs and the ethical conduct of research. The question is not whether human experimentation is going to take place but how it should be organized and who should participate in it. After a brief theoretical discussion of ethical agency, this conclusion takes up historical lessons for the socially responsible conduct of clinical trials, for making research more relevant to the treatment of those living with drug dependence, and for remaking the trajectory of U.S. drug policy.

ENACTING A SITUATED ETHICS: THE AMBIVALENT SCENE OF AGENCY

Criminalization has been the main response to addiction among persons of color, and poor and working-class people, as well as the mentally ill, a significant proportion of whom now fall under the control of the criminal justice system. The census of the federal narcotics farms at Lexington and Fort Worth declined in direct proportion to the rise of the current treatment infrastructure, scaled up in the 1970s. Despite different administrators, modalities, providers, and addicted persons, drug treatment remains class-stratified, especially in the criminal justice system, where so many now spend "deinstitutionalized" lives. Medicalization remains the province of the insured middle and upper classes. Many of the scientists whose everyday laboratory lives were reenacted in this book lament these structural circumstances but have nonetheless played a part in extending into everyday life Michel Foucault's "carceral continuum" (1979, 303). Insiders pursued research of their choosing, but from an outsider's perspective, addiction science has fitted seamlessly into the disciplinary regimes of drug control. Hence drug policy reformers—along with users, treatment providers, activists, and advocates—rarely see scientists as allies in struggles for social justice.

This is partly because professional research enterprises connected to therapeutic practices typically adopt practices that place them on Foucault's carceral continuum, which "provides a communication between the power of discipline and the power of the law, and extends without interruption from the smallest coercions to the longest penal detention" (1979, 303). Clinicians and scientists became integral to the regime of "examinatory justice" through which disciplinary power was extended over drug consumption (Foucault 1979, 304–5). Professional judgment is integral to the administrative processes through which the carceral continuum works. Foucault maintained that under such conditions, it is "useless to believe in the good or bad consciences of judges, or even of their unconscious," because "it is the economy of power that they exercise, and not that of their scruples or their humanism, that makes them pass 'therapeutic' sentences and recommend 'rehabilitating' periods of prison" (1979, 304). Although scientists involved in drug addiction research are not directly judging drug users, they are certainly making the data on which policy regimes sort out what should happen to addicted persons.

This book has shown that Foucault's thoroughgoing skepticism toward the conscience and scruples of judges does not quite fit this case. Be they scientists

or social workers, doctors or teachers, Public Health Service officers, or prison officials, those who carry out the institutional routines of examinatory justice in democratic societies have some room to follow the dictates of conscience or compassion. Situated ethics are not entirely colonized by institutional constraints, for extralocal rules and norms also govern professional conduct. For considering the lessons of twentieth-century addiction research, rethinking the relationship between ethical agency and social structure is essential. Judith Butler explained in *The Psychic Life of Power: Theories in Subjection* (1997):

> [W]hat is enacted by the subject is enabled but not finally constrained by the prior working of power. Agency exceeds the power by which it is enabled. One might say that the purposes of power are not always the purposes of agency. To the extent that the latter diverge from the former, agency is the assumption of a purpose *unintended* by power, one that could not have been derived logically or historically, that operates in a relationship of contingency and reversal to the power that makes it possible, to which it nevertheless belongs. (15)

Ethical subjectivity cannot be reduced to social role, for subjects find themselves in the predicament, described by Butler, of "how to take an oppositional relationship to power that is, admittedly, implicated in the very power one opposes" (17). Taking up the possibilities present in the ambivalent scene of agency means departing from what you are supposed to do within the prevailing social norms and indigenous moralities that structure the spaces you inhabit—whether you are a prisoner, patient, inmate, addict or postaddict, researcher, clinician, policy maker, treatment provider, or administrator.

