No. _____

SUPREME COURT OF NORTH CAROLINA

NORTH CAROLINA STATE CONFERENCE OF THE NAACP, DISABILITY RIGHTS NORTH CAROLINA, AMERICAN CIVIL LIBERTIES UNION OF NORTH CAROLINA LEGAL FOUNDATION, ALBERTA ELAINE WHITE, KIM T. CALDWELL, JOHN E. STURDIVANT, SANDARA KAY DOWELL, and CHRISTINA RHODES,

Petitioners,

v.

ROY COOPER, *in his official capacity as Governor of North Carolina*; and ERIK A. HOOKS, *in his official capacity as Secretary of the North Carolina Department of Public Safety*,

Respondents.

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EMERGENCY ORIGINAL PETITION FOR WRIT OF MANDAMUS

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TO THE HONORABLE SUPREME COURT OF NORTH CAROLINA:

Petitioners come to this Court in a time of unprecedented emergency. In a matter of weeks, the COVID-19 pandemic has spread at an alarming rate across the country, leaving thousands of deaths in its wake. Experts tell us the crisis has yet to hit its peak and emphasize that people who are incarcerated are in grave danger.

Already, there are confirmed COVID-19 cases in at least six North Carolina prisons, endangering the lives of people incarcerated and staff who work there. Many incarcerated people are elderly or have serious underlying health conditions, making them particularly vulnerable to COVID-19. The approximately 35,000 adults and 418 youth incarcerated in this state live in close proximity and often unsanitary facilities. They cannot engage in the social distancing that experts and the Governor have ordered the rest of us to undertake in order to prevent the spread of COVID-19. When there is an outbreak, these individuals will be at the mercy of a prison system that is ill-equipped to handle a novel, deadly virus that has overwhelmed healthcare systems across the country. Given these dire circumstances, North Carolina public health experts have urged that "reducing the prison population is a critical measure that must be acted on immediately."[1]

Governor Roy Cooper and Secretary of Public Safety Erik A. Hooks are aware of the gravity of the situation and each have a legal duty to act to protect the people

[1] Letter from Gavin Yamey, MD, MPH, MA, *et al.* to Gov. Cooper (Mar. 26, 2020), EXHIBIT A.

incarcerated in North Carolina's adult and juvenile facilities. Secretary Hooks is under a specific statutory mandate to reduce the prison population "to meet the State's obligations under law." N.C.G.S. §148-4.1(a). Both have the authority to release people from state custody through reprieves, commutations, pardons, and expedited release, and can suspend enforcement of technical probation and parole violations that pull released people back into the state's overcrowded jails and prisons. Yet, Respondents have failed to meaningfully decrease the number of people in Department of Public Safety ("DPS") facilities.

In the face of widespread and avoidable loss of life, Petitioners ask this Court for a writ of mandamus, or in the alternative, an order issued pursuant to its habeas powers or inherent authority, requiring Respondents to exercise their statutory authority to: (1) release statutorily eligible people from prison, particularly the elderly and medically vulnerable; (2) halt efforts to revoke parole, post-supervision release, and probation for all but the most serious violations; and (3) take concrete action to comply with Centers for Disease Control ("CDC") guidelines to protect those who remain behind bars.

PARTIES

1. Petitioner North Carolina State Conference of the NAACP ("NC NAACP") is a nonpartisan, nonprofit organization composed of over 100 branches and 20,000 individual members throughout the state. The fundamental mission of the NC NAACP is the advancement and improvement of the political, civil, educational, social and economic status of minority groups; the elimination of

racial prejudice; the publicizing of adverse effects of racial discrimination; and the initiation of lawful action to secure the elimination of racial bias. The NC NAACP has members who are currently incarcerated, members who have been released from incarceration, and members who are currently on probation or under post-release supervision. The NC NAACP advocates for people who are currently and formerly incarcerated as well as their families and communities, as a disproportionate number of incarcerated individuals in this state are people of color.[2]

2. Petitioner Disability Rights North Carolina ("DRNC") is a North Carolina nonprofit corporation that maintains its principal place of business in Raleigh. DRNC serves as the federally-mandated protection and advocacy (P&A) system for people with disabilities in North Carolina, and is a "person" authorized to seek legal and equitable relief. The federal statutes creating the P&A systems provide that each is authorized to bring "lawsuits in its own right to redress incidents of abuse or neglect, discrimination and other rights violations impacting on individuals" with disabilities. 45 C.F.R. § 1386.25; 42 C.F.R. § 51.6(f). Many people who are incarcerated are people with disabilities, and have been or will be affected by COVID-19 as a result of their continued incarceration

[2] Spearman Aff., EXHIBIT L.

3. Petitioner American Civil Liberties Union of North Carolina Legal Foundation ("ACLU-NCLF") is a private, nonprofit legal organization with its principal office in Raleigh, North Carolina. The mission of ACLU-NCLF is to defend and advance the individual freedoms embodied in the United States Constitution, including the rights of people who are incarcerated. ACLU-NCLF frequently represents incarcerated people in challenges to unconstitutional conditions and inadequate medical treatment.

4. Petitioner Alberta Elaine White is a 66-year-old African-American woman with Type II diabetes living in DPS custody at the Center for Community Transitions in Charlotte. Because of her age and underlying health condition, she is at high risk from COVID-19 infection. Until the pandemic hit, DPS regularly permitted Ms. White to spend time in the community, including at a work-release job in a grocery store. Ms. White's projected release date is November 29, 2020.[3]

5. Petitioner Kim T. Caldwell is a 64-year-old white man who was recently treated for Hepatitis C and tuberculosis and who lives in DPS custody at Dan River Prison Work Farm. Because of his age and underlying health conditions, Mr. Caldwell is at high risk from COVID-19 infection. Mr. Caldwell's projected release date is April 2020.[4]

[3] White Aff., EXHIBIT B.

[4] Caldwell Aff., EXHIBIT C.

6. Petitioner John E. Sturdivant is a 73-year-old African-American man in DPS custody at Pasquotank Correctional Institution in Elizabeth City. He suffers from high blood pressure, has had prostate cancer, and recently had a stroke. Mr. Sturdivant's age and underlying health conditions put him at high risk from COVID-19 infection.[5]

7. Petitioner Sandara Kay Dowell is a 51-year-old white woman in DPS custody at Swannanoa Correctional Center for Women in Black Mountain. She has many health problems, including high blood pressure, asthma, and Chronic Obstructive Pulmonary Disease (COPD). Because of underlying health conditions, Ms. Dowell is at high risk from COVID-19 infection.[6]

8. Petitioner Christina Rhodes is the spouse of Andrew Rhodes, a 38-year-old white man with Hepatitis C who lives in DPS custody at Wilkes Correctional Center. Because of his disease, Mr. Rhodes is at high risk from COVID-19 infection. Ms. Rhodes is scared that her husband may die from the coronavirus.[7]

9. Respondent Roy Cooper is the Governor of the State of North Carolina and pursuant to Art. III, Sec. 5 of the North Carolina Constitution and N.C.G.S.

[5] Sturdivant Aff., EXHIBIT D.

[6] Dowell Aff., EXHIBIT E.

[7] Christina Rhodes Aff., EXHIBIT F.

§147-12 has a duty to "supervise the official conduct of all executive and ministerial officers."

10. Respondent Erik Hooks is the Secretary of the North Carolina Department of Public Safety and as such has a duty to "ensure the safety of the public," N.C.G.S. §143B-601(4), and is statutorily obligated to "reduce the prison population to a more manageable level . . . to meet the State's obligations under law." N.C.G.S. §148-4.1.

STATEMENT OF FACTS

I. The COVID-19 pandemic is an extraordinary public health emergency.

On March 11, 2020, the World Health Organization classified the highly-contagious COVID-19, a respiratory illness caused by the novel coronavirus, as a global pandemic.[8] As of the morning of April 8, 2020, the United States leads the world in COVID-19 cases, with 374,329 confirmed cases of infection,[9] and has a death toll of 12,064 that continues to rise exponentially. In North Carolina, there have been 3,220 total confirmed cases and 50 confirmed deaths from COVID-19.[10]

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[8] World Health Organization ("WHO") Director General Tedros Adhanom Ghebreyesus, Remarks at media briefing on COVID-19 (Mar. 11, 2020), *available at* https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020.

[9] U.S. Centers for Disease Control and Protection ("CDC"), Coronavirus Disease 2019 (COVID-19) Cases in U.S. (April 3, 2020), *available at* https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html.

[10] Jin Wu et al., *Coronavirus in North Carolina: Map and Case Count*, N.Y. TIMES (Apr. 1, 2020)), *available at* https://www.nytimes.com/interactive/2020/us/north-carolina-coronavirus-

Infections are not expected to peak in North Carolina until the end of April.[11]

The state prison system confirmed its first case of COVID-19 of an incarcerated person on April 1, 2020, at the Caledonia minimum-custody facility.[12] This was followed by reports of confirmed COVID-19 cases at Neuse Correctional Institution, Johnston Correctional Institution, Central Prison, Maury Correctional Institution, and Eastern Correctional Institution.[13] Due to the severe shortage in testing, the true scope of COVID-19 infections inside the DPS 55 adult prisons and 11 juvenile detention centers and Youth Development Centers ("YDCs")[14] across the state remains unknown.

COVID-19 can severely damage the lungs and other vital organs, including

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cases.html?action=click&module=COVID&pgtype=Interactive&region=HomepageLink.

[11] WCNC Staff, *Model used by the White House projects the peak of COVID-19 in the Carolinas*, WCNC (April 1, 2020), *available at* https://www.wcnc.com/article/news/health/coronavirus/heres-when-covid-19-could-peak-in-the-carolinas/275-62ed6956-892e-4585-9434-73936bf728ac.

[12] Michael Balsamo & Michael Sisak, *First inmate coronavirus case reported in NC prison*, WRAL (Apr. 1, 2020), *available at* https://www.wral.com/coronavirus/first-inmate-coronavirus-case-reported-in-nc-prison/19038486/#.XoVFLYidSpY.email.

[13] WBTV Web Staff, *Four employees, four offenders in NC prison system test positive for COVID-19*, WBTV (Apr. 2, 2020), *available at* https://www.wbtv.com/2020/04/02/four-employees-found-offenders-nc-prison-system-test-positive-covid-/

[14] Juvenile detention centers are generally pretrial, while YDCs are used to confine youth post-disposition. *See* North Carolina Department of Public Safety, Juvenile Facility Operations Apr. 8, 2020 3:26AM), https://www.ncdps.gov/Juvenile-Justice/Juvenile-Facility-Operations.

the heart and liver, and ultimately cause death. Patients who do not die from serious cases require hospitalization, and may face prolonged recovery periods, including extensive rehabilitation from neurological damage and permanent loss of respiratory capacity. This disease "can kill healthy adults in addition to elderly people with existing health problems."[15] But the fatality rate of this disease increases with age and puts at particular risk those who have underlying health conditions or other disabilities that make them susceptible to COVID-19.

Specifically, people age 65 and over face heightened risks of serious complications or death resulting from COVID-19,[16] as do people of any age who suffer from certain disabilities and underlying medical conditions, including lung disease, heart disease, chronic liver or kidney disease (including hepatitis and dialysis patients), diabetes, epilepsy, hypertension, compromised immune systems (such as from cancer, HIV, or autoimmune disease), blood disorders (including sickle cell disease), inherited metabolic disorders, stroke, developmental delay, and

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[15] Bill Gates, *Responding to Covid-19 – A Once-in-a-Century Pandemic?*, NEW ENG. J. OF MED. (Feb. 28, 2020).

[16] CDC, Coronavirus Disease 2019 (COVID-19), Older Adults, (Apr. 8, 2020, 11:04 AM), https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/older-adults.html. The preliminary mortality rate analyses based on data from the coronavirus outbreak in China showed overall mortality rates by age to be at 1.3 percent for 50-59 year-olds, 3.6 percent for 60-69 year-olds, and 8 percent for 70-79 year-olds. By comparison, the mortality rate for people younger than 50 years old was 0.4% or lower. Chinese Center for Disease Control and Prevention, *The Epidemiological Characteristics of an Outbreak of 2019 Novel Coronavirus Diseases (COVID-19) – China 2020*, 2 CCDC Weekly 8, at 115, Table 1, *available at* http://weekly.chinacdc.cn/en/article/id/e53946e2-c6c4-41e9-9a9b-fea8db1a8f51.

asthma.[17] People who are pregnant may also be at higher risk of developing severe illness from COVID-19.[18] All of these risk factors are compounded for people in prisons, who are often in poorer health and physiologically 10 to 15 years older than their non-incarcerated counterparts.[19]

II. COVID-19 will be a death sentence for many people who are incarcerated.

The novel coronavirus spreads from person to person through respiratory droplets produced when an infected person coughs, sneezes, or speaks, close personal contact, and contact with contaminated surfaces and objects. Spread of the virus can occur even before an infected person exhibits any symptoms, and some people may spread the disease without showing symptoms.[20] There is no vaccine

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[17] The WHO-China Joint Mission Report indicates that the mortality rate was 13.2% for those with cardiovascular disease, 9.2 percent for diabetes, 8.4 percent for hypertension, 8.0 percent for chronic respiratory disease, and 7.6 percent for cancer. World Health Organization, *Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19)* at 12 (Feb. 28, 2020), *available at* https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19- final-report.pdf

[18] *See* The American College of Obstetricians and Gynecologists, *Novel Coronavirus 2019 (COVID-19) Practice Advisory* (March 2020), *available at* https://www.acog.org/clinical/clinical-guidance/practice-advisory/articles/2020/03/novel-coronavirus-2019; CDC, *COVID-19 Pregnancy and Breastfeeding FAQs* (Apr. 3, 2020), https://bit.ly/3bTR8VR.

[19] *See* Kathryn M. Nowotny, MA, *et al.*, *Growing Old Behind Bars: Health Profiles of the Older Male Inmate Population in the United States*, 1 J. AGING & HEALTH 22, 3 (Nov. 17, 2015).

[20] CDC, *How Coronavirus Spreads* (Apr. 1, 2020), https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html.

against COVID-19 and no known medication to treat it. Social distancing (maintaining physical separation of at least six feet from others) and vigilant hygiene, including handwashing and use of alcohol-based hand sanitizers are the only known measures for protection against COVID-19.

To ensure public compliance with these essential prevention practices, Governor Cooper issued a March 14 Executive Order closing all K-12 public schools,[21] and a statewide Stay at Home Order on March 30, instructing North Carolinians to remain at home with limited exceptions.[22] The March 30 Order also banned gatherings of more than ten people and directed everyone to stay at least six feet apart from others.[23] This Order followed orders by several city officials imposing these and additional restrictions to protect the health of people living in densely-populated urban areas.[24]

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[21] Gov. Cooper Exec. Order No. 117 (Mar. 14, 2020), *available at* https://files.nc.gov/governor/documents/files/EO117-COVID-19-Prohibiting-Mass-Gathering-and-K12-School-Closure.pdf.

[22] Gov. Cooper Exec. Order No. 121 (Mar. 27, 2020), *available at* https://files.nc.gov/governor/documents/files/EO121-Stay-at-Home-Order-3.pdf.

[23] North Carolina Department of Health and Human Safety (DHHS), *Coronavirus Disease 2019 (COVID-19) response in North Carolina*, *available at* https://www.ncdhhs.gov/divisions/public-health/coronavirus-disease-2019-covid-19-response-north-carolina

[24] City of Charlotte official page, Mecklenburg County Stay at Home Orders, https://charlottenc.gov/covid19/Pages/StayHomeOrder.aspx; City of Durham, City of Durham official page, Durham Issues COVID-1 Stay-At-Home Order Effective March 26 to April 30, https://durhamnc.gov/CivicAlerts.aspx?AID=2296; Wake County official page,Wake County Issues Stay-at-Home Order to Prevent the Spread of COVID-19 http://www.wakegov.com/news/Lists/Posts/Post.aspx?ID=1200

The practices that can slow the spread of COVID-19 are inherently impossible in prisons, putting everyone who is currently incarcerated – as well as prison staff and the surrounding communities to which they return daily – at increased risk. Due to the congregate nature of DPS detention facilities, people who are in DPS custody and the staff who work in these facilities cannot comply with the statewide mandate to remain six feet apart from others at all times. Even isolation in single cells for those who have been confirmed to have COVID-19 does not eliminate the risk of contagion due to shared ventilation systems and the necessity of personal contact in preparing and serving meals.

African Americans, who comprise 22 percent of North Carolina's population, but account for 51 percent of the prison population,[25] will disproportionately bear the devastation caused by a COVID-19 outbreak in DPS facilities. The data collected thus far shows that African Americans in the general population have been disproportionately impacted by this pandemic.[26] That risk is compounded for

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[25] North Carolina Department of Public Safety ("DPS") Research and Planning, *available at* https://webapps.doc.state.nc.us/apps/asqExt/ASQ; U.S. Census: North Carolina Quick Facts, *available at* https://www.census.gov/quickfacts/fact/table/NC/PST045219.

[26] *See* North Carolina DHHS COVID-19 North Carolina Dashboard, https://www.ncdhhs.gov/divisions/public-health/covid19/covid-19-nc-case-count#by-race/ethnicity (African-Americans are 37% of NC COVID-19 cases, whereas they comprise 22% of the state's population); Akiyah Johnson and Talia Buford, *Early Data Shows African-Americans Have Contracted Coronavirus at an Alarming Rate* (April 3, 2020), *available at* https://www.propublica.org/article/early-data-shows-african-americans-have-contracted-and-died-of-coronavirus-at-an-alarming-rate; Ibram X. Kendi, *What the Racial Data Shows* (Apr. 6, 2020), *available at* https://www.theatlantic.com/ideas/archive/2020/04/coronavirus-exposing-our-racial-divides/609526/.

African Americans who are confined to an environment where it is impossible to practice social distancing.

It is estimated that close to a third of people in DPS custody have at least one disability,[27] and over 8,000 of incarcerated adults are over the age of 50.[28] The physical limitations of prisons are especially life-threatening for people over the age of 65 and those who have underlying health conditions that put them at high risk for serious COVID-19 infection. Likewise, people who have a mental health or cognitive impairment that limits their ability to abide by heightened hygiene guidelines have a higher risk of infection. For those with disabilities that affect their lungs and hearts, the symptoms of COVID-19, particularly shortness of breath, can be severe, and complications can manifest quickly. Most people in these higher-risk categories who develop serious illness will need advanced support. People with disabilities in DPS facilities are therefore at extreme risk for infection, and once infected are likely to suffer more severe symptoms, including death, due to their disability. This level of supportive care requires highly expensive and specialized equipment, including ventilators, which are in limited supply.

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[27] According to the Bureau of Justice Statistics, an estimated 32 percent of people in prisons report having at least one disability. Jennifer Bronson Ph.D., Laura M. Maruschak, Disabilities Among Prison and Jail Inmates, 2011-12 (Dec. 14, 2015), *available at* https://www.bjs.gov/index.cfm?ty=pbdetail&iid=5500 (noting also that approximately 2 in 10 people incarcerated in prison have a cognitive disability).

[28] NC DPS, DPS Research and Planning Automated System Query, https://webapps.doc.state.nc.us/apps/asqExt/ASQ.

As the number of COVID-19 cases in DPS facilities increases, it is also likely that care rationing programs that disproportionately harm older people and people with disabilities will be implemented—a measure that some hospitals in other states are already having to take.[29] Upon information and belief, DPS has already limited medical services to essential appointments. As the number of COVID-19 infections grow, they will overwhelm DPS's medical services, leaving people with disabilities and underlying medical conditions without access to the routine care that they require to manage their health conditions.

For the 418 youth incarcerated in DPS facilities, many of whom also have disabilities and underlying medical conditions, there are additional, grave concerns about maintaining quality of care and supervision. The statewide ban on visitation at DPS facilities means that youth are unable to visit their parents and families. Youth in confinement are therefore likely to experience isolation and trauma. Moreover, because young people are more frequently asymptomatic carriers of COVID-19, an outbreak in the juvenile detention centers and YDCs across the state would be particularly difficult to contain, even while facility staff would continue to come and go, spreading the disease among the youth and in their communities.

