

## Training the Next Generation of Researchers Dedicated to Improving Health Outcomes for Justice-Involved Populations

The epidemic of mass incarceration is both a cause of and a contributor to racial disparities in the United States.<sup>1</sup> State departments of correction collectively spent \$8.1 billion on health care services in 2015, an estimated one fifth of overall prison expenditures.<sup>2</sup> For many people—particularly people of color without health insurance and inequitable access to health services in the community—incarceration may be a period during which they are more likely to receive health services. However, corrections-based health care is not subject to the same regulations, oversight, and accountability as community-based health care. Information on health care needs and quality also is not readily reported by these systems. Expanding access to high-quality health care for incarcerated people represents a public health opportunity to screen, prevent, diagnose, and treat illnesses. The provision of HIV testing, counseling, prevention, treatment, and care, as well as the delivery of effective treatments for substance use disorders, HCV, and mental health disorders, is especially important given the high rates

of these illnesses among justice-involved populations.

Despite the aforementioned opportunities, health-related research focused on justice-involved populations remains limited to a relatively small number of investigators. According to a study that examined National Institutes of Health (NIH)-funded research projects from 2008 to 2012, fewer than 0.1% of NIH grants focused on justice health research.<sup>3</sup> The authors had several recommendations to increase NIH support of justice health research, including establishing justice-focused training and career development programs for researchers. We performed a 10-year retrospective review of the NIH Research Portfolio Online Reporting Tools Expenditures and Results Tool (RePORTER) in September 2019 and identified only two NIH-funded training programs that have a specific focus on justice-involved populations. These T32- and R25-grant-supported programs are funded by the National Institute on Drug Abuse. Thus, an urgent need exists to expand training in this field of research and to increase the number and capacity of investigators working with justice-involved populations. Directed efforts to expand

training opportunities are needed, particularly for under-represented minority investigators, to increase the number of early career scientists appropriately trained to conduct clinical, behavioral and social science research with these disadvantaged populations. Herein, we summarize important goals and objectives for justice-focused health researchers and provide examples of applied and practical training experiences.

### GOALS AND OBJECTIVES FOR TRAINING PROGRAMS

The box on page S19 outlines eight specific areas of training that are fundamental components of justice-focused research training programs, including curricula on the structure and function of the justice system,

the confluence and epidemiology of incarceration and disease, regulatory requirements and ethical considerations of conducting research among vulnerable populations, and research methodologies that are particularly relevant to justice settings.

### PRACTICAL TRAINING METHODS

The two NIH-funded training programs (5R25DA037190, 5T32DA037801) that focus on justice-involved populations both provide mentored research opportunities through which trainees and junior investigators develop and apply their skills. Both programs also strive to create a team of mentors focused on not only research education but also professional development and career mentoring, essential components to support the advancement of a successful F31, F32, K01, K08, K22, K23, K99/R01, or a comparable career development award application following completion of the training program.

Career mentors impart specific knowledge and

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## TRAINING GOALS AND OBJECTIVES FOR JUSTICE-FOCUSED HEALTH RESEARCHERS

Training Goal	Educational Content
1. History of US incarceration and its relationship to structural racism	Overview: from slavery to mass incarceration Discussion of mass incarceration as a contributor to racial and class-based health disparities
2. Structure and function of the justice system	Structure and management of the justice system, including carceral settings and community supervision Types and characteristics of carceral facilities Movement through the justice system
3. Epidemiology of incarceration and disease	Syndemic of incarceration, substance use, HIV, HCV, mental health disorders, and traumatic stress exposure Chronic diseases treatment and management in carceral settings Aging among justice-involved populations
4. Structure and systems of health care delivery	Models of health care delivery (public, private, academic partnerships) Health entitlements and insurance coverage
5. Effect of incarceration on partners, family members, and communities	Effect on social networks Community-level outcomes
6. Research ethics	Incarcerated people as a protected population US Department of Health and Human Services regulations Local regulatory review
7. Community-based research methods	Community participatory research Community collaborative boards Engaging community stakeholders
8. Implementation science research methods	Effective adaptation and implementation of evidence-based interventions Unique individual, social, and structural barriers to health intervention in justice-focused settings

expertise related to professional skill development. Career mentors can also facilitate professional networking by introducing trainees to influential academic scientists. For example, the R25-funded Lifespan/Brown Criminal Justice Research Training (CJRT) Program on Substance Use and HIV at Brown University convenes a biannual in-person workshop for CJRT scholars, former scholars, faculty mentors, and affiliated faculty, with one of the workshops held in conjunction with the Academic and Health Policy Conference on Correctional Health. One of the great successes of the CJRT program has been the close network of justice-focused investigators

that has been created through the program. In addition to providing opportunities for training, biannual in-person workshops provide an opportunity to interact with scholars from around the United States, creating a nurturing professional network that extends beyond formal CJRT meetings.

Similarly, the T32-funded Training Program on HIV and Substance Use in the Criminal Justice System at Columbia University cosponsors a yearly networking event with all HIV- and substance use-related training programs across the university. This provides an excellent opportunity for networking among the directors, mentors, and trainees. Furthermore,

both of these R25- and T32-funded training programs encourage and support trainee's presentations at conferences that target co-occurring conditions, such as those hosted by the College on Problems of Drug Dependence and the International AIDS Society. Beyond attending specialty conferences for their own training and professional growth, researchers committed to improving health and well-being outcomes for justice-involved populations share their work with the wider scientific community.

Providing a mentored research experience is a key component of justice-focused health training programs and can be supported through pilot funding mechanisms internal to

the training program or available through the host institution. This type of research experience provides trainees with an opportunity to gain a hands-on experience, including study conceptualization and design; development of collaborations with justice and community partners; submission of a research protocol to the institutional review board and addressing any concerns from the institutional review board; implementation of the research protocol in the field or performance of a secondary data analysis; analysis of study results; dissemination of the results at national meetings and in the peer-reviewed literature; and review of feedback from justice and community partners and other relevant stakeholders. Importantly, the research study should be designed to produce preliminary data and findings that directly support and inform future applications for NIH research funding.

## CONCLUSIONS

To address the profound health disparities that are created by mass incarceration in the United States, we must expand the number and capacity of investigators who are conducting research with justice-involved populations. This requires resources to fund multidisciplinary training programs for predoctoral students, postdoctoral researchers, and junior faculty members. Training programs need to incorporate a justice-focused curriculum and deliver applied research experiences to establish emerging and early career investigators on a trajectory toward research independence. **AJPH**

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## CONFLICTS OF INTEREST

The authors have no conflicts of interest to disclose.

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