Ethics often focuses on the individual actions of autonomous moral agents making singular decisions on the basis of personal integrity. Bringing to life the long-dead laboratories discussed in this book has shown that ethical action is based less on individual scruples or attitudes than on the collective processes that coordinated research, often at a distance. Ethical subjectivity is not atomistic but socially situated and directed from particular social standpoints. By reenacting the ethical dilemmas in which scientists who worked within these material and institutional structures were caught, this account of situated ethics captured the changing social and institutional structures through which addiction has been discovered since the 1920s. Three additional changes have significantly impacted the social relevance of substance abuse research: the changing conduct of clinical trials, therapeutic innovation, and the emergence of harm reduction drug policy.

BROKERING SOCIALLY RESPONSIBLE CLINICAL TRIALS

Bringing to life the laboratory logics that animated twentieth-century substance abuse research allowed me to trace the intellectual and ethical history of the addiction research enterprise. If all knowledge is situated knowledge, how does scientific work taking place inside the walls of a prison-hospital differ from studies conducted in noncaptive populations? Considering this question forced me to confront the limits of analysis, the partiality of all perspectives, and the construction and maintenance of science as social privilege. Bringing more voices to the table will not allay legitimate public fears about the most problematic of scientific practices, such as those at issue in experimentation on unwitting subjects or subjects from whom valid informed consent simply cannot be obtained. However, closing the social distance between the scientific world and the multiple counterpublics who have stakes in scientific arenas would go some way toward building better ways to produce more socially relevant science. Fear about past abuse encourages ongoing vigilance toward the unresolved ethical dilemmas enacted in this book. Believing this to be a healthy state of skepticism, I have here set out not to resolve the practical and ethical dilemmas encountered in my historical research but to bring up unresolved questions about the role of science in social life, the role of human and animal experimentation in science and politics, and the role played by "good" and "bad" drugs in the lives of a significant fraction of the global population.

Technological innovations have reduced the need for human and animal subjects early in the drug development process. But most people believe that large-scale human experimentation remains necessary. In an age when "treatment-naive" subjects have become few and far between, many potential participants are disqualified for having used too many licit or illicit drugs. Despite greater attention to screening, privacy, and informed consent, clinical testing is now conducted with less controlled conditions, human contact, and attention to the experimental situation than was present at the ARC when it was in Lexington. Testing occurs in a commercialized domain with no checks and balances designed to distinguish public interests from commercial interests. The social inequities of clinical trials are produced by a basic, underlying problem: that high levels of risk and scrutiny are trained on the poor, while the relatively rich participate at much lower levels. Yet social and economic class is rarely acknowledged as an important marker within scientific studies, which typically lack a historical, sociological, or even epidemiological approach.

Class and race issues have again come to the forefront due to the revival of the prison research controversy decades after federal prison research was suspended. In 2006, a National Academy of Sciences (NAS) report from the Institute of Medicine (IOM), titled *Ethical Considerations for Research Involving Prisoners,* recommended stepping up federal oversight and allowing federal prisoners to resume participating in the later phases of clinical trials required for the FDA drug approval process (IOM 2006). Ironically, prisoners involved in research lacked protective federal regulations during the massive expansion of the carceral system. The demise of federal prison research ended federal public sector research but allowed private sector and state-level projects to continue in U.S. prisons. Such projects occur outside the federal purview and beyond the reach of institutional review boards. The IOM, advisory to the NAS, suggested remedying this lack of oversight by updating the ethical framework and bringing research in federal penitentiaries under federal oversight.[1]

That a mainstream scientific advisory body was willing to reopen the debate suggests that the stakes have changed since the 1970s. The IOM was asked to do so by the federal Department of Health and Human Services due to claims that the protections put into place at the end of the 1970s were no longer compatible with the current penal system. Since the early 1980s, the United States has witnessed the privatization and expansion of the prison system. Similarly, the scale of human experimentation itself has expanded radically (if unevenly) in terms of race, class, and ethnicity. Although only one in twenty North Americans has participated in a clinical trial, many more people's lives outside the United States have been touched since the new human subjects regime was put into place. Some subjects, such as AIDs activists, have become much more familiar with the limits of informed consent for ensuring fairness and more apt to question the need for placebo-controlled, double-blind studies. Given that federal prisoners no longer participate in risky Phase 1 and 2 studies, it is worth asking who does participate in them. In other words, the race and class politics of prisoner participation today differ from what they were in the 1970s, because pharmaceutical globalization has changed the political playing field.