DPS, which has already been operating under considerable strain, lacks the

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[29] For example, the Washington State Health Department issued guidance last week recommending that triage teams consider transferring patients out of the hospital to palliative care if their baseline function was marked by "loss of reserves in energy, physical ability, cognition and general health." Sheri Fink, *The Hardest Questions Doctors May Face: Who Will Be Saved? Who Won't?*, N.Y. TIMES (Mar. 21, 2020), *available at* https://www.nytimes.com/2020/03/21/us/coronavirus-medical-rationing.html.

trained staff, infrastructure, and supplies to manage the inevitable COVID-19 outbreak. Respondents have openly acknowledged this. On March 28, 2020, Governor Cooper informed local sheriffs that DPS could not accept any people from the jails in the event of an outbreak: "Like many of you, the Division of Prisons is extremely short staffed and therefore does not have the capability to take on all high medical need offenders at this time."[30] He acknowledged that the state's only two medical prison facilities had no ventilators.[31] At a March 27 press conference with Governor Cooper, Secretary Hooks also stated that no prisons are equipped with ventilators or the ability to provide intensive care.[32] People in prisons who need more intensive care for COVID-19 will therefore have to be treated in already overwhelmed community-area hospitals. As many DPS facilities are located in rural parts of the state with limited or healthcare infrastructure, the strain on rural hospitals and the communities they serve will be unbearable.

Even before the pandemic, DPS Commissioner of Prisons Todd Ishee briefed state lawmakers that the effective correctional officer vacancy rate was near 30%. Commissioner Ishee explained that "we're at the point where we need to take

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[30] Taylor Knopf, *NC governor to sheriffs: No extra state COVID-19 resources available for jail inmates*, NORTH CAROLINA HEALTH NEWS (Mar. 28, 2020), *available at* https://www.northcarolinahealthnews.org/2020/03/28/covid-19-county-jails/.

[31] *Id.*

[32] Gov.Cooper Coronavirus Transcript March 27: Stay-at-Home Order Issued, *available at* https://www.rev.com/blog/transcripts/north-carolina-governor-roy-cooper-coronavirus-transcript-march-27-stay-at-home-order-issued.

drastic measures."[33] Similarly, in the context of testing and treatment for the highly infectious but *curable* hepatitis C, former-DPS medical director Anita Wilson acknowledged in 2019 that DPS faces "staffing shortages that make it nearly impossible for medical providers to cover the basics."[34] And "[s]etting aside the lack of trained providers and moving to the actual medical treatment, we encounter cost issues."[35]

Given these realities, significantly reducing the number of people incarcerated in North Carolina is the only way to prevent devastating loss of life resulting from COVID-19 outbreaks in the prison system. Examples here and in other states show how quickly this deadly infection grows in the prison environment. At the Rikers Island jail in New York City, it took only 12 days for one COVID-19 case to explode into nearly 200 cases.[36] The jail's chief physician has warned that it is "unlikely" that they will be able to stop the spread, and predicted that 20 percent of those infected will need hospital treatment.[37] When COVID-19

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[33] Opinion, *NC's prison crisis needs drastic change*, News & Observer (Oct. 28, 2019), *available at* https://www.newsobserver.com/opinion/article236582913.html.

[34] Anita Wilson, *Challenges Within North Carolina Correctional Medicine*, 8 N.C. MED. J. 6, *available at* https://www.ncmedicaljournal.com/content/ncm/80/6/344.full.pdf.

[35] *Id.*

[36] Miranda Bryant, *Coronavirus spread at Rikers is a 'public health disaster,' says jail's top doctor*, THE GUARDIAN (Apr. 1, 2020), *available at* https://www.theguardian.com/us-news/2020/apr/01/rikers-island-jail-coronavirus-public-health-disaster.

[37] *Id.*

infections broke out in Illinois's Stateville Correctional Center and dozens of incarcerated people began showing symptoms, those that had to be taken to the closest hospital for emergency treatment "overwhelmed" the hospital's resources and "maxed out" the hospital staff.[38] And at the Butner federal prison here in North Carolina, it took only five days for the number of confirmed COVID-19 cases to surge from single digits to nearly 60.[39] An outbreak in state prisons, where people are unable to practice social distancing and vigilant hygiene, will be similarly devastating and uncontrollable.

III. Governor Cooper and Secretary Hooks's inaction stands in stark contrast to measures taken in other states.

Understanding COVID-19's threat to the lives of incarcerated persons and prison staff, state officials have taken decisive action to substantially lower their prison populations. In California, Governor Newsom announced plans to release 3,500 people who are within 60 days of release and not serving a sentence for a violent or sex crime in an effort to reduce the prison population.[40] In New York,

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[38] Chuck Goudie, *et al.*, *Illinois prisoners sick with COVID-29 "overwhelm" Joliet hospital*, ABC-7 CHICAGO (Mar. 30, 2020), *available at* https://abc7chicago.com/health/illinois-prisoners-sick-with-covid-19-overwhelm-joliet-hospital/6064085/.

[39] CBS 17 Digital Desk, *COVID-19 cases at federal prison in Butner jump from 9 to 59 in five days*, CBS 17 (Apr. 6, 2020), *available at* https://www.cbs17.com/news/local-news/covid-19-cases-at-federal-prison-in-butner-jump-from-9-to-59-in-five-days/.

[40] Associated Press, *California to release 3,500 inmates early as coronavirus spreads inside prisons*, KTLA5, Mar. 31, 2020, *available at* https://ktla.com/news/california/california-to-release-3500-inmates-early-as-coronavirus-spreads-inside-prisons/.

Governor Cuomo ordered the release of more than 1,000 people incarcerated on the basis of a parole violation.[41] In Colorado, Governor Polis issued an executive order suspending restrictions on good time credits in order to allow the department of corrections to award earned time credits to "facilitate the reduction of the population of incarcerated persons and parolees to prevent an outbreak in prisons," and also suspended restrictions on release under the state's "Special Needs Parole" program.[42] Likewise, in Iowa, the department of corrections announced that it would expedite the release of about 700 people, or 7% of its prison population, who are approved for parole or work release.[43] In North Dakota, the state parole board decided to release over fifty people on early parole.[44]

At the federal level, the U.S. Attorney General directed the Bureau of Prisons ("BOP") on March 26, 2020, to prioritize the use of home confinement for those who

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[41] Brendan J. Lyons, *NY to release 1,100 parole violators as coronavirus spreads*, TIMES UNION, Mar. 27, 2020, *available at* https://www.timesunion.com/news/article/Deaths-surge-again-in-New-York-from-coronavirus-15160973.php.

[42] Gov. Polis Exec. Order No. D 2020 016 (March 25, 2020), at pg. 2, *available at:* https://drive.google.com/file/d/18o0yWHzZleHJ87hmgLuBmXwpM8R74Q5x/view

[43] *Officials cut prison, jail numbers; Iowa virus cases hit 105*, NEWTON DAILY NEWS, Mar. 24, 2020, *available at* https://www.newtondailynews.com/2020/03/23/officials-cut-prison-jail-numbers-iowa-virus-cases-hit105/acs5xbk/; *see also* Iowa Dep't of Corrections, Quick Facts (Apr. 8, 2020, 12:50 AM), https://doc.iowa.gov/data/quick-facts.

[44] Tim Olson, *Over 50 inmates granted early release to prepare state penitentiary for COVID-19*, KXNET, Mar. 20, 2020, *available at* https://www.kxnet.com/news/health/coronavirus/over-50-inmates-granted-early-release-to-prepare-state-penitentiary-for-covid-19/.

are eligible in order to decrease the prison population,[45] and on April 3, expanded that directive for three federal facilities at which there have been COVID-19 outbreaks, ordering BOP to consider home confinement for "all at-risk inmates—not only those who were previously eligible for transfer."[46]

By contrast, Respondents have yet to use the authority that they indisputably have to substantially decrease the prison population, putting incarcerated people and prison staff and their families at high risk of infection.[47] This inaction fails to heed a March 27 letter sent to Governor Cooper by a group of North Carolina's medical and public health experts explaining that DPS facilities are "breeding grounds for the uncontrolled transmission of SARS-CoV-2, the virus that causes COVID-19," and urging Governor Cooper to "immediately release people from jails and prisons."[48] Respondents also disregard the appeals of dozens of concerned North Carolina community groups, civic organizations, faith leaders, legal scholars, and advocates who have called on Respondents to decrease the prison

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[45] Memorandum from Attorney General Barr to Director of Bureau of Prisons (Mar. 26, 2020), *available at* https://www.justice.gov/file/1262731/download.

[46] Memorandum from Attorney General Barr to Director of Bureau of Prisons (Apr. 3, 2020), *available at* https://www.justice.gov/file/1266661/download.

[47] *See* Thomasi McDonald, *The Coronavirus Poses a Significant Threat to NC Jail and Prisons. What Are Officials Doing About That?*, INDYWEEK, Mar. 24, 2020, *available at* https://indyweek.com/news/northcarolina/coronavirus-north-carolina-prisons/; Virginia Bridges, *Should NC prisoners be released? The state is now considering options*, NEWS & OBSERVER, April 1, 2020, *available at* https://www.newsobserver.com/news/coronavirus/article241653996.html.

[48] Yamey at 1, *supra* note 1.

population in light of the life-threatening dangers posed to incarcerated people and prison staff by the COVID-19 pandemic.[49]

Over three weeks have passed since Governor Cooper closed down schools, and over a week has passed since he closed down almost everything else. But he has failed to act to protect the lives of incarcerated people in DPS custody, or prison staff and their families. As public health experts have made clear, the other measures that DPS says it is taking, such as increased cleaning, limiting visitation, and cancelling group activities inside the prison,[50] will not stave off an inevitable large-scale COVID-19 outbreak. Prison staff and people incarcerated in at least six DPS prisons have already tested positive for COVID-19. Without immediate action from Respondents, this trickle will undoubtedly become a torrent.

REASONS WHY THE WRIT SHOULD ISSUE

I. This Court has broad mandamus powers to provide relief.

When lives are at stake and time is of the essence, this Court has substantial authority to grant relief.

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[49] Letter from Leonard G. Dunston, MSW, et al. to Governor Cooper, (Apr. 3, 2020), *available at* https://www.scribd.com/document/454859721/Roy-Cooper-Letter-April-3; Letter from Daryl Atkinson, et al. to Governor Cooper, (Mar. 19, 2020), *available at* https://www.acluofnorthcarolina.org/sites/default/files/covid19_coalitionletter_ncgovernor_3.19.20.pdf; Letter from NC NAACP to Governor Cooper, (Mar. 24, 2020), available at https://forwardjustice.org/resources/covid-19-naacp-crisis-strategy.

[50] North Carolina Department of Public Safety, DPS Actions on COVID-19 (Apr. 8, 2020 12:58 AM), https://www.ncdps.gov/our-organization/emergency-management/past-disasters/dps-actions-covid-19#prisons.

This Court has original jurisdiction to issue writs of mandamus. *Wilson Realty Co. v. City & Cty. Planning Bd.*, 243 N.C. 648, 655; 92 S.E.2d 82, 87 (1956). Writs of mandamus are "employed to compel inferior tribunals, officers, or administrative boards to perform duties imposed upon them by law." *Id.* Mandamus provides "swift enforcement of a party's already established legal rights" and is especially appropriate when circumstances are urgent. *In re T.H.T.*, 362 N.C. 446, 456, 665 S.E.2d 54, 60 (2008). Mandamus will issue where a party has a clear right to the act requested; the defendant has a legal duty to perform the act; the act is ministerial in nature; and the defendant has neglected or refused to perform the act. *Id.* at 453-54, 665 S.E.2d at 59. While a writ of mandamus is "an extraordinary remedy which the court will grant only in case of necessity," "[t]he courts of this State have no discretion to refuse the writ when it is sought to enforce a clear legal right to which it is appropriate[.]" *Sutton v. Figgatt*, 280 N.C. 89, 93; 185 S.E.2d 97, 99-100 (1971).

Moreover, where the law does not otherwise afford an effective remedy, this Court also has inherent power under the state Constitution "to do all things that are reasonably necessary for the proper administration of justice." *Beard v. N. Carolina State Bar*, 320 N.C. 126, 129, 357 S.E.2d 694, 696 (1987); *see also Corum v. Univ. of N. Carolina*, 330 N.C. 761, 783, 413 S.E.2d 276, 290 (1992) (drawing upon the Court's inherent authority to recognize a direct cause of action under the state Constitution where no other remedy exists). The present exigent circumstances,

which implicate the lives of tens of thousands of people, call for the exercise of the Court's full powers to grant the requested relief.

As discussed below, the elements of mandamus are present here: (1) Petitioners have constitutional and statutory rights to relief; (2) Respondents have a legal duty to take action; (3) Respondents are duty-bound to these actions, which are mandatory and non-discretionary in nature; and (4) Respondents have neglected to perform their legal duties.

II. Petitioners have a clear right.

A. People who are incarcerated have a right to be free of cruel and unusual punishment.

For the adults and youth who are in DPS custody pursuant to a conviction, the Eighth Amendment to the federal Constitution prohibits dangerous prison conditions that amount to cruel and unusual punishment. *Hutto v. Finney*, 437 U. S. 678, 685 (1978). Officials may not "ignore a condition of confinement that is sure or very likely to cause serious illness and needless suffering in the next week or month or year." *Helling v. McKinney*, 509 U.S. 25, 33 (1993). Such conditions may include "exposure of inmates to a serious, communicable disease," which can violate the Eighth Amendment, even though "the likely harm would [not] occur immediately" or "the possible infection might not affect all of those exposed." *Id*. In other words, an incarcerated person may "successfully complain about demonstrably unsafe drinking water without waiting for an attack of dysentery." *Id*.

When state officials fail to remedy unsafe conditions, courts may compel the release of prisoners when less drastic measures fall short. *See Brown v. Plata*, 563

U.S. 493, 531-32 (2011) (affirming prison population cap when California could not ensure "the timely diagnosis and care necessary to provide effective treatment and to prevent further spread of disease" through prison system); *Williams v. Bennett*, 689 F.2d 1370, 1388 (11th Cir. 1982) ("[A] state is not required to operate a penitentiary system . . . . The state may undertake to operate its prison system in countenance with the constitution or it may choose to close it down.").

The North Carolina Constitution provides at least the same protections—if not greater protections—for incarcerated people. Article 1, Section 27 of the state Constitution prohibits "cruel or unusual punishments," and imposes a duty to provide adequate medical care to people in prisons. *Medley v. N.C. Dep't of Correction*, 330 N.C. 837, 844, 412 S.E.2d 654, 659 (1992) ("the duty to provide adequate medical care to inmates, imposed by the state and federal Constitutions, and recognized in state statute and caselaw" is a "fundamental and paramount obligation of the state").

Here, the very fact of confinement in close quarters with other incarcerated people is the condition that will expose thousands of people to a novel, highly communicable, and deadly disease. People who are over the age of 65 or who have underlying health conditions or disabilities and who remain incarcerated during this pandemic face serious harm.

B. Pretrial detainees have a right to safety.

Youth held in DPS's juvenile detention centers pretrial are presumptively innocent and may not be punished. The due process clause of the Fourteenth

Amendment to the federal Constitution prohibits unreasonably dangerous conditions of confinement for pretrial detainees. "[T]he due process rights of a person [prior to conviction] are at least as great as the Eighth Amendment protections available to a convicted prisoner." *City of Revere v. Mass. Gen. Hospital*, 463 U.S. 239, 244 (1983); *see also Youngberg v. Romeo*, 457 U.S. 307, 324 (1982) (the state has an "unquestioned duty" to provide "adequate food, shelter, clothing, and medical care" for detainees).

Additionally, Article I, Section 19 of the state Constitution provides that "[n]o person shall be . . . imprisoned . . . or in any manner deprived of his . . . liberty . . . but by the law of the land." N.C. CONST. art. I, §19. North Carolina courts have "long held that [t]he law of the land clause has the same meaning as due process of law under the Federal Constitution," *State v. Guice*, 141 N.C. App. 177, 186, 541 S.E.2d 474, 480 (2000) (quotation marks & citation omitted), and that "our state due process requirements . . . must equal or surpass those imposed under [the federal Constitution]," *Id.* at 187, 541 S.E. 2d at 481.

Multiple courts have already recognized that the risk of exposure to COVID-19 likely violates the due process rights of people held in pretrial detention. *See, e.g.*, *Basank v. Decker*, 20 CIV. 2518 (AT), 2020 WL 1481503, at *5 (S.D.N.Y. Mar. 26, 2020) (granting release of detainees because "[t]he risk of contracting COVID-19 in tightly-confined spaces, especially jails, is now exceedingly obvious" and the petitioners were "caught in the midst of a rapidly-unfolding public health crisis"); *Castillo v. Barr*, No. CV 20-00605 TJH (AFMx), 2020 WL 1502864, at *5 (C.D. Cal.

U.S.C.Mar. 27, 2020) (ordering release of detainees and explaining that jail officials cannot ignore "the potential exposure of civil detainees to a serious, communicable disease on the ground that the complaining detainee shows no serious current symptoms, or ignore a condition of confinement that is more than very likely to cause a serious illness").

Here, imprisoning pretrial youth in detention centers where they are extremely likely to be exposed to a deadly infectious disease violates their due process rights.

C. People who are incarcerated have a statutory right to humane treatment and safety.

Furthermore, state statutes dictate that "[t]he general policies, rules, and regulations of the Division of Adult Correction and Juvenile Justice of the Department of Public Safety shall provide for humane treatment" of people who are in confinement, N.C.G.S. §148-22(a), and impose a duty on DPS "to ensure the safety of the public," and "ensure the . . . effective conduct of emergency operations by all participating agencies to sustain life and prevent, minimize, or remedy injury to persons . . . resulting from . . . disasters due to natural or man-made causes." N.C.G.S. §143B-601(4), (8).

Thus, under the federal and state Constitutions and state statutes, people incarcerated in DPS facilities have a long-established right to be free of conditions that will likely cause serious illness, needless suffering, and death. People who are currently in DPS custody are facing near certain exposure to a highly contagious and frequently fatal disease. The dangers faced by people who are older than 65 or

who have pre-existing health conditions of disabilities are particularly stark, as their risk of death from COVID-19 is far greater than for others. The only way to mitigate the spread of COVID-19 in DPS facilities is to create more physical space by substantially reducing the prison population.

III. Respondents have a clear duty and authority to act, those duties are mandatory, and they have failed to perform their duty.

A. Respondents have clear legal duties.

As outlined above, Governor Cooper and Secretary Hooks have affirmative constitutional and statutory duties to provide safe prison conditions for those that the state punishes by incarceration, as well as the constitutional and statutory authority to release people from incarceration. In fact, statute explicitly directs Secretary Hooks to "reduce the prison population to a more manageable level . . . to meet the State's obligations under law." N.C.G.S. §148-4.1(a). Yet, Respondents have failed to use their authority to decrease the population in DPS adult and youth prisons and detention centers.

Secretary Hooks is the head of DPS and directs and controls all "deputy secretaries, commissioners, directors, and the divisions of the Department." *Id.* §143B-600. Governor Cooper has the ultimate duty to "supervise the official conduct of all executive and ministerial officers," including the office of Secretary of Public Safety, and to ensure that all "duties thereof [are] performed." *Id.* §147-12(a)(1)-(2).