Nonetheless, press coverage and public response to the 2006 IOM report reverted to the strident and polarized postures of the 1970s. Subjects of the dermatology experiments conducted by the University of Pennsylvania at the Holmesburg Prison in Philadelphia (Hornblum 1998) publicly protested, insisting they were never going back to being research subjects, a stance that made it seem as if all prison research had been completely shut down for the

past thirty years. This was far from the case, yet Holmesburg survivors depicted the IOM as calling for barbaric research to resume in the abusive and exploitive form that had characterized it at Holmesburg. Nothing could be further from the case. The panel simply advised extending human subjects protections to all prisoners, finding "no ethically defensible reason to exclude certain prisoners from most, if not all, human subjects protections afforded by federal regulation" (IOM 2006, 3). Mindful of what the panel called the dark history of prisoner research, the IOM report outlined a new "ethic of collaborative responsibility," in which prisoners themselves would "collaborate" with researchers, administrators, and advocates at every step of the research process. The intemperate response to *Ethical Considerations for Research Involving Prisoners* indicates the confused state of thinking about prison research. Some responded as if the IOM was suggesting a return to the very past abuses it sought to avoid. I am led to wonder whether the underlying assumptions of many stakeholders may now preclude reasonable discussion of the form that biomedical research should take in prisons.

Derived from the principle of justice set out in *The Belmont Report* (National Commission for the Protection of Human Subjects 1978), the IOM panel viewed an "ethic of collaboration" as a way to "cope with the reality that each institution has its own unique conditions" and as a means to facilitate an open research environment (2006, 11). The collaborative working relationship would be brought about by the creation of a new social role, the Prison Research Subject Advocate (PRSA), who would guard against exploitation by monitoring each research project. Like the new social role of the "informed outsider," who was to mediate between current patient-subjects, future subjects, and researchers (Barber et al. 1979, 196), the PRSA role is imagined as a way to overcome the structural unfairness inherent in prison research. Such participatory mechanisms as the PRSA role have become more common since the women's health, civil rights, and HIV/AIDs movements successfully pressured NIH for more say in how science is done (Epstein 1996). Such participation remains optional due to perceptions that it delays research or makes it impossibly conflictual. Even the best participatory bodies do not yet incorporate all elements necessary to achieve socially responsible drug trials. Despite a chorus of critical voices calling for the democratization of science, there have been only modest attempts to do so, and the critical force of these voices has been contained.

In this respect, the 2006 IOM report advocated human subjects protection that is better than what generally prevails in most pharmaceutical research con-

ducted outside prison environments. While I applaud making prisoner advocacy central to the research process, I fear that collaboration cannot be the sole solution to a structural situation in which social inequalities are inherent. Participation can do little to restrain commercial entities from exploiting research subjects, nor can it buffer researchers from commercial pressures as did the NRC committee described in this book. It is not yet clear to me where such buffering capacity might reside inasmuch as the NAS no longer supports specific standing committees. The NAS discontinued sponsorship of CPDD in 1976, just about the same time as the human testing facilities at Lexington were closed (May and Jacobson 1989, 198). This forced CPDD to become a large membership association to survive, and the venerable professional association no longer coordinates the focused research effort it maintained through 1975, although it still runs a small testing program. No other body has emerged to play the role of "honest broker" that CPDD once did through the NAS and the NRC. Yet some entity along the lines of the old NRC committee, which restrained commercial interests in ways that prevented direct conflicts of interest and direct exploitation within the addiction research enterprise, remains necessary to ensure socially responsible clinical trials.