Respondents are duty-bound to take action to keep the people in their custody safe during this pandemic. Public health experts have been clear that the only effective tool for doing this is to release as many people currently incarcerated

in North Carolina prisons as quickly as possible, and to slow the tide of new people coming into the jails and prisons and into DPS custody. According to Dr. David Rosen, an epidemiologist and correctional health expert, and several of his medical and public health expert colleagues, "[p]risons are unable to adequately provide social distancing or meet mitigation recommendations," such as intensive hand washing practices, decontamination of surfaces, and isolating those who are ill, making it "likely that the prison system will remain a reservoir of infection for the entire state."[51] They have thus concluded that "reducing the level of risk both for those within those facilities and for the community at large" is "crucially important."[52] "These steps are both necessary and urgent" because "[a]s the number of cases in the prison system increase, efforts at infection control and mitigation will become increasingly more difficult."[53] Release of a significant number of incarcerated people is necessary to protect their lives, the lives of staff who work in prisons (and by extension their families and communities), and to create the conditions under which social distancing is possible for those who remain incarcerated.

B. Respondents' duties are mandatory.

Respondents' failure to act in this case is therefore a failure to perform a mandatory, non-discretionary duty. Their constitutional and statutory duties to

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[51] Rosen, et.al., Aff. ¶ 38, EXHIBIT H.

[52] *Id.* at ¶¶ 67-68.

[53] *Id.* at ¶ 71.

save lives and prevent serious medical harm by reducing the prison population are "clear and not reasonably debatable." *In re T.H.T.*, 362 N.C. at 453-54. Under the current emergency circumstances, the law does not leave Respondents to simply "decide according to their best judgment and discretion" that they will not take action. *Edgerton v. Kirby*, 156 N.C. 347, 367, 72 S.E. 365, 366 (1911).

Respondents are duty-bound to keep people in DPS custody safe during this pandemic, and there is no other way to do that but to release incarcerated people and to prevent re-incarceration of those released on post-release supervision, parole, or probation. The social distancing needed to prevent COVID-19's spread is otherwise impossible and, without it, a prison pandemic is unavoidable. The stark decision to be made here—whether to save lives and avoid certain, needless suffering—is not a discretionary one. As the Governor's own public statements and emergency orders that are aimed at protecting the rest of the general public show, under these extraordinary and unprecedented circumstances, ordering greater distances between *all* human beings in the state is mandatory.

C. Respondents have the authority to fulfill their duty, but have failed to do so.

Respondents have the authority to fulfill this mandatory duty to save the lives of people incarcerated in North Carolina by releasing adults and youth imprisoned in North Carolina's prisons and suspending enforcement of technical probation and parole violations in order to avoid re-incarcerating more people who have already been freed.

Governor Cooper is authorized by the Constitution to "grant reprieves, commutations, and pardons, after conviction, for all offenses . . . upon such conditions as he may think proper, subject to regulations prescribed by law relative to the manner of applying for pardons." N.C. CONST. art. III., §5. He also oversees the Post-Release Supervision and Parole Commission (the "Commission"), which is authorized to "prescribe when and under what conditions an inmate may be released for medical release," N.C.G.S. §15A-1369.1, which specifically contemplates the release of people who are permanently and totally disabled, terminally ill, or geriatric, *id.* §15A-1369(5).

Likewise, North Carolina statutes mandate that when Secretary Hooks "determines from data compiled by the Division of Adult Correction and Juvenile Justice of the Department of Public Safety that it is necessary to reduce the prison population to a more manageable level *or to meet the State's obligations under law*," he "shall direct [the Commission] to release on parole over a reasonable period of time a number of prisoners sufficient to that purpose." *Id.* §148-4.1 (emphasis added).

The Commission, subject to Respondents' oversight and direction, can act to reduce and prevent further growth of the prison population during this pandemic by reinstating parole and Post-Release Supervision ("PRS") for people who have had it revoked and limiting additional revocations until the pandemic subsides. *Id.* §143B-720(a); *Id.* §15A-1368.3(c)-(d); *Id.* § 15A-1368.6(a); *Id.* §15A-1373(d)-(e).[54] According

[54] Notably, individuals released on PRS generally only have nine to twelve months left in their maximum sentences. N.C.G.S. §15A-1368.2(a). It is cruel and

to data maintained by North Carolina Prisoner Legal Services, **approximately 26%** of those entering the prison system in 2019 did so as a result of PRS or parole revocation.[55] PRS, parole, or probation can be revoked for a panoply of reasons, including technical violations such as traveling outside the county, failure to report, or missing a curfew. *See Id.* §15A-1343(b); *Id.* §15A-1368.4(e); *Id.* §15A-1374(b). Without temporary reprieve, many North Carolinians will find themselves pulled back into an extremely dangerous prison environment for the most minor of reasons.

Where, as here, the imprisonment of people who are on PRS, parole, and probation or eligible for reinstatement subjects them to an intolerable risk of premature death, Respondents must exercise their statutory powers to refrain from revocation and reinstate community-based supervision wherever possible.

In addition, Secretary Hooks has expansive authority to permit incarcerated people to leave facilities unaccompanied for prescribed periods of time, under prescribed conditions, including to "[o]btain medical services not otherwise available," or to participate in pre-release and after-care programs. *Id.* §148-4(3), (6). DPS has already identified and approved many incarcerated people to leave

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disproportionate punishment to force their return to prison for a few months in the midst of a pandemic.

[55] Pollard Aff. at ¶ 8, EXHIBIT G.

DPS facilities unsupervised through their Home Leave Program, Mutual Agreement Parole Program, Work Release Program, and others.[56]

Respondents thus have both a clear duty to reduce the prison population and expansive legal authority to fulfill that duty. In Secretary Hooks's case, he is under statutory obligation to "reduce the prison population to a more manageable level . . . to meet the State's obligations under law." *Id.* §148-4.1. Respondents understand the magnitude of the COVID-19 crisis: Governor Cooper has gone so far as to close all schools and order every single non-incarcerated person in North Carolina to stay home. The DPS website has dedicated a page on its website to "DPS Actions on COVID-19" that links to guidance from the CDC and the North Carolina Department of Health and Human Services, laying out the importance of social distancing and explains the particularly serious and deadly impact COVID-19 can have on people who are 65 years old and older and people who have health conditions and other disabilities.[57] They are also aware of experts' recommendations that decreasing the number of people incarcerated is critical, and that it is the only measure that can mitigate the devastating effects of a large-scale COVID-19 outbreak in our prisons.

Respondents have thus far made scant efforts to release the elderly or medically vulnerable from DPS custody in response to the COVID-19 threat.

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[56] *See* North Carolina Department of Public Safety, Transition Services (Apr. 8, 2020 2:10 AM), https://www.ncdps.gov/adult-corrections/prisons/transition-services.

[57] *Supra* note 52.

Likewise, on information and belief, steps have not been taken to prevent people from being re-incarcerated on technical parole violations. By failing to exercise their expansive authority to keep people out of prison, Respondents have refused to fulfill their duty to keep the people in their custody safe. This status quo will lead inexorably to avoidable deaths of incarcerated people, prison staff, and the communities surrounding DPS prisons. The Court should use its mandamus authority to order the requested relief.

IV. In the alternative, this Court has inherent constitutional authority and habeas corpus powers to grant the relief requested.

In addition to its authority to issue writs of mandamus, this Court has broad authority to address urgent matters affecting the public interest. In the context of this unprecedented public health disaster, Petitioners respectfully request that the Court exercise this authority to remedy constitutional violations either in addition to, or as an alternative to, its authority to grant writs of mandamus to order the requested remedy.

The Court has inherent authority to establish an effective remedy for the protection of constitutional rights where the law does not otherwise provide one. *See Corum*, 330 N.C. at 782, 413 S.E.2d at 289 (recognizing a direct claim for violation of constitutional rights where there was no other legal remedy). In addition, this Court has authority to order release through writs of habeas corpus, N.C.G.S. §7A-32(a), which are available when someone has been lawfully imprisoned, "yet by some act, omission or event, which has taken place afterwards, the party has become entitled to be discharged," *id.* §17-33. Courts have an affirmative duty to

issue writs of habeas corpus even when no application has been made, and the Court's habeas power is so essential that it may be exercised by a single appellate judge and even where no application has been made for such a writ. *Id*. §17-8

The COVID-19 pandemic is already in DPS prisons, rendering traditional civil litigation incapable of providing the swift relief needed in these exigent circumstances. The current conditions of confinement in DPS facilities are unconstitutional and will remain so unless the population of incarcerated people can be significantly decreased, such that social distancing can realistically occur. Whether by issuing a writ of mandamus or habeas corpus, or by exercise of its inherent powers, this Court should act to prevent large-scale death and suffering.

Courts across the country have already recognized that reduction of prison populations are necessary in this moment of crisis, and have used their authority to order such remedies. For example, the Supreme Court of Hawai'i, citing both its original jurisdiction over writs of mandamus and its authority to "make and award such judgments, decrees, orders and mandates . . . and do such other acts and take such other steps as may be necessary to carry into full effect the powers," ordered all intermittent custodial sentences suspended and appointed a special master to release people from jails and prisons in the state. *Office of the Public Defender v. Connors*, SCPW-20-0000200, SCPW-20-0000213 (Haw. April 2, 2020). EXHIBIT I. The New Jersey Supreme Court on its own motion "relaxed the Rules of Court to permit the filing of the request for relief directly with the Supreme Court, based on the dangers posed by Coronavirus disease 19," and issued an Order to Show Cause

why certain incarcerated people should not be released. *In the Matter of the Request to Commute or Suspend County Jail Sentences*, Dkt No. 084230 (N.J. Mar. 22, 2020) EXHIBIT J. And the Tennessee Supreme Court drew upon its "constitutional, statutory, and inherent authority" to issue an administrative order directing judicial districts to "develop a written plan to affirmatively address issues regarding the incarceration of nonviolent offenders in furtherance of efforts to reduce the jail population. *In re: COVID-19 Pandemic*, No. ADM2020-00428 (Tenn. Mar. 25, 2020), EXHIBIT K.[58]

In the face of Respondents' inaction, action from this Court is urgently needed.

PRAYER FOR RELIEF

WHEREFORE, Petitioners respectfully pray that this Court issue a Writ of Mandamus or other appropriate Order that:

1. Directs Respondents to develop and effectuate a plan that prioritizes the immediate release of incarcerated people who:
    a. Are 65 years of age and older;
    b. Have underlying medical conditions that, according to the CDC guidelines, put them at particular risk of serious harm or death from COVID-19; or
    c. Have a projected release date within the next 12 months, or who are currently approved for work release;

[58] corum federal courts have ordered the release of incarcerated people due to the dangers of the pandemic in prisons. *See, e.g.*, *United States v. Grobman*, No. 18-cr-20989-2, ECF No. 397 (S.D. Fla. Mar. 29, 2020);*United States v. Mclean,* No. 19-cr-380, ECF No. 21 (D.D.C. Mar. 28, 2020); *United States v. Harris*, No. 19-cr-356, ECF No. 35 (D.D.C. Mar. 26, 2020); *United States v. Garlock*, No. 18-CR-00418-VC-1, 2020 WL 1439980, at *1 (N.D. Cal. Mar. 25, 2020) ;*United States v. Stephens*, 2020 WL 1295155, -- F. Supp. 3d -- (S.D.N.Y. Mar. 19, 2020); *Basank v. Decker*, No. 20-cv-2518, (S.D.N.Y. Mar. 26, 2020).

2. Directs Governor Cooper to exercise his reprieve, commutation, and pardon powers to meet the present COVID-19 emergency pursuant to N.C.G.S. §143B-266(a) and under Art. III, Sec. 5 of the North Carolina Constitution by prioritizing commuting the sentences of people who fall into the three categories listed above;

3. Directs Secretary Hooks to:
    a. Ensure the immediate release of people specified above;
    b. Release immediately:
        i. Pursuant to N.C.G.S. §148-4(3), all individuals who have serious underlying medical conditions that, according to CDC guidelines, put them at particular risk from COVID-19; and
        ii. Pursuant to N.C.G.S. §15A-1369, all individuals who are eligible for medical release;
    c. Immediately use all available DPS programs for release, such as Home Leave, and:
        i. Extend Home Leave to last for the duration of the sentence of the released person, or at minimum until the CDC recommends an end to social distancing practices;
        ii. Extend the limit on the "place of confinement" pursuant to N.C.G.S. §148-4(6) so that individuals can participate in additional community-based programs;
        iii. Refer for immediate release any person who is eligible for the Mutual Agreement Parole Program ("MAPP") to the Parole and Post-Release Supervision Commission, and waive the requirement that a person must be within 3 years of parole;
        iv. Reduce the maximum term of imprisonment for all persons who are medically or physically unfit for work release or other rehabilitative activities, such that they are immediately eligible for release; pursuant to N.C.G.S. §15A-1355(d).
        v. Submit for parole eligibility any person eligible as of right pursuant to N.C.G.S. §15A-1371.
    d. Instruct Community Corrections to halt actions to revoke probation.
    e. Instruct the Post-Release Supervision ("PRS") and Paroles Commission to:
        i. Halt arrests and other actions to revoke PRS and parole;

ii. Grant all PRS and parole requests within their statutory authority; and
iii. Reinstate any previously revoked PRS and parole.

f. Place all eligible youth who have less than 6 months remaining in their term of confinement pursuant to N.C.G.S. §7B-2514 who are able to live with family or other guardian in PRS.
g. Place all youth currently held pretrial in a juvenile detention center who are able to live with family or other guardian in the care of that family or guardian.
h. Ensure that ongoing transparent assessment of racial disparities occur;
i. Develop plans, in partnership with organizations and agencies that already support newly released people, to provide support and assistance to additionally released people;
j. Implement immediately a plan for adopting the CDC recommendations for correctional facilities that, at minimum, addresses staffing shortages and ensures that all people in custody:
    i. Are able to follow CDC guidelines for preventing the spread of COVID-19;
    ii. Can receive appropriate medical care, including COVID-19 screening, testing, and treatment;
    iii. Receive in written and verbal education in English (and any other language commonly spoken) on the hazards of COVID-19 and how to protect themselves;
    iv. Are able to access telephone and video visitation free of cost; and
    v. Will not be placed in 22-hour lockdown or be retaliated against for requesting treatment or testing related to possible COVID-19 symptoms, or for requesting hygienic supplies.

4. Directs Governor Cooper to take any other actions available under his emergency powers to ensure appropriate relief;

5. Awards Petitioners all costs and attorney fees under any applicable authority; and

6. Awards all other relief this Court deems just and proper.

Dated: April 8, 2020

Respectfully submitted,

/s/

I certify that all of the attorneys listed below have authorized me to list their names on this document as if they had personally signed it.

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Attorneys for Petitioners

CERTIFICATE OF COMPLIANCE

Pursuant to Rule 28(j) of the Rules of Appellate Procedure, counsel for Petitioners certifies that the foregoing brief, which is prepared using a 12-point proportionally spaced font with serifs, is less than 8,750 words (excluding covers, tables of authorities, table of contents, indices, counsel's signature block, and certificates of service and compliance) as reported by the word-processing software.

This is the 8th day of April 2020.

/s/
Kristi L. Graunke (NC Bar #51216)
Attorney for Petitioners

VERIFICATION

I affirm, under penalty of perjury, that I have prepared the foregoing, and it is accurate to the best of my knowledge, information, and belief.

This is the 8th day of April 2020.

/s/

Kristi L. Graunke (NC Bar #51216)
Attorney for Petitioners

CERTIFICATE OF SERVICE

I hereby certify that the original of the foregoing was this day filed electronically with the North Carolina Supreme Court, and a copy of the foregoing has this day been served by e-mail upon:

WILLIAM C. MCKINNEY
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116 W. Jones Street
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This is the 8th day of April 2020.

/s/ _____
Kristi L. Graunke (NC Bar #51216)
Attorney for Petitioners

Exhibit A

The Honorable Roy Cooper
Governor of North Carolina
20301 Mail Service Center
Raleigh, NC 27699-0301

March 27, 2020

Dear Governor Cooper

Thank you for your leadership during this state of emergency.

The scale of the COVID-19 crisis becomes clearer each day. I recognize that, as governor, you must make important decisions in the crucible of this global health crisis that will have life and death consequences. That is a heavy burden to bear.

As detailed in the accompanying letter, I and other public health experts in the state are urging you to address a particularly vulnerable population in this moment: people incarcerated in North Carolina prisons. Based on our professional training and experience, we firmly believe that reducing the prison population is a critical measure that must be acted on immediately. This will not only protect the lives of those living in prisons, but also the lives of those who work inside these facilities, as well as their families and the larger community.

Thank you for your attention to this urgent public health issue.

Sincerely,

Gavin Yamey MD MPH MA MRCP
Director, Center for Policy Impact in Global Health
Professor of the Practice of Global Health & Public Policy
Associate Director for Policy
Duke Global Health Institute
310 Trent Drive, Rm 113 Trent Hall
Duke Box 90519, Durham, NC 27708

March 27, 2020

The Honorable Governor Roy Cooper
North Carolina Office of the Governor
20301 Mail Service Center
Raleigh, NC 27699-0301

Dear Governor Cooper:

We, as public health experts and concerned citizens, write to urge you to take immediate action to safeguard the lives of those involved in our statewide court system and the North Carolina Department of Corrections, including those who work or are detained in these facilities, their families, and their communities. These facilities contain high concentrations of people in close proximity and are breeding grounds for the uncontrolled transmission of SARS-CoV-2, the virus that causes COVID-19.

The COVID-19 pandemic requires a strategic response based on the conditions we know to exist and the interventions we know to effectively limit transmission. You are well aware that the COVID-19 virus transmits rapidly in densely populated spaces, as evidenced by your recent Executive Orders closing down schools, restaurants, and bars and bans mass gatherings over 50 people.

The CDC recommends that people keep at least six feet away from each other and avoid gatherings of more than ten people. Responding to the virus also requires an ability to keep sick people from well people and to treat those who have been exposed without endangering others. This "social distancing" has been difficult to accomplish in our society generally, but is impossible to achieve in our state correctional facilities, jails and youth detention centers as things currently stand. Almost 55,000 people are incarcerated in these facilities. Prisons and jails contain high concentrations of people in close proximity, with people housed in tightly-packed and poorly-ventilated dormitories; they share toilets, showers, and sinks; they wash their bedsheets and clothes infrequently; and often lack access to basic personal hygiene items. These facilities lack the ability to separate sick people from well people and to quarantine those who have been exposed.

Concern over the people detained in our jails and prisons should be sufficient to spur you to action, but they are not nearly the only people who stand to suffer if conditions are not changed: it is inconceivable that an outbreak in a prison stays confined to that facility. Through "jail churn" staff, correctional officers, judges, doctors, and visitors will all be exposed to COVID-19 in these facilities and will carry and spread it in the community at large. Facilities combine the worst aspects of cruise ships and nursing homes when dealing with COVID-19, as they contain high concentrations of people in close proximity and are breeding grounds for the uncontrolled transmission of SARS-CoV-2, the virus that causes COVID-19.

Unless you immediately address this threat, you are leaving North Carolinians vulnerable to a massive outbreak of COVID-19. But it is within your power **to immediately release people from jails and prisons** and thus work to mitigate the spread of this disease. To that end, we ask that you take the following urgent steps:

First, we ask that you commute sentences for **all elderly people.** While the SARS-CoV-2 virus infects people of all ages, the World Health Organization (WHO) is clear that older people are at a higher risk of getting severe COVID-19 disease and dying. In fact, the risk of severe disease gradually increases with age starting from around 40 years. Also, older people who are released from prison pose little risk to public safety.

Second, we are also asking that you commute sentences for the **medically vulnerable population** including persons suffering from cardiovascular disease, diabetes, chronic respiratory disease, or cancer. In addition to older people, WHO has identified persons with these underlying medical conditions to be at greater risk for contracting severe COVID-19. While there is little known yet about the effects of COVID-19 on pregnant women, the CDC explains that with viruses from the same family as COVID-19, and other viral respiratory infections such as influenza, pregnant women have had a higher risk of developing severe illness.

Third, we are asking that you commute sentences for **all persons who have one year or less remaining on their sentence**. This measure will limit overcrowding that can lead to further spread of COVID-19 and free up beds that will be needed to care for the sick who should be housed separate from others.

Fourth, we call on you to urge local officials to **drastically reduce jail populations**. Many who are admitted to jail only stay for a short period of time, and more people churn through jails in a day than are admitted or released from state and federal prisons in 2 weeks. To prevent a severe outbreak, local officials should take the following steps immediately:

1. Release of anyone who is held pretrial and who does not pose an unreasonable safety risk to a specific person or persons;
2. Release of all people serving a misdemeanor sentence who are within six months of their release date;
3. Release of all people held locally on probation and parole technical violation detainers or sentences;
4. Increased use of citations in place of arrests and limit custodial arrest only to those few accused of crimes that pose a serious safety risk to a specific person or persons; and
5. Reclassification of misdemeanor offenses that do not threaten public safety into non-jailable offenses.

Only if such steps are taken will North Carolina have a chance to flatten the curve of COVID-19 in our communities.

Respectfully,

Gavin Yamey MD, MPH, MA
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Director, Center for Policy Impact in Global Health
Associate Director for Policy, Duke Global Health Institute
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Epidemiologist
University of North Carolina

Kathryn Wouk, PhD, MS, IBCLC
Postdoctoral Research Fellow
Department of Maternal and Child Health
University of North Carolina, Gillings School of Global Public Health

Exhibit B

AFFIDAVIT OF ALBERTA ELAINE WHITE

1. My name is Alberta Elaine White. I am a 66-year-old African American woman. I have Type II diabetes, and need to take daily medication for it. I have lived in the custody of the North Carolina Department of Public Safety since 2011.

2. In that time I have had no disciplinary infractions.

3. I have lived in minimum custody since 2016. In prison, I have participated in an apprenticeship program and became a certified dental lab technician, I have participated in prison service clubs, and I have taken as many self-help programs as I've been permitted to.

4. Since March 2019, I have lived in the Center for Community Transitions reentry program in Charlotte, North Carolina. Previously, I lived at the North Carolina Correctional Institute for Women (NCCIW), the Raleigh Correctional Center for Women (RCCW), Southern Correctional Institution, and Swannanoa Correctional Center for Women.

5. I was sentenced for drug possession, obtaining property by false pretenses, and possession of fraudulent identification. My projected release date is November 29, 2020. Were it not for my habitual felon status, I would have already been released.

6. Until a couple weeks ago, I participated in a work release program. I would take public transportation to and from a Harris Teeter grocery store where I worked in the deli and fresh foods section. DPS stopped the work release program because of the COVID-19 pandemic.

7. Until a couple weeks ago, I also participated in the home leave program. Once a month I got to spend the night at my sister's house. We would also go shopping and go out to eat together. DPS also stopped the home leave program because of the COVID-19 pandemic.

8. The house I live in now has thirty beds, with two people sharing a room. All of the beds are taken. All of the women here share one bathroom with three toilets and four showers.

9. I am very scared of catching the coronavirus. My age and my diabetes put me at high risk to a serious COVID-19 infection. I have heard about people dying from this disease, and I worry that I could be one of them.

10. Because of the pandemic we're not allowed to go anywhere now, we are not allowed visitors, and people delivering packages are not allowed in. But the staff still come and go every day.

11. The house I live in is also pretty crowded. In our rooms, it's not possible to keep more than six feet away from the person sharing the room. We are cleaning more, but we don't have any face masks to protect ourselves.

12. Staff have told us that if someone gets sick, all they can do is isolate that person in the conference room.

13. The crowding was even worse in the other prisons where I lived. At NCCIW, everyone slept in big open rooms called "quads," which had 17 bunk beds and slept 34 people. All 34 people had to share one bathroom with four toilets and four showers. The only place where you could get some distance from everyone else was going

outside in the yard. At Swannanoa I shared a bathroom with about 30 other people, and at Southern it was about 10. Southern was especially bad because we couldn't go outside like at NCCIW.

14. Cleanliness was a problem a lot of the time. For example, at NCCIW there was just one janitor for the whole quad getting paid less than a dollar a day, so they didn't always do a good job. When someone got a cold or the flu, it would spread pretty quickly.

15. I can't imagine being in the other prisons right now. The women there must be so scared.

16. If I get released, I would be able to stay in home quarantine indefinitely with my sister, who lives in Charlotte. I have a safe place to stay and family who support me.

17. I was looking forward to my release this coming November. I was looking forward to being home and with my family. It's been so long since I've been away. There are so many kids in my family that I've only seen in pictures.

18. I have done everything I can to show that I have paid my debt to society. I would like to be somewhere safe during this pandemic. I just want to live.

VERIFICATION

I affirm, under the penalties for perjury, that the foregoing representations are true.

Alberta Elaine White

Alberta Elaine White

April 1, 2020

Exhibit C

AFFIDAVIT OF KIM T. CALDWELL

1. My name is Kim T. Caldwell. I am a 64-year-old white man. I have been incarcerated by the North Carolina Department of Public Safety since 2015. I currently live in minimum custody at Dan River Prison Work Farm.

2. I am serving a sentence for drug trafficking and possession. I have a projected release date of April 2021. Over the last five years I've only had two disciplinary infractions: "no threat contraband" and "illegal cloth/linen/sheets."

3. I was diagnosed with hepatitis C in 2015 and recently received antiviral treatment for it. Medical staff told me that I've been cured of the virus, but I understand that because the disease progressed to cirrhosis of the liver, I may have permanent liver damage and ongoing risks of developing liver cancer.

4. I also recently received treatment for tuberculosis. I was quarantined for about two months and twenty days. Medical staff say the infection is gone, but I still have more trouble breathing than I used to and I am coughing more.

5. Because of my age and health problems, I'm extremely worried about what will happen to me with the COVID-19 pandemic. At Dan River, I live in a dorm where about 70 people sleep in bunk beds. We're piled up on top of each other and all have to use the same shower. We only get to go outside for twenty minutes a day. No one has masks except for medical staff. Whenever someone gets a cold or flu, it usually spreads quickly and many people get sick.

6. Within the last couple weeks, two guys with high fevers got shipped out late at night. I don't understand how they're doing this to us.

7. I only have twelve months left on my sentence, and I'm really looking forward to spending time with my sister, who lives in Rockingham County, and my brother, who lives in Guilford County. I'm also hoping to start up my old painting business.

8. If I'm released, I would stay with my sister in Rockingham County. I'd be able to shelter in place and do proper social distancing.

VERIFICATION

I affirm, under the penalties for perjury, that the foregoing representations are true.

_____

Kim T. Caldwell

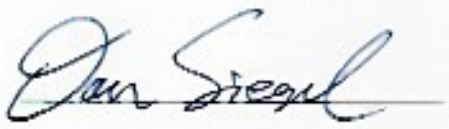
April ___, 2020

AFFIDAVIT OF DANIEL K. SIEGEL

1. My name is Daniel K. Siegel. I am an attorney licensed to practice law in the State of North Carolina (State Bar # 46397).
2. I spoke to Mr. Kim T. Caldwell via telephone on April 7, 2020.
3. I transcribed his affidavit and orally confirmed with him that its contents were true and correct.
4. I have not been able to obtain Mr. Caldwell's signature due to the global pandemic. I will obtain that signature via mail as quickly as possible.

VERIFICATION

I affirm, under the penalties for perjury, that the foregoing representations are true.



Daniel K. Siegel

April 7, 2020

Exhibit D

AFFIDAVIT OF JOHN E. STURDIVANT

1. My name is John E. Sturdivant. I am a 73-year-old African American man.
2. I am currently living in the custody of the North Carolina Department of Public Safety, incarcerated at Pasquotank Correctional Institution in Elizabeth City, North Carolina (Minimum 1).
3. I am serving time for trafficking in a schedule II substance and possession of a schedule II substance. My projected release date is April 10, 2024.
4. I suffer from many health problems, including high blood pressure. I have experienced a stroke and I have had prostate cancer. These medical conditions are documented in my prison medical file.
5. Right now, at Pasquotank, we are housed with up to 65 people sleeping in one room. Proper social distancing is not possible.
6. Because of my age and health problems, I am afraid that if I catch COVID-19, I will die.
7. We do have access to soap at this prison, but we do not have access to hand sanitizer.
8. If I am released, I have a safe home to go to in Guilford County, North Carolina with my son, where I will be able to follow CDC guidelines regarding social distancing and hygiene.

VERIFICATION

I affirm, under the penalties for perjury, that the foregoing representations are true.

_____

John E. Sturdivant

April ___, 2020

i.

AFFIDAVIT OF ELIZABETH GUILD SIMPSON

1. My name is Elizabeth Guild Simpson. I am an attorney licensed to practice law in the State of North Carolina (State Bar # 41596).
2. I spoke to Mr. John E. Sturdivant via telephone call on April 7, 2020.
3. I transcribed his affidavit and orally confirmed with him that its contents were true and correct.
4. I cannot obtain Mr. Sturdivant's signature at this time due to a global pandemic. I will obtain that signature via mail as quickly as possible.

VERIFICATION

I affirm, under the penalties for perjury, that the foregoing representations are true.

Elizabeth Guild Simpson

April 7, 2020

Exhibit E

AFFIDAVIT OF SANDARA KAY DOWELL

1. My name is Sandara Kay Dowell. I am a 51-year-old white woman.
2. I am currently living in the custody of the North Carolina Department of Public Safety, incarcerated at Swannanoa Correctional Center for Women in Black Mountain, North Carolina (Minimum 1).
3. In 1992, I was convicted of second-degree murder and second-degree kidnapping in Stokes County. I was sentenced to a parole-eligible term of life in prison. I have served over 29 years. I have been on minimum custody since 2011. I have over 1700 merit days.
4. I am currently eligible for release on parole. My next parole review is scheduled for December 2020.
5. During my time in prison, I have completed over 30 programs and certificates, including job readiness, workplace skills, character education, choir, computer skills, and the service club.
6. I suffer from many health problems, including high blood pressure, asthma, and Chronic Obstructive Pulmonary Disease (COPD). These conditions are documented in my prison medical file.
7. COPD is a chronic inflammatory lung disease that causes obstructed airflow from the lungs. I regularly experience breathing difficulty, cough, mucus production, and wheezing. I have lost capacity in my lower left lung lobe. Every time I get sick, the illness settles in my chest. I get respiratory infections often.

8. In 2019, I experienced severe bronchitis while incarcerated at Neuse Correctional Institution. I was quarantined in the segregation unit. I ended up having to be hospitalized at an outside facility, and I stayed sick for over six months.
9. Right now, at Swannanoa, prison officials have attempted to control COVID-19 by separating each dorm from each of the other dorms.
10. However, in my dorm, up to 42 women crowd into one dayroom at a time. It is impossible to maintain social distancing in this space. We are crowded in the dayroom because regular programs have been canceled due to COVID-19.
11. There is not good cleanliness in this prison, including in the shared bathroom and the dayroom. They are not cleaned thoroughly. I have watched the women assigned as janitors do the cleaning job, and as they are paid 40 cents per day, they are often not motivated to clean very deeply, in my opinion.
12. The prison has provided some kind of hand sanitizer product for us, but it does not contain any alcohol. It is not the type of sanitizer that is approved by the Center for Disease Control (CDC), which recommends sanitizer with 60% ethanol or 70% isopropanol.
13. I am scared. I know that as soon as one person gets COVID-19 in my dorm, it will spread like wildfire in the pod. I know that I cannot control whether the other women regularly wash their hands and I know that staff are coming in and out of the facility and may be bringing the virus.
14. We do not have access to face masks.

15. Due to my COPD, I am afraid that I will die if I get infected with COVID-19.
16. If I am released, I have a safe home to go to in Durham, North Carolina with my legal spouse, where I will be able to follow CDC guidelines regarding social distancing and hygiene.

VERIFICATION

I affirm, under the penalties for perjury, that the foregoing representations are true.

Sandara Kay Dowell

Sandara Kay Dowell

by Amanda L Marriner ATTORNEY IN FACT

April 7, 2020

Exhibit F

AFFIDAVIT OF CHRISTINA RHODES

1. My name is Christina Rhodes. I am a 39-year-old white woman. I live in Wilkes County.

2. I am married to Andrew Rhodes. He goes by "Andy." He has been incarcerated by the North Carolina Department of Public Safety since 2016. He currently lives in minimum custody at Wilkes Correctional Center. He has a projected release date of August 2023. He's currently serving time for selling drugs, and was sentenced as a "habitual felon."

3. Andy is a 38-year-old white man. He was diagnosed with hepatitis C in 2008. He has repeatedly sought treatment while in state prison but he's been turned down.

4. Andy and I were high school sweethearts. We parted ways for about fifteen years and then reconnected. We married last October.

5. We talk all the time about how when he gets out, we have plans to start a business, build a home, and be as productive members of society as possible.

6. I'm extremely stressed about what will happen to Andy in prison with the COVID-19 virus going around. I worry he might not make it home for reasons that could be avoided.

7. While housed at Alexander Correction, Andy completed the upholstery program there with high praise. The program supervisor offered Andy assistance with job placement once he is released.

8. At Wilkes, Andy lives in a big dorm with bunk beds that I think houses about 60 people. I believe there is one bathroom for the entire dorm. He's told me it's

"physically impossible" to maintain six feet of distance from other people. Whenever someone gets the cold or flu, it spreads like wildfire.

9. Prison staff gave him hand sanitizer and an extra bar of soap, have put up posters about the coronavirus, and are segregating the dorms from each other. But there are still about 60 people in each dorm, and there are still people who go back and forth from the different dorms, like the people who hand out clothes.

10. Wilkes does not have a segregated area. When anyone is given a disciplinary infraction, they have to be shipped to another camp because they don't have anywhere to segregate them.

11. A lot of the people at Wilkes are on work release at nearby chicken and pork processing plants. They were coming in and out of the prison almost every day until DPS suspended the program sometime at the end of March.

12. One of the work release sites is the Tyson plant where three out of the four confirmed coronavirus cases in Wilkes County came from.

13. Andy has told me that he's terrified. He knows he's not perfect and has made mistakes, but he didn't get a life sentence.

14. Andy's parents, who live within five minutes of me, are in poor health. Andy's worried he'll never see them again.

15. Andy has people that love him and a support system. He has a family that needs him home.

16. If Andy were released, he could come stay with me indefinitely. We would be able to comply with the stay-at-home order and social distancing guidelines.

VERIFICATION

I affirm, under the penalties for perjury, that the foregoing representations are true.

Christina Rhodes

_____

Christina Rhodes

April 7, 2020

Exhibit G

Affidavit of Mary Pollard

1. My name is Mary Pollard. I am an attorney and I have been licensed to practice in North Carolina since 1993. I have been the Executive Director of North Carolina Prisoner Legal Services, Inc. ("NCPLS") since 2009.

2. NCPLS is a 501(c)(3) nonprofit law firm that contracts with the North Carolina Office of Indigent Defense Services ("IDS"). IDS is statutorily charged with providing persons incarcerated in North Carolina state prisons with constitutionally required meaningful access to the courts. To that end, NCPLS attorneys represent individuals with claims for post-conviction relief or with claims relating to constitutionally inadequate conditions of confinement.

3. Over the past ten years, I have visited clients located at prisons throughout the state. As I have watched the COVID-19 pandemic unfold, I have been concerned about the safety and wellbeing of my incarcerated clients and of the staff at those institutions. Social distancing at all of the units I have visited is impractical or even impossible. For example, at dormitory style camps like Caswell Correctional, dozens of men sleep in long rows of bunk beds that are almost certainly not six feet apart. Meals are generally taken communally in crowded chow halls.

4. NCPLS gets letters and phone calls from clients all over the state and from their loved ones. In recent days, we have gotten a number of reports of inadequate cleaning supplies and hand sanitizer at the units, as well as concerns about a lack of masks or other personal protective equipment for the correctional officers. One particularly common concern expressed is about conditions in the dining hall and an inability to clean tables sufficiently before and after meals. I visited a client at NCCIW on April 7, 2020 and observed only a handful of staff wearing masks.

5. It is a matter of public record that the North Carolina Department of Public Safety ("DPS') struggles to recruit and retain sufficient staff to work at prisons throughout the state. This is true both for correctional officers and for health care providers. According to an August 2019 DPS press statement, the statewide vacancy rate for correctional officers was estimated at 21%. A September 2019 report to legislators cited a 28.6% vacancy rate for physicians and a 27.7% vacancy rate for nurses. One reason that is often

cited by DPS for staff shortages, particularly for medical staff, is that many of the units are located in remote rural locations. When prisons are short-staffed, they are dangerous for those who work there and those who live there. It seems inevitable that COVID-19 will spread through our state prisons as it has spread through the federal prison at Butner and that staff illnesses will result in even more significant staff shortages.

6. NCPLS attorney Ben Finholt collects and analyzes publicly available data from DPS as part of his work for the Just Sentencing Project, a grant-funded project studying sentence lengths. Mr. Finholt is an NCPLS employee and I supervise his work, which includes data collection as part of the Project. The Project exists in part to collect and provide data to attorneys and advocates working for criminal justice reform. These advocates recognized long before the COVID-19 pandemic that the best way to ensure that our prisons are safe and effective with the limited resources that are allocated to them is to lower prison populations. There are many incarcerated persons serving unnecessarily long sentences who may safely be released into the community.

7. According to data collected by Mr. Finholt:

- As of April 7, 2020, DPS is incarcerating 1,190 people over the age of 65

- As of April 1, 2020, DPS was incarcerating 2,015 people eligible for parole.

- As of March 30, 2020, there were 10,489 people in DPS prison facilities whose projected release date was on or before March 31, 2020.

- An additional 565 people were housed in the State Misdemeanant Confinement program, at the Center for Community Transitions in Charlotte, or at the North Piedmont CRV Center. With the possible exception of a relatively small number of people convicted of aggravated level one DWI, these people are projected to be released within the next twelve months or earlier.

- There are approximately 22,000 people in DPS custody whose convictions do not render them ineligible for early medical release.

- There are 806 people whose custody level is Minimum 3 and who are within 1 year of release or parole eligibility and who have been infraction free for 90 days. As we understand the criteria for the home leave program, people in this group who have been in Minimum 3 for at least 90 days would be eligible for home leave.

8. NCPLS attorneys also represent people in post-release revocation hearings before the North Carolina Parole Commission. According to DPS website statistics, there were 24,021 prison entries during calendar year 2019, and 6,325 entries described as "returned from parole." DPS characterizes our clients whose post-release revocation is revoked on the DPS offender profile website as "returned from parole." Accordingly, it appears that approximately 26% of 2019 prison entries were as a result of parole or post-release revocations.

Further affiant sayeth not.

This the 8th day of April, 2020.

/s/ Mary Pollard

_____

Mary Pollard

Affirmed by me under penalty of perjury.

Original signature available as soon as practical.

Exhibit H

Declaration of Dr. David Rosen, Dr. Lauren Brinkley-Rubinstein, Dr. Gavin Yamey, Dr. Mike Dolan Fliss, and Dr. Shabbar I. Ranapurwala

We, Drs. David Rosen, Lauren Brinkley-Rubinstein, Gavin Gamey, Mike Dolan Fliss, and Shabbar I. Ranapurwala, declare as follows:

I. Background and Expertise

Dr. David Rosen

1. I am Dr. David Rosen, an Associate Professor of Medicine in the Division of Infectious Diseases within the School of Medicine at the University of North Carolina—Chapel Hill (UNC) and Adjunct Assistant Professor in the Department of Epidemiology at the UNC Gillings School of Global Public Health. I received my doctorate in Epidemiology in 2008 and my doctorate in Medicine in 2010, both from UNC. I completed postdoctoral fellowships at the UNC Sheps Center for Health Services Research and the UNC Institute for Global Health and Infectious Diseases. I am a practicing epidemiologist and health services researcher specializing in the health of and healthcare for people in the criminal justice system.