The IOM panel recognized some of the most problematic aspects of prison research: "Justice requires more than the protection of prisoners from harm caused by the research itself. Ethical research carries with it the responsibility to grapple with the fact that potential harm is ubiquitous in everyday prison life" (NAP 2006, 12). Prisons inevitably inflict harm on those punished—that is their purpose, albeit one from which many dissent (see the final section of this conclusion for an alternative policy trajectory more in line with clinical and scientific understandings of drug addiction). The inescapable vulnerability of prison populations is compounded when they contain "people with diseases (addiction, hepatitis, HIV, hypertension, diabetes) that may or may not be treated during imprisonment" (NAP 2006, 12). However, the IOM panel fell short of suggesting that access to health care during incarceration be widened or improved, a goal of the current prison reform movement. Instead, it suggested severely limiting biomedical research in prison, while disallowing riskier Phase 1 and 2 studies altogether, on grounds that safety and efficacy are unknown until these earlier phases are complete. Phase 1 and 2 studies cannot assure that benefits to individual prisoners are commensurate with the risks of participation.

Significantly, the panel said nothing about Phase 3 studies, which are typically expensive and hard for pharmaceutical companies or clinical research

organizations to recruit or enroll subjects in and to complete. Using prisoners to accomplish Phase 3 studies would be seen as attractive by pharmaceutical companies for precisely the same reason that they are hard to complete on the outside: a captive audience is more likely to remain enrolled all the way through to the completion of a large clinical trial. However, the conditions under which the panel suggested federal prison research could resume were similar to those that had arisen in the 1970s: half the subjects had to be non-prisoners, and there had to be a "strongly favorable benefit-risk ratio for the prisoner" (NAP 2006, 10). The panel argued that all human subjects research should be brought under uniform regulations—no matter who the sponsor was or which federal agency had jurisdiction. Lastly, the panel recommended a national database to "bring clarity to the currently murky landscape of research involving prisoners" (NAP 2006, 7). The unsettled nature of the controversy has returned to haunt the present, but to my mind, the debate need not assume its former contours.

One positive development is that the relevant scientific communities and advocacy communities have both become more sophisticated about the stakes involved in biomedical and behavioral research. One of the most vehement opponents from the 1970s, National Prison Project litigator Alvin Bronstein, stated in a *New York Times* article: "[W]ith the help of external review boards that would include a prisoner advocate, I do believe that the potential benefits of biomedical research [in prisons] outweigh the potential risks" (quoted in Urbina 2006). The demise of research in federal prisons that Bronstein helped bring about in the 1970s did not end exploitive experimentation. Indeed, it can be said to have opened a new era of clinical entrepreneurialism in the form of privatized clinical trials.

Phasing out prison research introduced problematic practices that make even the most questionable practices of the Lexington era look relatively benign. Today's clinical trials industry routinely depends on economically disenfranchised people as research subjects (Fisher 2005; Petryna 2006; Shah 2006). Where trials are the only way people can secure access to health care for themselves or family members, there is a coercive element involved. This also applies to physician researchers who conduct trials to keep their practices afloat amid time constraints imposed by managed care and the changing financial structure of medical care delivery. That the context in which clinical trials are conducted often produces injustice, venality, and carelessness is documented in the emerging literature on the clinical trials industry. Mechanisms to counteract these problems are unlikely to come from the pharmaceutical

industry or from the FDA, the existing regulatory body that is so often perceived as "captive" to the industry.

More generally, public institutions have proven incapable of truly governing the pharmaceutical industry by restraining its tendencies to commodify health and health care, expand market share by promoting lifestyle drugs and look-alikes, and exploit intellectual property monopolies. One of the major constraints to genuine monitoring and public oversight has been the industry's successful engineering of an antiregulatory consensus under the mantle of "commercial free speech" and "free markets" (Ronald 2006). If public interests are to prevail, a new regulatory consensus will have to be reached, and the most likely source of that will be a combination of scientific and advocacy-oriented communities. Although participatory mechanisms would be a good start, new and revised institutions are also needed not only to ensure socially responsible clinical trials and postmarketing surveillance but to broker deals to bring "public interest drugs" to market. Although nongovernmental organizations could play "honest broker" roles, they are unlikely to have the authority or resources that it will take to mediate the social conflicts involved in marrying private interests to public goals. Government-funded scientists are caught between a privatized, deregulated industry and a public that constructs them as agents of social control. Despite the dependency of the pharmaceutical industry on the public purse (Goozner 2004), there are political and economic obstacles to inducing private industry to serve public purposes.