2. I have conducted research to understand and improve the health of incarcerated people for over 20 years. Much of my research has focused on the health of people incarcerated in the North Carolina Department of Public Safety Division of Prisons (i.e. the NC prison system). I have led several National Institutes of Health (NIH)-funded studies in or about the prison system that have conducted in-depth interviews with incarcerated persons, healthcare providers and social workers; surveyed hundreds of incarcerated persons about their health; and analyzed the incarceration and health information for more than 100,000 incarcerated persons. Additionally, I am a co-investigator of the NC Formerly Incarcerated Transitions (FIT) Program, a collaboration with the state prison system, which helps support continuity of care as incarcerated people transition from correctional settings back to the community.

3. I have published over 40 scientific articles about the relationship between justice-involvement and health and healthcare in some of the leading peer-review journals (including JAMA, American Journal of Public Health, and Journal of Acquired Immune Deficiency Syndrome). Among others, my research articles focused on the NC prison system have examined the prevalence of chronic health conditions; impact of DPS HIV testing policies on case ascertainment and patients' attitudes towards testing; access to care

during periods of incarceration and in the community; all-cause and cause-specific mortality during incarceration and at release; the relationship between solitary confinement and post-release mortality; and the relationship between community hospitalization during incarceration and post-release mortality. In November 2019 I served as the guest co-editor for an issue of the North Carolina Medical Journal focused on the health of incarcerated persons in the state.

4. My C.V. includes a full list of my honors, experiences, and publications, and is attached as Exhibit A.

Dr. Lauren Brinkley-Rubinstein

5. I am Dr. Lauren Brinkley-Rubinstein, an Assistant Professor in the Department of Social Medicine and the Center for Health Equity Research at the University of North Carolina at Chapel Hill. I am trained as a Community Psychologist. I completed a Master's Degree in Criminal Justice at the City University of New York in 2006. I then went on to obtain a PhD in Community Research and Action in 2015 and a postdoctoral fellowship in HIV and Other Infectious Consequences of Substance Use at the Alpert Medical School at Brown University.

6. I have worked for nearly 15 years on research at the intersection of incarceration and public health. I have been the principal investigator of several National Institutes of Health-funded studies that investigate or address the health of people who have been or are currently incarcerated. These studies are primarily concerned with the prevention of poor health outcomes, overdose, and HIV transmission and acquisition. I am also on the steering committee of the recently launched Justice Substance Use and HIV Prevention working group of the Center for AIDS Research.

7. I have written and published extensively on the topics of incarceration and health (60+) including book chapters and articles in leading peer-reviewed journals (including Lancet HIV, JAMA Open Network, American Journal of Public Health, International Journal of Drug Policy). I co-edited a special issue of the American Journal of Public Health that frames incarceration as a socio-structural driver of health inequities. Relatedly, at this year's annual meeting of the American Public Health Association, I will be an expert plenary speaker on a panel related to mass incarceration and public health. Most recently, I have been engaging in scholarship related to COVID-19. I am the senior author on a new article in Clinical Infectious Diseases that provides COVID-19 prevention guidelines for jails, was an expert panelist for

the Foundation for Opioid Response webinar related to COVID-19 in correctional facilities, and have a forthcoming article in the American Journal of Public Health that discusses COVID-19 in the context of criminal justice reform.

8. My C.V. includes a full list of my honors, experience, and publications, and it is attached as Exhibit B.

Dr. Gavin Yamey

9. I am Dr. Gavin Yamey, Director of the Center for Policy Impact in Global Health (CPIGH) in the Duke Global Health Institute (DGHI) at Duke University, Durham, North Carolina. I am a Professor of Global Health and the Associate Director for Policy at DGHI and I am a Professor of Public Policy in the Duke Sanford School of Policy. I am also a Core Faculty Member of Duke's Margolis Center for Health Policy and am the Faculty Director for the Duke Global Policy Program in Geneva. I teach health policy and health systems to undergraduate and graduate students, including medical students. I am a physician who trained in Britain, and I am a Member of the Royal College of Physicians UK. I have a master degree in public health from the London School of Hygiene and Tropical Medicine. I trained in medical journalism through a fellowship at the British Medical Journal (BMJ).

10. At CPIGH I lead a team of researchers, working on health policy and health disparity worldwide. I focus on ways to improve national health systems and reach universal health coverage. In this work, I engage intensively with policymakers. I have chaired policy workshops at the National Academy of Medicine, on pandemic preparedness, and at the Duke in DC office, on topics such as funding research and development for neglected diseases. A major priority for my work is infectious disease control, including ways to curb HIV, TB, malaria, and outbreaks of emerging infectious diseases. During this current COVID-19 pandemic, I have been called upon by national and international bodies to provide expert inputs on topics such as developing COVID-19 vaccines and mobilizing emergency funding for the COVID-19 response. I have served on four international health commissions—on investing in health; global surgery; tuberculosis; and the links between health, gender, and peace.

11. I have published 191 papers or articles in peer-reviewed journals on a broad range of topics related to health disparities and inequities, social determinants of health, and neglected diseases. I have also been a frequent

commentator on NPR and am a regular columnist for TIME magazine, which published my recent piece on COVID-19 outbreaks in US prisons and jails.

12. My C.V. includes a full list of my honors, experience, and publications, and it is attached as Exhibit C.

Dr. Mike Dolan Fliss

13. I am Dr. Mike Dolan Fliss, a research scientist at the UNC Injury Prevention Research Center and part-time epidemiologist with the NC Injury & Violence Prevention Branch at the Division of Public Health. I completed a PhD in Epidemiology from UNC Chapel Hill, Masters in Social Work from UNC Chapel Hill, and Masters of Professional Science in Biomedical Informatics. I have worked in public health in North Carolina for the past 10 years, at the county, state, and university research levels.

14. I have served on the Orange County Bias-Free Policing Task Force since 2015. My dissertation was on racial disparities in and accurate measurement of North Carolina traffic stops. I have some experience working with DPS data on North Carolina prison populations, and Administrative Office of the Courts (AOC) data. My expertise and training include identifying racial injustices in policing and in the built and natural environment; tracking injury outcomes like opioid overdoses, child maltreatment, and car crashes; and building public health dashboards for situational awareness, policy change, and population health improvement.

15. I have been funded by the North Carolina Department of Public Health, Carolina Center for Health Informatics, and Council of State and Territorial Epidemiologists for bringing research to practice in North Carolina. I have published in peer-reviewed journals on measuring disparities and the link between criminal justice and public health.

16. My C.V. includes a full list of my honors, experience, and publications, and it is attached as Exhibit D.

Dr. Shabbar I. Ranapurwala, PhD, MPH

17. I am Dr. Shabbar I. Ranapurwala, Assistant Professor of Epidemiology at the University of North Carolina at Chapel Hill, and a core faculty member at the UNC Injury Prevention Research Center. I have a PhD in Epidemiology from UNC, Chapel Hill, and was trained as a physician in India.

18. Over the past five years I have worked on opioid overdose and prevention, along with a focus on opioid overdose deaths, homicides, and suicides post-release among justice involved individuals. I have received funding from the CDC and NIH to do work in these research areas. Over the past three years, I have continuously engaged with the North Carolina Department of Public Safety (NCDPS) on health issues affecting justice involved individuals.

19. I have written and published on the topics of post-release mortality among people involved in the criminal justice system including articles in leading peer-reviewed journals (including JAMA Open Network, American Journal of Public Health, and Drug Alcohol Dependence) on issues of post-release services for formerly incarcerated individuals including community mental health and substance use treatment services.

20. My C.V. includes a full list of my honors, experience, and publications, and it is attached as Exhibit E.

II. Heightened Risk of Epidemics in Correctional Facilities

21. The risk posed by infectious diseases in prisons is significantly higher than in the community, both in terms of risk of transmission, exposure, and harm to individuals who become infected. There are several reasons this is the case, as described below.

22. Globally, outbreaks of contagious diseases are all too common in closed correctional settings and are more common than in the community at large. Prisons are not isolated from communities. Staff, visitors, contractors, and vendors pass between communities and prison facilities and can bring infectious diseases into prisons. People released from prison can bring infectious diseases into the community. People in prison often need to be transported between different prisons within the prison system, which can foster transmission.

23. Reduced prevention opportunities: Congregate settings such as prisons allow for rapid spread of infectious diseases that are transmitted person to person, especially those passed by droplets through coughing and sneezing. When people must share dining halls, bathrooms, showers, and other common areas, the opportunities for transmission are greater. When infectious diseases are transmitted from person to person by droplets or through the air, the best initial strategy is to practice social distancing. When imprisoned, people have much less of an opportunity to protect themselves by

social distancing than they would in the community. Spaces within correctional facilities are often poorly ventilated, which promotes highly efficient spread of diseases through droplets. When people are shackled using wrist restraints, they are prevented from covering their mouth when they cough, thus promoting viral transmission. Placing someone in such a setting therefore dramatically reduces their ability to protect themselves from being exposed to and acquiring infectious diseases.

24. Disciplinary segregation or solitary confinement is not an effective disease containment strategy. Beyond the known detrimental mental health effects of solitary confinement, isolation of people who are ill in solitary confinement results in decreased medical attention and increased risk of death. Isolation of people who are ill using solitary confinement also is an ineffective way to prevent transmission of the virus through droplets to others because, except in specialized negative pressure rooms (rarely in medical units if available at all), air continues to flow outward from rooms to the rest of the facility. Risk of exposure is thus increased to other people in prison and staff.

25. Reduced prevention opportunities: During an infectious disease outbreak, people can protect themselves by washing hands. Prisons do not provide adequate opportunities to exercise necessary hygiene measures, such as frequent handwashing or use of alcohol-based sanitizers when handwashing is unavailable. Prisons are often under-resourced and ill-equipped with sufficient hand soap and alcohol-based sanitizers for people detained in and working in these settings. High-touch surfaces (doorknobs, light switches, etc.) should also be cleaned and disinfected regularly with bleach to prevent virus spread, but this is often not done in jails and prisons because of a lack of cleaning supplies and lack of people available to perform necessary cleaning procedures. Face masks can also be an important tool in reducing droplet disease transmission[1] by reducing the dispersion of infectious particles among cases and by reducing opportunities for inoculation among susceptible persons.

26. Reduced prevention opportunities: During an infectious disease outbreak, a containment strategy requires people who are ill with symptoms to be isolated and that caregivers have access to personal protective equipment (PPE), including gloves, masks, gowns, and eye shields. Prisons are often

[1] Recommendation Regarding the Use of Cloth Face Coverings, Especially in Areas of Significant Community-Based Transmission. Available at https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cloth-face-cover.html. Accessed April 5, 2020.

under-resourced and ill-equipped to provide sufficient personal protective equipment for people who are incarcerated and caregiving staff, increasing the risk for everyone in the facility of a widespread outbreak.

27. Increased susceptibility: People incarcerated in jails and prisons are more susceptible to acquiring and experiencing complications from infectious diseases than the population in the community.[2] This is because people in prison are more likely than people in the community to have chronic underlying health conditions, including diabetes, heart disease, chronic lung disease, chronic liver disease, and lower immune systems from HIV.[3]

28. Prisons are often poorly equipped to diagnose and manage infectious disease outbreaks. The medical facilities at prisons are almost never sufficiently equipped to handle large outbreaks of infectious diseases. To prevent transmission of droplet-borne infectious diseases, people who are infected and ill need to be isolated in specialized airborne negative pressure rooms. Most prisons have few negative pressure rooms if any, and these may be already in use by people with other conditions (including tuberculosis or influenza). Resources will become exhausted rapidly and any beds available will soon be at capacity. This makes both containing the illness and caring for those who have become infected much more difficult.

29. Compared to community settings, prisons do not have the same access to health resources that can be crucial in identifying and managing widespread outbreaks of infectious diseases. This includes access to testing equipment, laboratories, and medications.

30. Prisons often need to rely on outside facilities (hospitals, emergency departments) to provide intensive medical care given that the level of care they can provide in the facility itself is typically relatively limited. During an epidemic, use of outside healthcare facilities will likely be limited, as community needs may outpace the capacity of community healthcare facilities.

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[2] Active case finding for communicable diseases in prisons, 391 The Lancet 2186 (2018), https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)31251-0/fulltext.

[3] Maruschak LM, Berzofsky M, Unangst J. Medical Problems of State and Federal Prisoners and Jail Inmates, 2011–12. Washington, DC: US Department of Justice, Bureau of Justice Statistics; 2015 February Report No.: NCJ 248491.

31. Health safety: As an outbreak spreads through prisons and communities, medical personnel become sick and do not show up to work. Absenteeism means that facilities can become dangerously understaffed with healthcare providers. This increases a number of risks and can dramatically reduce the level of care provided. As health systems inside prison systems are taxed, people with chronic underlying physical and mental health conditions and serious medical needs may not be able to receive the care they need for these conditions. As supply chains become disrupted during a global pandemic, the availability of medicines and food may be limited.

32. Safety and security: As an outbreak spreads through prisons and communities, correctional officers and other security personnel become sick and do not show up to work. Absenteeism poses substantial safety and security risk to both the people inside the facilities and the public.

33. These risks have all been borne out during past epidemics of influenza in jails and prisons. For example, in 2012, the Centers for Disease Control and Prevention (CDC) reported an outbreak of influenza in 2 facilities in Maine, resulting in two inmate deaths.[4] Subsequent CDC investigation of 995 inmates and 235 staff members across the 2 facilities discovered insufficient supplies of influenza vaccine and antiviral drugs for treatment of people who were ill and prophylaxis for people who were exposed. During the H1N1-strain flu outbreak in 2009 (known as the "swine flu"), jails and prisons experienced a disproportionately high number of cases.[5] Even facilities on "quarantine" continued to accept new intakes, rendering the quarantine incomplete. These scenarios occurred in the "best case" of influenza, a viral infection for which there was an effective and available vaccine and antiviral medications, unlike COVID-19, for which there is currently neither.

34. Pregnant women are at even higher risk: Women who are incarcerated are more likely than the general population to have high-risk pregnancies. They are more likely to give birth prematurely and to have other health issues like pre-eclampsia. Due to possible staff shortages and greater resources devoted to the COVID-19 response, pregnant women may not have access to

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[4] Influenza Outbreaks at Two Correctional Facilities — Maine, March 2011, Centers for Disease Control and Prevention (2012), https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6113a3.htm.

[5] David M. Reutter, Swine Flu Widespread in Prisons and Jails, but Deaths are Few, Prison Legal News (Feb. 15, 2010), https://www.prisonlegalnews.org/news/2010/feb/15/swine-flu-widespread-in-prisons-and-jails-but-deaths-are-few/.

necessary care such as needed scans or appointments. In, addition, women's medical calls could go unanswered or responded to slowly impacting timely transfer to the hospital for birth or other emergency situations.[6]

III. Profile of COVID-19 as an Infectious Disease in North Carolina Prisons[7]

35. The novel coronavirus, officially known as SARS-CoV-2, causes a disease known as COVID-19. The virus is thought to pass from person to person primarily through respiratory droplets (by coughing or sneezing) but may also survive on inanimate surfaces. People seem to be most able to transmit the virus to others when they are sickest but it is possible that people can transmit the virus before they start to show symptoms or for weeks after their symptoms resolve. It was recently recognized that up to 25% of those infected remain asymptomatic. In China, where COVID-19 originated, the average infected person passed the virus on to 2-3 other people; transmission occurred at a distance of 3-6 feet. Not only is the virus very efficient at being transmitted through droplets, everyone is at risk of infection because our immune systems have never been exposed to or developed protective responses against this virus. A vaccine is currently in development but the very earliest that a vaccine is likely to be available is around 12-18 months from now.[8] Antiviral medications are currently in testing but not yet FDA-approved, so only available for compassionate use from the manufacturer. People in prison and jail will likely have even less access to these novel health strategies as they become available.

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[6] Emily Goddard, Government Must Release Pregnant Women from Prison or Risk Lives, Campaigners Warn, March 22, 2020, available at https://www.independent.co.uk/news/uk/politics/pregnant-women-prison-coronavirus-covid19-england-wales-a9416991.html.

[7] This whole section draws from Brooks J. Global Epidemiology and Prevention of COVID19, COVID-19 Symposium, Conference on Retroviruses and Opportunistic Infections (CROI), virtual (March 10, 2020); Coronavirus (COVID-19), Centers for Disease Control, https://www.cdc.gov/coronavirus/2019-ncov/index.html; Brent Gibson, COVID-19.
(Coronavirus): What You Need to Know in Corrections, National Commission on Correctional Health Care (February 28, 2020), https://www.ncchc.org/blog/covid-19-coronavirus-what-you-need-to-know-in-corrections.

[8] Yamey G, Schäferhoff M, Hatchett R, Pate M, Zhao F, Kennedy McDade K. Ensuring global access to COVID-19 vaccines. Lancet 2020 Mar 31. doi: 10.1016/S0140-6736(20)30763-7.

36. Most people (80%) who become infected with COVID-19 will develop a mild upper respiratory infection but emerging data from China suggests serious illness occurs in up to 16% of cases, including death.[9] Serious illness and death is most common among people with underlying chronic health conditions, like heart disease, lung disease, liver disease, and diabetes, and older age.[10]

37. The care of people who are infected with COVID-19 depends on how seriously they are ill.[11] People with mild symptoms may not require hospitalization but may continue to be closely monitored at home. People with moderate symptoms may require hospitalization for supportive care, including intravenous fluids and supplemental oxygen. People with severe symptoms may require ventilation and intravenous antibiotics. Public health officials anticipate that hospital settings will likely be overwhelmed and beyond capacity to provide this type of intensive care as COVID-19 becomes more widespread in communities.

38. COVID-19 prevention strategies include containment and mitigation. Containment requires intensive hand washing practices, decontamination and aggressive cleaning of surfaces, and identifying and isolating people who are ill or who have had contact with people who are ill, including the use of personal protective equipment. Jails and prisons are totally under-resourced to meet the demand for any of these strategies. As infectious diseases spread in the community, public health demands mitigation strategies, which involves social distancing and closing other communal spaces (schools, workplaces, etc.) to protect those most vulnerable to disease. Prisons are unable to adequately provide social distancing or meet mitigation recommendations as described above. With the approximately 50,000 in the NC prison system (35,000 incarcerated persons and 14,000 staff) unable to

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[9] Coronavirus Disease 2019 (COVID-19): Situation Summary, Centers for Disease Control and Prevention (March 14, 2020), https://www.cdc.gov/coronavirus/2019-ncov/summary.html.

[10] Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study. The Lancet (published online March 11, 2020), https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30566-3/fulltext

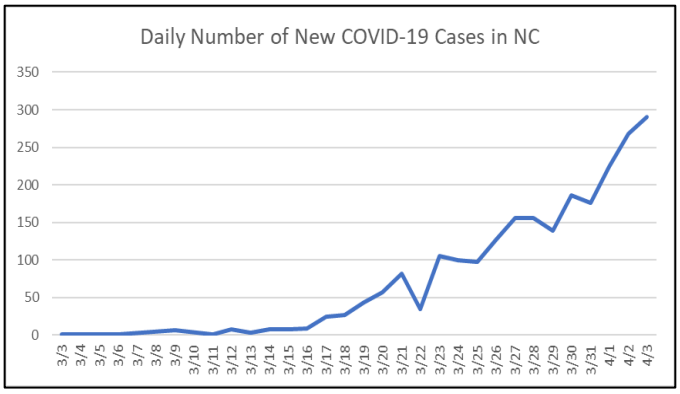
[11] Coronavirus Disease 2019 (COVID-19): Interim Clinical Guidance for Management of Patients with Confirmed Coronavirus Disease, Centers for Disease Control and Prevention (March 7, 2020), https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html.

fully partake in social distancing, it is likely that the prison system will remain a reservoir of infection for the entire state.

39. People infected with the virus causing COVID-19 frequently do not display symptoms; those who do develop symptoms can transmit infection prior to showing symptoms. It has been estimated that up to 25% of people infected with the novel coronavirus do not display any symptoms and those who do develop symptoms are infectious prior to symptom onset. Accordingly, existing symptom-based screening is an insufficient mechanism to identify probable cases and stop disease transmission both within prison facilities and between prison and community settings.

40. With asymptomatic transmission, use of face masks is an essential tool to reduce the spread of infectious particles among COVID-19 cases and to reduce exposure among those who are susceptible. As of April 6, masks were reportedly allotted to incarcerated persons and staff in three NC prisons with identified cases, but the distribution of masks to incarcerated persons and staff in other facilities appears to be incomplete until the prison system can ramp up mask production. Although the prison system's goal is to issue masks to all incarcerated persons and staff, in the meantime there has been ample opportunity for asymptomatic transmission to occur within the prison system.

41. COVID-19 continues to spread across the globe, in the US, and in NC. Across the globe, there are now more than 1.2 million confirmed cases of COVID-19. The first US case of COVID-19 was identified on January 21, 2020 and as of April 4, 2020, over 300,000 cases have been detected with more than 8,500 (2.8%) resulting deaths.[12]



[12] Coronavirus COVID-19 Global Cases by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU). https://coronavirus.jhu.edu/map.html. Accessed April 5.

42. In NC, the first COVID-19 case was detected on March 1, 2020. As of April 7, 2020, more than 3,257 cases had been identified in the state.[13] Characteristic of COVID-19 transmission, the daily number of cases detected in the state continues to grow exponentially, with the number of new cases in NC doubling about every three days. This finding is also impacted by growing testing capacity in the state.

43. Rates of hospitalization, ICU beds need, and death in the US and in NC are high. In the US as in other countries, rates of hospitalization, need for intensive care, and death among those infected with COVID-19 are high and increase with age. A CDC investigation of outcomes among all COVID-19 cases from mid-February to mid-March[14] reported that among infected persons aged 20-40 years, the rate of hospitalization was 14-21% and the case fatality rate was 0.1-0.2%. Among infected persons aged 55 or older, the hospitalization rate was at least 21% and the rate of mortality was at least 1.4%; among infected persons aged 85 years or older, the case fatality rate was greater than 10%. Although these rates may be elevated because they do not account for asymptomatic cases that remained undetected in the community, the high rates of poor health outcomes among infected persons invokes concern that healthcare systems, including correctional healthcare systems, can be overwhelmed. According to state DHHS data, as of April 7, 2020, 11% (271/2402) of COVID-19 cases in NC have been hospitalized and 1.6% (24/2402) have died.

TABLE. Hospitalization, intensive care unit (ICU) admission, and case–fatality percentages for reported COVID–19 cases, by age group — United States, February 12–March 16, 2020

Age group (yrs) (no. of cases)	%*		
	Hospitalization	ICU admission	Case-fatality
0–19 (123)	1.6–2.5	0	0
20–44 (705)	14.3–20.8	2.0–4.2	0.1–0.2
45–54 (429)	21.2–28.3	5.4–10.4	0.5–0.8
55–64 (429)	20.5–30.1	4.7–11.2	1.4–2.6
65–74 (409)	28.6–43.5	8.1–18.8	2.7–4.9
75–84 (210)	30.5–58.7	10.5–31.0	4.3–10.5
≥85 (144)	31.3–70.3	6.3–29.0	10.4–27.3
Total (2,449)	**20.7–31.4**	**4.9–11.5**	**1.8–3.4**

* Lower bound of range = number of persons hospitalized, admitted to ICU, or who died among total in age group; upper bound of range = number of persons hospitalized, admitted to ICU, or who died among total in age group with known hospitalization status, ICU admission status, or death.

[13] Source: NC DHHS and county health departments. Data available from https://www.newsobserver.com/news/local/article241168731.html; accessed April 7.
[14] Severe Outcomes Among Patients with Coronavirus Disease 2019 (COVID-19) — United States, February 12–March 16, 2020. MMWR Morb Mortal Wkly Rep 2020;69:343-346. Available at https://www.cdc.gov/mmwr/volumes/69/wr/mm6912e2.htm?s_cid=mm6912e2_w#T1_down. Accessed April 5, 2020

44. Other correctional systems are incurring COVID-19 cases among incarcerated persons and staff, but comprehensive information on transmission in these systems is incomplete. Thus far, comprehensive reports of COVID-19 transmission in correctional settings are lacking. However, there are several media reports of large clusters that have occurred. For example, the Cook County (IL) Jail identified its first cases on March 23rd. Since then, the Cook County Jail has had a total of 210 detained persons and 60 employees that have tested positive for COVID-19. Fourteen of the detained persons (6.7%) who tested positive are now hospitalized. [15] In Rikers Island Jail, 231 incarcerated people and 223 staff members have tested positive for COVID-19, and the infection rate is about 8 times that in New York City overall (4% vs 0.51%).[16] In the federal Bureau of Prisons, 195 incarcerated persons and 63 staff have tested positive for COVID-19, and there have been 8 inmate deaths which accounts for 4% death rate (in contrast to approximately 1% death rate in NC). At the Butner Federal Correctional Complex in Granville County, NC, at least 54 detained people and one staff member have tested positive as of April 6.[17] Data are also beginning to emerge from state prison systems. Michigan and Illinois have 207 and 62 incarcerated persons who are infected, respectively. And state prison systems in Michigan[18], California[19], Florida,[20] New York,[21]

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[15] Cook County Jail Now Reports 210 Inmates Have Tested Positive for COVID-19. Available at https://www.nbcchicago.com/news/coronavirus/cook-county-jail-now-reports-210-inmates-have-tested-positive-for-covid-19/2250366/. Accessed April 5, 2020

[16] Craven J. Coronavirus Cases Are Spreading Rapidly on Rikers Island. April 2, 2020. Available at https://slate.com/news-and-politics/2020/04/rikers-coronavirus-cases-increase.html; accessed April 5, 2020

17 Dan Kane & Ashad Ajela, Coronavirus cases surge at Butner prison complex in NC, county official reports, April 6, 2020. Available at https://www.newsobserver.com/news/coronavirus/article241801076.html.

[18] Megan Schellong. More than 200 cases of COVID-19 reported in Michigan Department of Corrections facilities. April 4, 2020. Available at: https://www.wlns.com/news/more-than-200-cases-of-covid-19-reported-in-michigan-department-of-corrections-facilities/. Accessed on April 6, 2020

[19] COVID-19 Preparedness. Available at https://www.cdcr.ca.gov/covid19/. Accessed April 5, 2020

[20] Dara Kam. 2 Florida inmates test positive for COVID-19. April 5, 2020. Available at: https://www.news4jax.com/news/florida/2020/04/05/2-florida-inmates-test-positive-for-covid-19/. Accessed on April 6, 2020.

[21] Emily Russell. NYS Prisons: 105 employees and 14 inmates test positive for COVID-19. March 31, 2020. Available at: https://news.wbfo.org/post/nys-prisons-105-employees-and-14-inmates-test-positive-covid-19. Accessed on April 6, 2020.

Louisiana[22], New Jersey[23], and Illinois[24] all have 20 or more staff who have tested positive.

High rates of infection have been detected in correctional facilities outside of the US. In perhaps the only example in which all incarcerated persons within a facility were tested for COVID-19, the Rencheng Prison in the Shandong province of China found that 10% (207/2007) of incarcerated persons were infected. News outlets reported that Iran temporarily released 70,000 prisoners when COVID-19 was detected in its prisons.[25]

45. To mitigate harms of COVID-19, some prison systems have begun planning for early release. The US Attorney General William Barr has requested that the Bureau of Prisons release all incarcerated persons who could be eligible for home confinement and were at increased risk for infection.[26] Among other state prison systems, those in California (planned 3,500 releases)[27], Iowa (expediting release of 700+ approved for work release)[28], and Illinois

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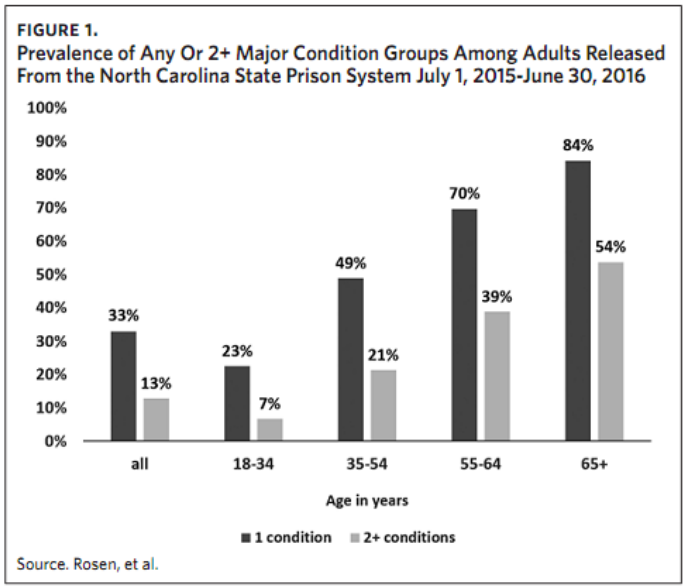
[22] Louisiana Department of Public Safety & Corrections. COVID-19 staff positives. Available at https://doc.louisiana.gov/doc-covid-19-testing/. Accessed April 6, 2020
[23] State of New Jersey Department of Corrections COVID-19 Updates. Available at https://www.state.nj.us/corrections/pages/COVID19Updates.shtml. Accessed April 6, 2020
[24] IDOC Facilities. COVID-19 Response. Available at https://www2.illinois.gov/idoc/facilities/Pages/Covid19Response.aspx. Accessed April 6, 2020
[25] Iran temporarily releases 70,000 prisoners as coronavirus cases surge, Reuters (March 9, 2020), https://www.reuters.com/article/us-health-coronavirus-iran/iran-temporarily-releases-70000-prisoners-as coronavirus-cases-surge-idUSKBN20W1E
[26] Benner K. Barr Expands Early Release of Inmates at Prisons Seeing More Coronavirus Cases. April 3, 2020. Available at https://www.nytimes.com/2020/04/03/us/politics/barr-coronavirus-prisons-release.html. Accessed April 5, 2020.
[27] Paige St. John. California to release 3,500 inmates early as coronavirus spreads inside prisons. March 31, 2020. Available at: https://www.latimes.com/california/story/2020-03-31/coronavirus-california-release-3500-inmates-prisons. Accessed on April 6, 2020.
[28] Linh Ta. Iowa's prisons will accelerate release of approved inmates to mitigate COVID-19. Available at: https://www.timesrepublican.com/news/todays-news/2020/03/iowas-prisons-will-accelerate-release-of-approved-inmates-to-mitigate-covid-19/. Accessed on April 6, 2020.

(300 releases)[29] are in the midst of increasing the number of releases in response to COVID-19.

46. <u>The NC prison system is a large and sprawling organization</u>. North Carolina has the 12th largest state prison system in the country.[30] More than 14,000 (per 2018 data)[31] DPS personnel operate the system's 56 prisons[32] that span much of the state. As of February 29, 2020, there were just over 35,000 people incarcerated in the prison system, with approximately 23,000 entering and exiting the system each year. [33]



47. <u>People incarcerated the NC prison system have a heavy burden of health problems.</u> In the US, morbidity among incarcerated people is commonly high, and NC is no exception. In our recently published study, we found that in 2015-2016, 33% of people released from the NC prison system had taken medication for a chronic health condition during their incarceration: 15% had cardiovascular disease, 6% had a pulmonary condition, 3% had diabetes, and

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[29] Devin Trubey. Inmates released to stop spread of COVID-19. March 31, 2020. Available at: https://newschannel20.com/news/coronavirus/inmates-released-to-stop-spread-of-covid-19. Accessed on April 6, 2020.
[30] Bronson J, Carson EA. Prisoners in 2017. Washington, DC: US Department of Justice, Bureau of Justice Statistics; 2019 April. Report No.: NCJ 252156. Available at https://www.bjs.gov/index.cfm?ty=pbdetail&iid=6546. Accessed on April 5, 2020.
[31]NC Department of Public Safety. Prisons. March 20, 2018. Available at https://files.nc.gov/ncdps/documents/files/Status%20of%20Prisons%20Presentation%20to%20Prison%20Reform%20Advisory%20Board%203-20-18.pdf. Accessed April 1, 2020.
[32] NC DPS. Prison Facilities. Available at https://www.ncdps.gov/Adult-Corrections/Prisons/Prison-Facilities. Accessed April 5, 2020.
[33] DPS Office of Research and Planning. Automated Query System. Available at https://webapps.doc.state.nc.us/apps/asqExt/ASQ. Accessed April 1, 2020.

3% had a chronic infectious disease such as HIV or tuberculosis. Among those aged 65 years and older, 84% had a chronic condition and 54% had multiple. Nearly half of those aged 35-54 years had at least one chronic condition, and 21% had multiple conditions. Prison physicians have observed that incarcerated people often appear to age faster compared to the general population due to both the increased burden of chronic disease, putting them at increased risk for adverse health outcomes and death resulting from COVID-19.[34]

48. In the NC prison system, incarcerated people living with psychiatric conditions have a heavier burden of non-psychiatric, chronic conditions as compared to the general prison population. Our study of chronic health conditions in the NC prison system found that within every age group, those with a psychiatric disorder had a higher prevalence of non-psychiatric, chronic health problems as compared to the other people incarcerated in the NC prison system. This finding suggests that those with psychiatric problems may be particularly vulnerable to the consequences of infection with the novel coronavirus.

49. Medical care in the NC prison system is understaffed. As of September 2019, the NC prison system had 1,153 health care positions filled, with a vacancy rate of about 20%. This included vacancies among 28% of physician and registered nurse positions and vacancies for 15% of certified nursing assistant II positions.[35] Quarantine of staff with confirmed or probable infection would result in further reductions in the prison system healthcare workforce.

50. Under normal conditions, it can be difficult to obtain needed care in NC prisons. In a 2018 survey conducted among 208 people incarcerated in the NC prison system who had chronic health condition, 64% reported that it was "harder" to get healthcare in prison than in the community; 51% reported needing but not receiving a prescription medication during their current incarceration; and 48% reported having gone without needed medical care during their current incarceration (unpublished data collected by Dr. Rosen).

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[34] Barbara Bradley Hagerty, Innocent Prisoners Are Going to Die of the Coronavirus, Mar. 31. 2010, available at https://www.theatlantic.com/ideas/archive/2020/03/americas-innocent-prisoners-are-going-die-there/609133/.

[35] Healthcare Staffing at North Carolina State Prisons: How we are combatting healthcare vacancies. Available at https://files.nc.gov/ncdps/documents/files/Prison-Reform-Committe-on-Healthcare-PPT-9182019.pdf. Accessed on April 1, 2020

A nationally representative survey of people incarcerated in state and federal prisons found that 44% of respondents were "not at all satisfied" with their healthcare, and 52% found that their care during incarceration was worse than care they received in the community in the 12 months preceding their incarceration.[36] As the number of COVID-19 cases increases, the typical challenges in receiving needed healthcare in the NC prison system and in other US prison systems are likely to be exacerbated.

51. The North Carolina prison system relies on community hospitals to provide care**.** Although the prison system maintains medical facilities for men and women, the system is often dependent on community hospitals for the delivery of care. In 2016, for example, there were 2,165 outside hospitalizations[37] among persons incarcerated in the prison system.

52. The prison system does not possess any mechanical ventilators, which are essential in sustaining life among those with respiratory failure. Without onsite ventilators, incarcerated persons with worsening COVID-19 symptoms will need to be transferred to community hospitals. These transfers require accompaniment by correctional officers. Considering current staff shortages, capacity to conduct these transfers may be hampered as the number of COVID-19 cases requiring advanced medical care are needed.

53. Known cases of COVID-19 in the NC state prison system. As of April 3, there were 8 known COVID-19 cases associated with the NC prison system, 4 among incarcerated persons and 4 among staff.[38] As of April 5, an additional 3 incarcerated persons have tested positive.[39] Thirty-six adult offenders and

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[36] Maruschak LM, Berzofsky M, Unangst J. Medical Problems of State and Federal Prisoners and Jail Inmates, 2011–12. Washington, DC: US Department of Justice, Bureau of Justice Statistics; 2015 February Report No.: NCJ 248491.

[37] NC DPS. Memorandum to Chairs of Senate Appropriations Committee on Justice and Public Safety Chairs of House Appropriations Subcommittee on Justice and Public Safety Chairs of the Joint Legislative Oversight Committee on Justice and Public Safety. Feb 1, 2017. Available at https://www.ncleg.gov/documentsites/committees/JLOCJPS/Reports/FY%202016-17/DPS_Inmate_Medical_CostContainment_Q2_Oct-Dec%202016_2017-02-27.pdf. Accessed April 1, 2020.

[38] WECT staff. At least 4 inmates test positive for COVID-19, N.C. prison officials say. Available at https://www.wect.com/2020/04/02/least-inmates-test-positive-covid-nc-prison-officials-say/. Accessed April 5, 2020

[39] 7 state prison inmates in NC have now tested positive for COVID-19. April 5, 2020. Available at

2 juvenile justice offenders have been placed in isolation for respiratory or flu-like symptoms. Given the epidemic curve in the country and in NC, these numbers are expected to continue rising.

54. Considering the large size of the prison population, low levels of infection among incarcerated persons and staff can result in relatively high numbers of adverse health outcomes, stressing prison operations, including healthcare delivery. We used a simple approach to estimate the likely number COVID-19 related hospitalizations, ICU need, and deaths among incarcerated persons and staff. Our estimates are based on an approach called direct standardization, in which we assumed that those infected will have the "rates" of outcomes (hospitalization, needed ICU beds, and deaths) as reported in the CDC report described above.[40] Because outcomes (hospitalization, ICU needed, death) become more likely with increasing age, the analysis takes into account the age distribution of the incarcerated and staff populations. Considering the lack of information about the proportion of people in prison that will become infected (see "COVID-19 in other correctional systems"), we calculated our estimates across a wide range of possible infection rates. As a point of reference, it has been estimated that without any intervention (e.g. social distancing), 60% of people in the general population will become infected with the coronavirus during the pandemic.[41]

Results: Estimated Number of Hospitalizations, ICU beds needed, and Deaths by % infected

Incarcerated Persons (n=35,085)

% Infected*	Hospitalizations	ICU	Deaths
5	387	86	10
10	775	172	21
15	1,162	258	31
20	1,550	344	41
30	2,325	517	62
40	3,100	689	83
50	3,875	861	103
60	4,650	1,033	124

Prison Staff (n=14,115)

% Infected*	Hospitalizations	ICU	Deaths
5	163	39	5
10	327	78	10
15	490	117	16
20	654	156	21
30	981	234	31
40	1307	312	41
50	1634	390	52
60	1961	468	62

https://www.newsobserver.com/news/coronavirus/article241781341.html. Accessed April 6, 2020.

[40] The CDC report provided a low and high estimates for hospitalization, ICU need, and death for each age strata. Our results were calculated using the average of the low and high estimate for each age strata and health outcome.

[41] Jankowicz M. Coronavirus could infect 60% of the world's population if it is left 'unchecked,' a leading disease expert warned. November 2, 2019. Available at https://www.msn.com/en-sg/health/medical/coronavirus-could-infect-60percent-of-the-worlds-population-if-it-is-left-unchecked-a-leading-disease-expert-warned/ar-BBZSMHM. Accessed April 6, 2020

55. Based on our analysis, if 5% of the prison population became infected, the result would be an estimated 387 hospitalizations, 86 ICU beds needed, and 10 deaths; if 20% were infected, there would be 1550 hospitalizations, 334 ICU beds needed, and 41 deaths. Compared to 2016, this would represent a 71% increase in hospitalizations.

56. If 5% of prison staff were infected, there would be an estimated 163 hospitalizations, 39 ICU beds needed, and 5 deaths. Twenty percent of staff becoming infected would result in 654 hospitalizations, 156 ICU beds needed, and 21 deaths. Considering existing challenges maintaining sufficient levels of prison staffing, including healthcare staffing, the analysis suggests that relatively low levels of infection among incarcerated persons and staff could stress prison operations and result in considerable morbidity and mortality.