The possibility of honest brokering by government is not far-fetched, as is shown by the example of buprenorphine, the sort of drug in which the CDAN/CPDD invested. The FDA finally approved buprenorphine in 2003 for treating drug addiction through office-based medical maintenance therapy. Its promise had first become evident during initial testing at the ARC in Lexington (Jasinski 2003). Lack of coordination between public and private interests delayed development far longer than the notoriously slow FDA approval process. To bring "bupe" to market, NIDA worked to stimulate private interest and gain "orphan drug" status for the drug on behalf of Reckitt and Coleman, the company ultimately responsible for marketing the drug in the United States (Jasinski 2003; Johnson 2005; O'Keefe 2005; Vocci 2005). Buprenorphine was handled as a bellwether drug, and a new nonprofit entity was developed to carry out an extensive (and expensive) postmarketing surveillance program designed to detect and respond to abuse quickly (Cicero 2006). This is one example of the general point that emerged from the history of addiction research: the relatively sensible practices of addiction researchers ought to prompt a full-scale

revisiting of the public priorities involved in clinical trials—before the next "wonder drug" becomes the next public health crisis.

BRIDGING TWO CULTURES: THE GAPS BETWEEN CLINIC AND LABORATORY

What might induce substance abuse researchers to pursue more socially relevant research questions more of the time? Getting this to happen will require improved relationships between researchers, subjects, and treatment providers. Poor relations between the addiction research enterprise and the therapeutic side of Lexington seeded an ongoing struggle between those who treat and those who study. By the end of the twentieth century, this conflict had flowered into a full-blown "two cultures problem." Treatment providers complain that basic research is disengaged from everyday practice. Their calls for a research culture that is more attuned and accountable to addicted persons have yet to result in increased involvement of clients, consumers, or providers in setting research priorities, generating hypotheses, designing studies, or interpreting data. Clinicians adopt whatever methods become available, whereas researchers constantly question these methods in order to build and refine the knowledge base. Research findings introduce uncertainties that treatment providers perceive as threatening. They then dismiss research as irrelevant to practice, in a cycle of blame that pits theory against practice. Who has the political will and cultural capital to democratize research and treatment, much less mediate relations between clinic and laboratory settings? What would it take to de-escalate the two cultures problem?

One policy maker seeking to infuse "evidence-based thinking" through a statewide treatment system expressed frustration that research simply affirms "what treatment providers and people in the self-help groups have known for years, [that] people, places and things are toxic." The policy maker continued:

> They might not have known it's because there's an amygdala section of the brain that's triggering relapse and cues. They knew this intuitively by watching thousands and thousands of addicts and alcoholics. [I]t's very nice that NIDA can now confirm with brain scans what they already know. . . . I've looked right at them and said, "What's your recommendation for what a clinician should do with this knowledge? In an individual session, when do I share with them about their amygdala? Do I do it when they're first coming in the door? Not really abstinent? Do I do it three weeks in? When and how do I use this information about the neurobiological nature of their disease?" They can't tell me that. They look at me and say, "That would be a great study."

As I learned through ethnographic research with practitioners and policy makers, such sentiments are not uncommon. The two cultures problem in the field of the addictions was exacerbated by a federal reorganization in the 1990s that detached service delivery from research.[2]

Entrenched bureaucratic and cultural divisions among the criminal justice system, the mental health system, and the substance abuse research and treatment infrastructure make jails and prisons unlikely scenes for the democratization of research or treatment innovation. Writing this book did not convince me that prisons are therapeutic, rehabilitative, or educative. Lexington stands as an exemplary failure of the ideals of "moral therapy" and the project of normalization. Locking people up is a stupid way to deter them from using drugs, for incarceration does more to amplify and proliferate the harms associated with drug problems. Although I applaud efforts to expand drug treatment in prisons, it is always an exercise of power that can tip over into domination, surveillance, and social control. Research—wherever conducted—can also be a form of domination, especially where researchers have direct financial ties or commercial interests in outcomes. Despite safeguards, new reports arise concerning conflicts of interest, poorly designed studies, and badly executed research stemming from failure to address power relations and differing levels of knowledge and responses to risk. Must research reenact the scene of disenfranchisement and extract "interest" from the poor, the sick, or the vulnerable?