57. Another important finding is that while younger persons are at lower risk of poor health outcomes from COVID-19 as compared to older persons, the age structure of the incarcerated population suggests that the bulk of hospitalizations, ICU need, and deaths will occur among the large population of younger persons. Accordingly, while release of older persons is an important intervention to protect their health, it alone will be insufficient to avoid most adverse health outcomes and deaths among the incarcerated population.

58. As in prison systems in other countries, fears about COVID-19 infection have incited protests among incarcerated persons in NC. In countries such as Italy, Columbia, and Thailand, fear of COVID-19 has sparked prison riots and deaths. In NC there have been reports of incarcerated persons protesting at a prison where two cases were identified.[42] Such protests—and the force used by correctional staff to maintain order—may increase the incidence of anxiety, trauma, and injury.

59. Concerns about the implementation of policies to address COVID-19 in the NC DPS. The prison system has created some policies to mitigate the risk of COVID-19.[43] While many of these recommendations are in line with

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[42] Inmates organize protest at Goldsboro prison after 2 test positive for COVID-19. April 2, 2020. Available at https://abc11.com/neuse-correctional-institution-covid-19-prison-riot-morris-reid/6071997/. Accessed April 6, 2020

[43] DPS Actions on COVID-19. Available at https://www.ncdps.gov/our-organization/emergency-management/past-disasters/dps-actions-covid-19#prisons. Accessed on April 5, 2020

recommendations provided by the Centers for Disease Control and Prevention, their implementation has been problematic.[44] For example:

1. Recent reports indicate that social distancing has not been occurring.[45]
2. Non-essential transports between facilities have occurred despite policies limiting transfers to only court-ordered, high priority, and health care movements.[46]
3. Relying on temperature checks and self-reporting of previous exposure does not account for possible contact with asymptomatic cases. In addition, according to DPS statements, these actions are only taking place in a few facilities.
4. There is a lack of available masks for both correctional staff and people who are incarcerated. DPS has plans to ramp up production, but this will take time.
5. Covid-19 testing currently takes seven days for results, which is too long for effective infection control. Only more rapid and robust testing efforts can prevent spread.

60. Racial disparities in prison may perpetuate disparities in COVID-19 outcomes. As in many other states, there are stark racial disparities in the NC prison system. Non-white persons make up 31% of NC's general population,[47] but 59% of NC's prison population. [48] As a result of these

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[44] CDC. Interim Guidance on Management of Coronavirus Disease 2019 (COVID-19) in Correctional and Detention Facilities. Available at https://www.cdc.gov/coronavirus/2019-ncov/community/correction-detention/guidance-correctional-detention.html. Accessed April 5, 2020.

[45] Wilkie J. UPDATED: Prison dorm quarantined after coronavirus confirmed in NC inmate. April 2, 2020. Available at https://carolinapublicpress.org/30188/prison-dorm-quarantined-after-coronavirus-confirmed-in-nc-inmate/. Accessed on April 6, 2020.

[46] Ochsner N. NC's prisons have continued transferring inmates, holding worship services during coronavirus pandemic. April 3, 2020. Available at https://www.wbtv.com/2020/04/03/ncs-prisons-have-continued-transferring-inmates-holding-worship-services-during-coronavirus-pandemic/. Accessed April 6, 2020. DPS Actions on COVID-19, available at https://www.ncdps.gov/our-organization/emergency-management/past-disasters/dps-actions-covid-19#prisons.

[47] North Carolina Population. Available at https://worldpopulationreview.com/states/north-carolina-population/. Accessed April 6, 2020.

[48] DPS Office of Research and Planning. Automated Query System. Available at https://webapps.doc.state.nc.us/apps/asqExt/ASQ. Accessed April 1, 2020.

disproportionate incarceration rates, inadequacies in the prison system's response to COVID-19 will have a greater population-level impact on non-white persons as compared to whites.

IV. Summary of COVID-19 risk in the NC state prison system.

61. Based on our experience conducting health research in the NC prison system and in other states; our review of the relevant literature, CDC guidelines, and prison system policies; examples of divergence between prison system infection control policies and practice; the sprawling nature of the prison system; understaffing of prison system correctional and medical personnel; the high transmissibility of the virus and its asymptomatic spread; and the lengthy time necessary to conduct tests for the virus causing COVID-19; it is our professional judgment that the prison system is inadequately able prevent and manage a COVID-19 outbreak, which would result in severe harm to incarcerated persons, staff, and the broader community. The reasons for this conclusion are detailed as follows.

62. The delays in access to care that already exist in normal circumstances will only become worse during an outbreak, making it especially difficult for the prison system to contain any infections, to quarantine appropriately, and to treat those who are infected.

63. Failure to provide individuals adequate medical care for their underlying chronic health conditions results in increased risk of COVID-19 infection and increased risk of infection-related morbidity and mortality if they do become infected.

64. People with underlying chronic mental health conditions need adequate access to treatment for these conditions throughout their incarceration. Failure to provide adequate mental health care, as may happen when the prison system is taxed by COVID-19 may result in poor health outcomes. Moreover, mental health conditions are likely to be exacerbated by the stress of incarceration during the COVID-19 pandemic, including isolation and lack of visitation.

65. The routine reliance of the prison system on community hospitals is a strong sign that they will be seriously ill-equipped and under-prepared when a number of people will need urgent care simultaneously, as would occur during a COVID-19 epidemic.

66. For individuals incarcerated in the prison system, the experience of an epidemic and the lack of care while effectively trapped can itself be traumatizing, compounding the trauma of incarceration.

V. Conclusion and Recommendations

67. For the reasons above, it is our professional judgment that individuals in the NC state prison system are at a significantly higher risk of infection with COVID-19 as compared to the population in the community and—because of lack of medical staff and resources—they are at a significantly higher risk of harm if they do become infected. These harms include serious illness (pneumonia and sepsis) and even death.

68. Reducing the prison population size more generally can be crucially important to reducing the level of risk both for those within those facilities and for the community at large.

69. As such, from a public health perspective, it is our strong opinion that individuals who are of low criminogenic risk should be released to the community regardless of the time on their remaining sentence.

70. This is more important still for individuals with preexisting conditions (e.g., heart disease, chronic lung disease, chronic liver disease, suppressed immune system, diabetes) or who are over the age of 60. They are in even greater danger in these facilities, including a meaningfully higher risk of death.

71. It is our professional opinion that these steps are both necessary and urgent as the first cases of COVID-19 have been detected in the prison system. As the number of cases in the prison system increase, efforts at infection control and mitigation will become increasingly more difficult.

72. Health in prisons and jails is community health. Protecting the health of individuals who are incarcerated is vital to protecting the health of the wider community.

73. None of the undersigned were paid for preparing this report.

Date: April 7, 2020

I declare, under penalty of perjury under the laws of the State of North Carolina, that the statements contained in the **Declaration of Dr. David Rosen, Dr. Lauren Brinkley-Rubinstein, Dr. Gavin Yamey, Dr. Mike Dolan Fliss, and Dr. Shabbar I. Ranapurwala** are true and correct.

David Rosen, M.D., Ph.D

April 7, 2020

Date

Carrboro, NC

Location

I declare, under penalty of perjury under the laws of the State of North Carolina, that the statements contained in the **Declaration of Dr. David Rosen, Dr. Lauren Brinkley-Rubinstein, Dr. Gavin Yamey, Dr. Mike Dolan Fliss, and Dr. Shabbar I. Ranapurwala** are true and correct.

Lauren Brinkley-Rubinstein, Ph.D

4/8/20

Date

Durham, NC
Location

I declare, under penalty of perjury under the laws of the State of North Carolina, that the statements contained in the **Declaration of Dr. David Rosen, Dr. Lauren Brinkley-Rubinstein, Dr. Gavin Yamey, Dr. Mike Dolan Fliss, and Dr. Shabbar I. Ranapurwala** are true and correct.

Gavin Yamey, M.D., MPH	4/7/2020 Date
	Durham, NC, USA Location

I declare, under penalty of perjury under the laws of the State of North Carolina, that the statements contained in the **Declaration of Dr. David Rosen, Dr. Lauren Brinkley-Rubinstein, Dr. Gavin Yamey, Dr. Mike Dolan Fliss, and Dr. Shabbar I. Ranapurwala** are true and correct.

Mike Dolan Fliss, Ph.D, MSW, MPS

04/7/2020

Date

Chapel Hill, NC

Location

I declare, under penalty of perjury under the laws of the State of North Carolina, that the statements contained in the **Declaration of Dr. David Rosen, Dr. Lauren Brinkley-Rubinstein, Dr. Gavin Yamey, Dr. Mike Dolan Fliss, and Dr. Shabbar I. Ranapurwala** are true and correct.

Shabbar I. Ranapurwala, PhD, MPH

04 / 07/ 2020

Date

Chapel Hill, North Carolina

Location

EXHIBITS

Declaration of Dr. David Rosen,
Dr. Lauren Brinkley-Rubinstein,
Dr. Gavin Yamey, Dr. Mike Dolan Fliss,
and Dr. Shabbar I. Ranapurwala

EXHIBIT LIST

EXHIBIT A – Curriculum Vitae of David L. Rosen, M.D., Ph.D

EXHIBIT B – Curriculum Vitae of Lauren Brinkley-Rubinstein, Ph.D

EXHIBIT C – Curriculum Vitae of Gavin M. Yamey, M.D.

EXHIBIT D – Curriculum Vitae of Mike D. Fliss, Ph.D, MPS, MSW

EXHIBIT E – Curriculum Vitae of Shabbar I. Ranapurwala, PhD, MPH, BHMS

EXHIBIT A

DAVID LOREN ROSEN

Curriculum Vitae

Personal Information

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Education

Post-Graduate Training

THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

2012 – 2013 **Postdoctoral Fellow**
Center for Infectious Diseases, Department of Medicine

2010 – 2012 **Postdoctoral Fellow**
Cecil G. Sheps Center for Health Services Research
Comparative Effectiveness Research Training Grant

2011 **Teaching Certificate**
Center for Faculty Excellence/Training Initiatives in Biomedical and Biological Sciences Summer Teaching Certificate Series, School of Medicine

Undergraduate and Graduate Education

THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

2002 – 2010 **Doctorate of Medicine**
School of Medicine

2004 – 2008 **Doctorate of Philosophy, Epidemiology**
School of Public Health, Dept. of Epidemiology

2000 – 2002 **Masters of Science in Public Health**
School of Public Health, Dept. of Epidemiology

1993 – 1996 **Bachelors of Science, Psychology**
Graduation with Honors
School of Arts and Sciences

MIAMI UNIVERSITY OF OHIO

1992 – 1993 School of Arts and Sciences

Professional Experience – Employment History

2020 – present **Research Associate Professor of Medicine**
Institute for Global Health and Infectious Diseases, Division of Infectious Diseases, Department of Medicine, UNC, Chapel Hill, NC

2019 – Present	**Term Faculty Member** (Dissertation Committee Member) Graduate School, Duke University, Durham, NC
2016 – Present	**Adjunct Assistant Professor of Epidemiology** Dept. of Epidemiology, Gillings School of Global Public Health, UNC, Chapel Hill, NC
2014 – 2020	**Research Assistant Professor of Medicine** Institute for Global Health and Infectious Diseases, Division of Infectious Diseases, Department of Medicine, UNC, Chapel Hill, NC
2013 – 2014	**Research Associate** Institute for Global Health and Infectious Diseases, Division of Infectious Diseases, Department of Medicine, UNC, Chapel Hill, NC
1998 – 2002	**Social Research Assistant** Department of Medicine, UNC, Chapel Hill, NC
1997 – 1998	**Community Support Therapist** Annas Consulting, Orange County, NC
1996 – 1997	**Research Assistant** Department of Fetal Medicine, UNC, Chapel Hill, NC

Honors and Awards

2010	**Isaac Hall Manning Award**, UNC School of Medicine
2008	**Induction into Delta Omega,** the Honorary Public Health Society
2007	**University of North Carolina Graduate Education Advancement Board Impact Award**
2004 – 2005	**US Public Health Training Award**
2003	**Excellence in Student Submissions**, Honorable Mention, American Public Health Association
2003	**Holderness Family Foundation Summer Fellow Award**, UNC School of Medicine
2001 – 2002	**US Public Health Training Award**

Bibliography

***mentored**

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43. Bucci DJ, **Rosen DL**, Gallagher M. Effects of age on pilocarpine-induced c-fos expression in rat hippocampus and cortex. Neurobiol Aging. 1998 May-Jun;19(3):227-32. PMID: 9661997.

In Press/Submitted

1. **Rosen DL**, Khan MR, Kavee AL. The Impact of Medicaid Suspension and Termination Policies on Resumption of Medicaid and Prison Recidivism among Released State Prisoners with Mental Health Problems. Under review, BMJ Open, 11.19.19, 29 pages.

2. Sredl M, Fleishauer A, Moor Z, **Rosen DL**, Schranz AJ. Not just endocarditis: Hospitalizations for invasive drug-related infections. *In press*, JID, 3.15.20, 16 pages.

3. **Rosen DL**, Kavee AL, Rubinstein. Post-release mortality among persons hospitalized during their incarceration. *In press*, Annals of Epidemiology, 3.9.20, 28 pages

Published abstracts

1. Schranz AJ*, Wu LW, Wohl D, **Rosen DL**. Readmission After Discharge Against Medical Advice For Persons With Opioid-Associated Infective Endocarditis. 2019 AHA Scientific Sessions. Nov. 16-18, 2019; Philadelphia, PA. Solicited oral presentation

2. Buchbinder M, Rennie S, Juengst E, Blue C, Brinkley-Rubinstein L, **Rosen DL**. HIV surveillance in the era of Big Data: ethical considerations in new methods to ensure continuity of care. 21st Annual Conference of American Society for Bioethics and Humanities. Oct 24-27, 2019; Pittsburg, PA. Solicited oral presentation.

3. **Rosen DL**, Buchbinder M, Rennie S, Brinkley-Rubinstein L, Wohl D White B, Blue C, Juengst E. Expert stakeholders' perspectives on a Data-to-Care strategy for improving care among HIV-positive individuals incarcerated in jail. International Association of Providers of AIDS Care (IAPAC) Adherence 2019 Conference. July 17-19, 2019; Miami, FL. Poster presentation.

4. Scott Proescholdbell S, Ranapurwala S, Brinkley-Rubinstein L., Rebecca Naumann, **Rosen DL**, Marshall S, Junker Gary, Brown S., Brown C. Overdose, Suicide and Homicide Deaths among Justice-involved Populations in North Carolina. 2019 Council of State and Territorial Epidemiologists (CSTE) Annual Conference. June 2-6, 2019; Raleigh, NC. Solicited oral presentation.

5. Brinkley-Rubinstein L, Sivaraman J, Shanahan ME, Proescholdbell SK, **Rosen DL**, Ranapurwala SI. Restricted housing during incarceration and the risk suicide, homicide, and opioid overdose death among formerly incarcerated persons in North Carolina: 2000-2015. Submitted to the 2019 Society for Advancement of Violence and Injury Research (SAVIR) conference. April 1-3, 2019; Cincinnati, OH. Solicited oral presentation.

6. Ashkin E, **Rosen DL**, Thomas S, Kavee AL. Determination of Disease Prevalence in recently released prisoners from the North Carolina state prison system using pharmacy data. 12th Academic and Health Policy on Conference on Correctional Health. March, 2019; Las Vegas, NV. Poster presentation.

7. **Rosen DL**, Carda-Auten J, DiRosa E, Brinkley-Rubinstein L, Fernandez T, Travers D, Domino M. Examining Healthcare Resources among Southern Jails. 12th Academic

and Health Policy on Conference on Correctional Health. March, 2019; Las Vegas, NV. Solicited oral presentation.

8. Brinkley-Rubinstein, Calves J, **Rosen DL**, Ranapurwala S. Solitary confinement and the risk of post-release death. 12th Academic and Health Policy on Conference on Correctional Health. March, 2019; Las Vegas, NV. Solicited oral presentation.

9. Schranz AJ, Fleischauer, Chu VH, **Rosen DL**. Infective endocarditis and cardiac valve surgery during the opioid epidemic in North Carolina, 2007 to 2017. IDWEEK 2018. October, 2018; San Francisco, CA. Open Forum Infect Dis. 2018 Nov; 5(Suppl 1): S12. Published online 2018 Nov 26. doi: 10.1093/ofid/ofy209.025. Solicited oral presentation.

10. Ashkin E, **Rosen DL**, Brinkley-Rubinstein L. The North Carolina Experience: Alignment between a Transition Clinic Program and the "Remissioning" of the State Prison System to enhance Reentry. 11th Academic and Health Policy on Conference on Correctional Health. March, 2018; Houston, TX. Solicited oral presentation.

11. **Rosen DL**, Fernandez T, Kavee A. Use of emergency medical services (EMS) following release from a state prison system. 11th Academic and Health Policy on Conference on Correctional Health. March, 2018; Houston, TX. Solicited oral presentation.

12. **Rosen DL**, Grodensky CA, Miller AR, Bradley-Bull, S, Domino ME, Powell, W, Golin CE, Wohl DA. Evaluation of a prison-based Medicaid enrollment program: inmate perspectives. 10th Academic and Health Policy Conference on Correctional Health. March, 2017; Atlanta, GA. Solicited oral presentation.

13. A Randomized Controlled Trial of an Intervention to Maintain Suppression of HIV Viremia Following Prison Release through Linkage to Community Care, Motivational Interviewing, and Text Message Medication Reminders: The imPACT Trial. Wohl DA, Golin CE, Knight K, Carda-Auten J., Gould M, Groves J, Naprvanik S., Cole S, white B, Fogel C, **Rosen DL**, Mugavero M, Pence B, Flynn P. 10th Academic and Health Policy Conference on Correctional Health. March, 2017; Atlanta, GA. Solicited oral presentation.

14. Johnson TL, Golin C, **Rosen D**, Sleath B, Bailey S, Carda-Auten J, Wohl D, Flynn P, Knight K, Oramasionwu, C. Substance abuse services uptake among people living with HIV released from prison. 2016 Annual Research Meeting, June 26-28, 2016; Boston, MA. Poster presentation.

15. **Rosen DL**, Grodensky CA, Miller AR, Bradley-Bull S, Golin CE, White BL, Wohl DA. Reasons for missed HIV care appointments among inmates in a Southern prison

system. 11th Conference on HIV Treatment and Prevention Adherence, May 9-11, 2016; Ft. Lauderdale, FL. Poster presentation.

16. Johnson TL, Golin C, **Rosen D**, Carda-Auten J, Wohl D. The costs associated with providing a multi-component intervention to maintain suppression of HIV RNA among people living with HIV released following release from prison. 11th Conference on HIV Treatment and Prevention Adherence, May 9-11, 2016; Ft. Lauderdale, FL. Oral presentation.

17. **Rosen DL**, Grodensky CA, Miller AR, Golin CE, Domino ME, Powell WH, and Wohl DA. Evaluation of a prison-based Medicaid enrollment program: program personnel perspectives. 9th Academic and Health Policy Conference on Correctional Health. March, 2016; Baltimore, MD. Solicited poster presentation.

18. **Rosen DL**, Quist AJL, Grodensky CA. An evaluation of published US correctional health research, 2006-2015. 6th Academic and Health Policy Conference on Correctional Health. March, 2016; Baltimore, MD. Poster presentation.

19. Nguyen NL, Wohl DA, Golin CE, **Rosen DL**, Miller WC, White BL, Farel CE. The association of timing and duration of lifetime physical and sexual trauma with HIV infection among African American women incarcerated in North Carolina: A case control study. 2014 Inter-CFAR Collaboration on HIV Research in Women Symposium, December 8 - 9, 2014; New York, NY. Poster presentation.