The degree to which a given research project is exploitive depends on how it is conceptualized and carried out, what its goals and objectives are, with whom it is conducted, and what forms of ethical subjectivity are brought to it. When research is conceived as the top-down production of treatment technologies to be transferred or adopted without variation to other settings, there will continue to be a disjunct with treatment providers. Failing to acknowledge the validity of local or indigenous knowledge, technology transfer programs ride roughshod over cultural particularities and prevent full partnerships from forming between the research and treatment communities. What would it mean for treatment providers to scrutinize the basic assumptions on which research paradigms are based? If providers could participate more in the political process of priority setting so central to resource allocation, that might create a greater degree of responsiveness between researchers, clinicians, and subjects.

What would it mean for those most affected by addiction research and treatment to have collaborated in selecting research questions? If, as discussed already, there was an ethic of collaboration involving imprisoned persons, should there not also be one involving treatment practitioners? The priorities

of the research agenda are now set without such participatory design, a fact brought out in the 1997 report *Bridging the Gap between Research and Practice,* cosponsored by NIDA, the federal agency most identified with the research culture, and the Center for Substance Abuse Treatment (CSAT), the federal agency most identified with the treatment culture. The report documented "cultural and attitudinal differences" between clinicians and researchers that were amplified by frustrations in both cultures. Chief among the complaints of clinicians were the "apparent failure of research to provide practical and relevant answers to important clinical and programmatic questions" and the pursuit of a "methodological rigor [that] breeds narrowly defined research that often ignores the complexities of real-world environments" (Substance Abuse and Mental Health Services Administration 2001). Both federal agencies sought to relate differently to their constituencies by building decentralized infrastructures that addressed ongoing tensions between the two cultures: the nationwide regional structure of the Addiction Technology Transfer Center Network; the NIDA Clinical Trials Network, initiated in 2000; and CSAT's Practice Research Network (PRN).

CSAT's effort directly took on the two cultures problem.[3] The Practice Research Network was supposed to demonstrate the "blending" of cultures, easing movement between them by giving providers a stake in making science. Instead, a turf war resulted, in which NIDA took a proprietary approach to what counts as science and "research." The institute declared the treatment agency's use of the term *research* invalid. A federally mandated name change forced the New York State Practice Research Collaborative to become the Practice Improvement Collaborative (PIC). An anonymous participant to a February 27, 2002, PIC meeting complained, "NIDA claims that word [i.e., *research*], [whereas] we're funded by an organization that doesn't have ownership of that word." The regional PRN groups in New York state refused to stop using the high-status word, because they were aware that it was a path to scientific credibility, cultural capital, and social status. Providers felt palpably shut out by the focus on high-end, laboratory-based research modeled on clinical trials.

Soon after this skirmish, however, NIDA began an ongoing series of "blending" conferences and "bridging" initiatives where those who straddle the two cultures meet. Going beyond bridging and blending to truly connect science-as-usual to everyday practice will take a serious rethinking of the federal research infrastructure. Practitioners and researchers navigate different social norms, expectations, and structures, with differing beliefs and commitments. Having explored the tensions that drew the two cultures apart, I want, in clos-

ing, to consider harm reduction as a possible rapprochement that might narrow the social distance between them.

CONSCRIPTING THE CLINICAL GAZE: SHIFTING PUBLIC HEALTH TOWARD HARM REDUCTION

U.S. drug policy is based on two misguided assumptions. The first is that the distinction between "medical" and "nonmedical" use still holds (for a full-scale examination of the collapse, see DeGrandpre 2006). The second is the prohibitionist ideal that abstinence will someday prevail. "A drug-free nation" is a view in which the absence of drugs is idealized in ways that foreclose the space for talking about other approaches to public health and social good. Both scientific and therapeutic projects have been harnessed to these assumptions. The clinical gaze of addiction researchers and treatment providers has been conscripted to serve the projects of criminalization, resistance to medicalization, and prohibition, despite the personal scruples and humane intentions of many inhabitants of the social worlds of substance abuse research and treatment.

The conscription of the clinical gaze has dangerous effects, one of which has been to prevent biomedical researchers and medical personnel from advocating policies aimed at reducing the social harms and negative health consequences of drug use. Even if researchers believe in harm reduction, they must disclaim the label as a "dirty word" in policy circles (Shaw and Campbell forthcoming). Ultimately, a harm reduction approach toward legal pharmaceuticals and illegal drugs offers a pragmatic route beyond the impasse. Drugs can be dangerous if used in dangerous ways, but drugs can be relatively safe if used in situations structured to minimize harm. Where will the political will to restructure U.S. drug policy and public health around a politics of harm reduction come from, if not from the expert communities who deal with drug dependence?

Mundane and tragic, the continuum of problematic drug effects ranges from none to death. Ironically, we live in a world where the risks and benefits of pharmaceutical drugs are promoted and listed as if they are the sole ingredients of good decision making about which drugs to consume and which to stay away from. Yet the risks and benefits of illegal substances are shrouded in sanctioned ignorance. Those who use illegal drugs and (as is becoming most common) those who use legal drugs in illegal ways lack the knowledge to do so safely. The assumption is that withholding such knowledge is good because condoning drug use is bad. Thus when "neurobiology goes awry," many people do not know how to respond, because useful knowledge has been kept from them.

The interviews and archival research that I conducted for this book led me to believe that substance abuse researchers have a crucial role to play in shifting drug policy toward public health and harm reduction. Scientific communities contribute data for drug control decisions, and my microlevel perspective enabled a close look at the production of (to again quote Wikler's comment with which I started this conclusion) "limited, but useful patches of knowledge." Some readers might wish my analysis had hovered above, in search of "ultimate realities" and moral judgments, but this would have been a different book had those been my goals. Instead, the close and constructive engagement I had with the scientific communities involved opened my eyes to what could be a way out of a tragic predicament: drawing scientists and clinicians into the drug policy reform movement by convincing drug policy reformers and prison advocates to start taking them seriously as allies. Effectively contesting the morally judgmental argument that harm reductionists advocate "coddling the sick" or "condoning drug use" requires the cultural authority of science. Researchers should be courted by the drug policy reform movement—rather than being scorned for studying monkeys or rats or prisoners. I state it this way not to equate all research subjects but to indicate how much disdain has been directed toward scientists and research participants themselves by those who construct all experimental subjects as "guinea pigs." If more scientists could be convinced to stop endorsing the impossible dream that prohibition will lead to a drug-free nation, they might help policy makers craft a way beyond the unimaginative polarity of criminalization and medicalization.

Harm reduction offers a metaphor for care and an ethical sensibility "attuned to the play of power" (Schram 2006, 162). An alternative to the idea that abstinence is the only way to live, harm reduction follows from addiction researchers' recognition that addiction is better thought of as a chronic relapsing condition than as something to which individuals can simply say no. Harm reduction focuses on the actual harms that occur as people lead lives filled with pain, boredom, and structural violence. Substance abuse research does not really question why so many people are drawn to self-medicate or what social structures produce "addiction" as a route toward self-definition, for this would mean incorporating the social rather than disqualifying or controlling for it. Short of engaging the ambitious project of asking why so many people turn to drugs when and how they do, modest steps toward reducing harm and expanding access to health care and drug treatment offer the most workable drug policy.

Bringing to life the laboratory logics and indigenous moralities of the

addiction research enterprise has changed my perspective on the social relevance of the sciences of craving, appetite, and addiction; on the definition of ethical conduct; and on the clinical usefulness of the outcomes of basic research. Getting close to the multiple social worlds of drug addiction unsettled my assumptions about what science ought to be and do. Given the pains and pleasures, rewards and punishments integral to research and writing, I hope *Discovering Addiction* provokes readers to question assumptions about drug addicts, drug policy, and the social role of science. I hope that it provides addiction researchers a fuller sense of their history as a community constituted in diversity. Finally, I hope policy reformers, advocates, activists, and policy makers find value and inspiration in realizing that harm reduction and critical public health approaches have a longer and richer history than many imagine.