20. Onsomu, E.O., Abuya, B.A., Okech, I.N., **Rosen, D.L**., Simmons, A.C., Duren-Winfield, V., & Moore, D. (2014). Association between domestic violence and HIV serostatus among married and formerly married women in Kenya. AIDS 2014, Stepping Up The Pace 20th International AIDS Conference, July 20 – 25, 2014; Melbourne, Australia – International AIDS Society Conference, #THPE178, pg521. Poster presentation.

21. **Rosen DL**, Golin CE, Grodensky CA, Stinnette S, White BL, Napravnik S, Wohl DA. Imprisonment among a large US clinical cohort of HIV-positive outpatients. Annual Conference on Retroviruses and Opportunistic Infections, March, 2014; Boston, MA. Poster presentation.

22. **Rosen D**. Medicaid policies and practice in US state prisons: Updated findings from a nationwide survey. 6th Academic and Health Policy Conference on Correctional Health. March, 2013; Chicago, IL. Solicited oral presentation.

23. Montague B, Green T, Donahue S, **Rosen D**, Rich J, Leroy L. Linkage to HIV Care on Release from Corrections: Year 2 Data from the LINCS Study. 6th Academic and Health Policy Conference on Correctional Health. March, 2013; Chicago, IL. Solicited oral presentation.

24. **Rosen D**. HIV and Incarceration. World AIDS Day 2012: 14th Annual HIV/AIDS Symposium sponsored by the UNC Center for AIDS Research. November, 2012; Chapel Hill, NC. Invited oral presentation.

25. LeRoy L, Donahue S, Lee A, Solomon L, Costa M, Rich J, **Rosen D**. Role of State and Community Policies on Prison Releasees' Linkage to HIV Care: Preliminary Findings. American Public Health Association, November, 2012; San Francisco, CA. Poster presentation.

26. Jones CD, Viswanathan M, Golin C, Ashok M, Blalock SJ, Wines RCM, Coker-Schwimmer E, Grodensky C, **Rosen DL**, Pryanka S, Lohr K. Interventions to Improve Adherence to Self-Administered Medications for Chronic Diseases in the United States: A Systematic Review. AHRQ Annual Conference, September 9 – 11, 2012; Bethesda, MD. Poster presentation.

27. **Rosen D**, Golin C, Davis R. DeVellis R, Matuszewski J, Bowling JM, Green K, White B, Wohl D. Do North Carolina State prisoners perceive routine opt-out HIV testing as voluntary or mandatory? International AIDS Society, July, 2012; Washington, DC. Poster presentation.

28. LeRoy LJ, Donahue SMA, Lee A, Solomon L, Costa M, Rich J, **Rosen D.** Role of State and Community Programs on Prison Releasees' Linkage to HIV Care. XIX International AIDS Conference (AIDS 2012); July, 2012; Washington, DC. Poster presentation.

29. LeRoy L, Donahue S, Rich J, Lee A, Solomon L, **Rosen D**. Role of State and Community Policies on Prison Releasees' Linkage to HIV Care. 2012 Academy Health Annual Research Meeting; June, 2012; Orlando, FL. Poster presentation.

30. **Rosen D,** Dumont D, Traver A Cislo A, Brockmann B, Rich J. Nationwide survey of Medicaid policies and practices in state prisons. AcademyHealth Annual Research Meeting, June, 2012; Orlando, FL. Poster presentation.

31. Wohl D, Golin C, **Rosen D**, Matuszewski, Bowling M, Green K, Davis R, Devellis R, Leone P, White B. Adoption of Opt-Out HIV Screening in a State Prison System Had Limited Impact on Detection of Previously Undiagnosed HIV Infection: Results from a Blinded HIV Seroprevalence Study. 19th Annual Conference on Retroviruses and Opportunistic Infections, March, 2012; Seattle, WA

32. Montague B, **Rosen D**, Solomon L, Green T, Costa M, Baillargeon J, Wohl DA, Par DP, Rich J. Tracking linkage to HIV care for former prisoners: a public health priority. American Public Health Association, October, 2011; Washington DC. Poster presentation

33. Menezes P, **Rosen D**, Wohl DA, Kiziah N, Sebastian J., Eron JJ, White B Prevalence of antiretroviral (ARV) resistance among treatment-experienced, HIV-positive inmates of the North Carolina (NC) prison system. International AIDS Society, July, 2011; Rome, Italy. Poster presentation.

34. Khan M, **Rosen D**, Epperson M, Berger A, Smyrk K. Criminal justice involvement in adolescence and sexually transmitted infections in adulthood in the United States. 19th Biennial Conference of the International Society for Sexually Transmitted Diseases Research, July, 2011; Quebec, Canada. Poster presentation.

35. **Rosen DL**. Assessing the impact of the US federal government's investment in health science research on the publication of scientific articles: a pilot study examining funded comparative effectiveness research projects. AcademyHealth Annual Research Meeting, June, 2011; Seattle, WA. Poster presentation.

36. **Rosen DL**, Wohl DA, White BL, Schoenbach VJ. Characteristics and behaviors associated with HIV infection in a large southern prison system. 15th Annual Conference on Retroviruses and Opportunistic Infections, February, 2008; Boston, MA. Poster presentation.

37. **Rosen D**, Golin C, Schoenbach V, Stephenson B, Wohl D, Gurkin B, Kaplan A. Availability and access to medical services among HIV-infected inmates incarcerated in county jails. American Public Health Association, November, 2003; San Francisco, CA. Awarded Excellence in Student Submissions – Honorable Mention. Poster presentation.

38. Stephenson B, Wohl D, **Rosen D**, Kiziah N, Simpson G, Ngo B, Bowles J, Liu H, Kaplan A. Directly observed therapy does not ensure adherence to antiretroviral therapy among HIV-infected inmates. American Public Health Association, October, 2000; Boston, MA
39. Wohl DA, Stephenson BL, Golin CE, Kiziah CN, **Rosen D**, Ngo B, Liu H, Kaplan AH. Adherence to directly observed therapy of antiretrovirals in a state prison system. Abstracts of the IDSA 38th Annual Meeting, September, 2000; New Orleans, LA

40. Stephenson B, Wohl D, Kiziah CN, **Rosen D**, Merriman N, Kaplan A. Release from prison and reincarceration is associated with an increase in the viral loads of HIV-infected individuals. 13th International AIDS Conference, July, 2000; Durban, South Africa

41. Wohl D, Ngo B, Fiscus, S, Handy J, Alcorn T, Cronin M, Pan W, **Rosen D**, Van Der Horst C. CMV viremia and the risk of cmv end-organ disease (EOD) or death in patients with AIDS in the era of HAART. 13th World AIDS Conference, July, 2000; Durban, South Africa

In Press/submitted abstracts

1. Grove LR, Gertner A, Swietek K, Ching-Ching CL, Ray N, Malone TL, **Rosen DL**, Zarzar TR, Domino ME, Sheitman B, Steiner BD. A tailored primary care service for people with serious mental illness increased cardiometabolic screening and decreased blood pressure relative to usual primary care. Accepted, Annual Research Meeting of AcademyHealth. June 2020; Boston, MA. Solicited poster presentation.

2. **Rosen D**, Ray N, Brinkley-Rubinstein L, Fernandez A, Travers D, Domino M, Powers P, DiRosa E. EMS encounters in North and South Carolina Jails, 2010-2016. Accepted, 13th Academic and Health Policy on Conference on Correctional Health. June, 2020; Raleigh, NC. Solicited oral presentation.

3. Blue C*, Buchbinder M, Brinkley-Rubinstein L, Rennie S, Juengst E, **Rosen D**. Expert Stakeholders' Perspectives on Community Engagement Strategies to Improve Data-to-Care in Jails. Accepted, 13th Academic and Health Policy on Conference on Correctional Health. June, 2020; Raleigh, NC. Solicited oral presentation.

4. Ashkin E, **Rosen D**, Brinkley-Rubinstein L, Baker H, Marlowe T, Smith J, Clayton D, Green T, Harrington B. Morbidity, Service Needs, and Program Engagement among Participants in the North Carolina FIT Program Linking Formerly Incarcerated Individuals with Healthcare. Accepted, 13th Academic and Health Policy on Conference on Correctional Health. June, 2020; Raleigh, NC. Solicited oral presentation.

Other un-refereed works

1. **Rosen DL**, Buchbinder M, Juengst E, Rennie S. Public Health Research, Practice, and Ethics for Justice-Involved Persons in the Big Data Era. AJPH, Supplement 1, 2020, Vol 110, No. S1. doi: 10.2105/AJPH.2019.305456 Epub 2020 Jan 23.

2. **Rosen DL**, Gifford EJ, Ashkin EA. Overwhelming Need, Insufficient Health Care for Justice-involved North Carolinians. N C Med J. 2019 Nov-Dec;80(6):339-343. doi: 10.18043/ncm.80.6.339.

3. Wohl DA, **Rosen DL**. Inadequate HIV care after incarceration: case closed. Lancet HIV. 2018 Feb; 5(2):e64-e65. doi: 10.1016/S2352-3018(17)30210-2. Epub 2017 Nov 27. PubMed PMID: 29191441.

4. Brinkley-Rubinstein L, **Rosen DL**, Christopher P, Bazerman L, Beckwith CG. Long-Acting Injectable Antiretroviral Therapy: An Opportunity to Improve Human Immunodeficiency Virus (HIV) Treatment and Reduce HIV Transmission Among Persons Being Released From Prison Facilities. Clin Infect Dis. 2017 Oct 1; 65(7):1247-1248. doi: 10.1093/cid/cix493. PubMed PMID: 28549121; PubMed Central PMCID: PMC5849091.

5. Brockmann BW, **Rosen DL**, Dumont DM, Cislo AM, Rich JD. Brockmann et al. respond. Am J Public Health. 2014 Aug; 104(8):e4-5. doi: 10.2105/AJPH.2014.302067. Epub 2014 Jun 12. No abstract available. PMID: 24922139. PMCID: PMC4103257

6. Wohl DA, **Rosen D**. Testing should be offered, not forced. Letter to the Editor. Raleigh News and Observer. April 23, 2008. Available at www.newsobserver.com/print/wednesday/opinion/story/1046724.html

7. **Rosen DL**, Schoenbach VJ, Kaplan AH. HIV testing in state prisons: balancing human rights and public health. Infectious Diseases in Corrections Report. April 2006;9(4):1-5

Other un-refereed works in press/under review

NA

Teaching record/mentorship

Courses/Seminars – UNC

Fall 2016 - Present	**Seminar Leader** Criminal Justice and Health Working Group Seminar Approximately 85 unique participants per year; average approximately 20 participants per seminar meeting
Fall 2019	**Small Group Leader/Instructor** Epid 725. Epidemiologic Research Methods. 5 students
Fall 2018	**Small Group Leader/Instructor** Epidemiologic Research Methods, Epid 725 4 students
2016 - 2018	**Small Group Leader** Clinical Research Skills III: Proposal Development - Part 1(Fall), Epid 805 4-7 students

2016 - 2018	**Small Group Leader** Clinical Research Skills IV: Proposal Development- Part 2(Spring), Epid 806 4-7 students
Spring 2015 – Fall 2016	**Seminar Leader** Incarceration and public health journal club Approximately 4-6 participants
Spring 2016	**Guest Small Group Leader** Clinical Research Skills IV: Proposal Development - Part 2, Epid 806 2.12.16, 3.11.16, 4.22.16 4-6 students
Summer 2002	**Teaching Assistant** Introduction to Epidemiology, Epid 600 Approximately 25 students
1999 – 2000	**Teaching Assistant** Gross Anatomy Approximately 20-30 students

Lectures – UNC

Fall 2019	**Guest Lecturer** Mass Incarceration and Public Health, PUBH783 Topic: Chronic health conditions among incarcerated persons 10.09.2019 Approximately 15 - 20 students
Fall 2019	**Guest Lecturer** Introduction to Public Health, SPHG 600 Topic: Health and healthcare for incarcerated persons. 10.08.2019 Approximately 50 - 80 students
Spring 2019	**Guest Lecturer** Introduction to Public Health, SPHG 600 Topic: Health and healthcare for incarcerated persons. 03.28.2019 Approximately 50 - 80 students
Fall 2018	**Guest Lecturer** Special topics: The Public Health Impact of Criminalizing the Marginalized, PUBH 890.001 Topic: Health and healthcare for incarcerated persons 10.16.2018 Approximately 15 - 20 students
Fall 2017	**Guest Lecturer** Exploring Public Health, SPHG 620 Topic: Public Health and the Criminal Justice System 11.09.2017 Approximately 50 students

Fall 2016 **Guest Lecturer**
Social Epidemiology Seminar
Topic: Prison Health
11.09.2016
Approximately 20 students

Spring 2012 **Guest Lecturer**
Advanced Methods in Social Epidemiology
Topic: Research in vulnerable populations
02.16.2012
Topic: Research ethics & communicating with the public about controversial research
03.01.2012
Approximately 20 students at each lecture

Grand Rounds– Outside UNC

Spring 2017 **Guest Lecturer**
Wilmington Internal Medicine (AHEC) Grand Rounds.
Topic: Public Health and the Criminal Justice System.
02.22.2017
Approximately 40 attendees

Invited Talks/Panels – UNC

Fall 2018 **Invited Speaker**
Presented "Leveraging Big Data to Understand and Improve Continuity of Care Among HIV-positive Jail Inmates: Rationale and Approach"
Health Technology Symposium: Health Ethics at the Intersection of Data and Technology
11.30.2018

Spring 2013 **Panel Discussant**
Health Inequities in the U.S.
Sponsored by UNC SOM International Health Forum and the American Medical Student Association
02.20.2013

Fall 2011 **Lead Discussant**
Structural Determinants Working Group
UNC Center for AIDS Research
12.02.2011

Invited Talks/Panels – Outside UNC

Summer 2019 **Invited Speaker**
NC Department of Health and Human Services, Raleigh, NC
Topic: UNC Jail HIV Testing and Linkage to Care
06.14.2019

Spring 2017 **Guest Faculty**

Mock reviewer for Lifespan/Brown Criminal Justice Research Program on Substance Use and HIV
03.20.2018
Approximately 6 students/trainees

Fall 2016 **Invited Speaker**
Division of Comparative Effectiveness and Decision Science, Langone School of Medicine, New York University, New York, NY
Topic: The HIV Care Cascade: Application to a Large Southern Prison System
10.18.2016

Spring 2016 **Invited Speaker**
Coalition for Health Care of North Carolina, Durham, NC
Topic: Criminal Justice System, Medicaid, and Health
05.26.2016

Summer 2015 **Invited Speaker**
NC Department of Health and Human Services, Division of Public Health, HIV/AIDS Section, Raleigh, NC
Topic: The Criminal Justice System and HIV
06.17.2015

Mentorship

Junior Faculty/Clinical Instructors

2018 – Present **Mentor**. Shabbar Ranapurwala, PhD, Assistant Professor, UNC Gillings Global School of Public Health, UNC. Grant writing; project mentorship: Medicaid expansions and deaths due to opioid overdose, suicides, and homicides among formerly incarcerated persons.

2018 – Present **Mentor**. Tonya VanDeinse, PhD, Assistant Professor, School of Social Work, UNC. Project mentorship: Understanding Support Networks of Probationers with Mental Illness and Substance Use Disorders to Inform Care

2018 – Present **Ad Hoc Mentor**. Andrea Knittel, MD, Assistant Professor, Dept. of OB/GYN, UNC. Grant writing/review

2017 – Present **Mentor.** Asher Schranz, MD, Clinical Instructor, Division of Infectious Diseases, UNC. Primary mentor for submitted NIH K23 proposal: Drug-use associated infective endocarditis: Post-hospitalization outcomes and patient treatment preferences; percentile score: 4

2013 – 2014 **Mentor.** Elijah Onsomu, PhD, Assistant Professor, Winston-Salem State University. Paper Development: Association between domestic violence and HIV serostatus among married and formerly married women in Kenya

Postdoctoral fellows

2019 – Present **Ad Hoc Mentor**. Nadya Belenky, PhD, MSPH, Institute for Global Health and Infectious Diseases, UNC. Grant review; manuscript development

Fall 2017 – Spring 2018	**Mentor.** Trenita Childers, PhD, Sheps Center for Health Services Research UNC. Grant review

Doctoral students

2019 – Present	**Mentor/ Dissertation Committee Member**. Bonnie Shook-Sa, Doctoral students, Dept of Biostatistics, UNC
2018 – Present	**Mentor**. Catherine Grodensky, MPH, Sanford School of Public Policy, Duke University
2018 – Present	**Mentor/Dissertation Committee Member**. Nicole Calhoun, FNP-BC, MSN, Doctoral student, School of Nursing, Duke University

Masters students

Fall 2017 – Spring 2018	**Mentor/2nd reader**. Holly McDowell, 2nd year master's student, Department of Health Policy, School of Public Health, UNC
Fall 2017 – Spring 2018	**Mentor.** Arbor Quist, 1st year master's student, Department of Epidemiology, School of Public Health, UNC
Fall 2016	**Mentor/Independent Study Director**. Stephanie Bahorski, 2nd year master's student, Dept. of Health Behavior, School of Public Health, UNC
Spring 2015 – Spring 2016	**Mentor**. Terence Johnson, master's student, Div. of Pharmaceutical Outcomes and Policy, School of Pharmacy, UNC
Spring 2015	**Mentor/Independent Study Director**. Anna Rose Miller, 2nd year master's student, Dept. of Health Behavior, School of Public Health, UNC
Spring 2014	**Mentor**. Sayaka Hino, 2nd year master's student, Dept. of Health Behavior, School of Public Health, UNC

Undergraduates

2018 – Present	**Mentor**. Priya Sridhar, undergraduate student, UNC
2011 – 2012	**Project Advisor**. Amy Traver, senior undergraduate student, Brown University

Grants

Active Grants

R49/CE003092 (Marshall S)
08.01.2019 – 07.31.2024
National Center for Injury Prevention and Control, Centers for Disease Control and Prevention
UNC INJURY PREVENTION RESEARCH CENTER
Medicaid expansions and deaths due to opioid overdose, suicides, and homicides among formerly incarcerated persons.
Role: Center Co-investigator, Project PI (10%, Years 1-3), $4,201,429

UG1DA050072 (Wang)
08.01.2019 – 07.31.2024

NIH
Transitions Clinic Network: Post Incarceration Addiction Treatment, Healthcare, and Social Support (TCN PATHS) study
Role: Co-investigator, $688,949 (0% Years 1-3; 10%, Years 4-5)

P30 AI50410 (Swanstrom R)
08.01.2017 – 07.31.2021
NIH
UNC Center for AIDS Research Core G
This project funds the Social and Behavioral Sciences Research Core for the UNC Center for AIDS Research, which aims to facilitate collaborative social science research in the area of HIV.
Role: Epidemiology and Prison Database Specialist (2%)

R01 MD012469 (Rosen DL)
09.26.2017 – 06.30.2021
NIMHD
Assessing jails' use of community-based emergency care in the US South.
Jails incarcerate populations with a heavy burden of health needs, but few data are available to understand systems of jail healthcare. Robust clinical indicators of inmates' immediate healthcare needs—and the extent to which their needs exceed jail healthcare resources—are needed to target interventions to improve jail healthcare and reduce costs. In response, we propose a novel approach, leveraging statewide EMS databases to characterize the frequency and types of EMS encounters occurring in all jails across 5 states. By enumerating the prevalence of health conditions— particularly traumas and ambulatory-care sensitive conditions—resulting in EMS care may in turn identify opportunities to modify jail policies to improve health and reduce healthcare costs. We will complement these analyses with findings from a targeted survey of jail health administrators to further delineate jail healthcare systems and to identify components, which could be strengthened
Role: PI (40%), $1,696,656

R01 AI129731 (Rosen DL)
06.20.2017 – 05.31.2021
NIAID
Leveraging Big Data to understand and improve continuity of care among HIV-positive jail inmates.
Existing research examining the epidemiology of HIV among jail inmates and their use of healthcare has been limited, and largely conducted in high capacity urban jails. This project will create a de-identified HIV surveillance database to understand the burden of HIV in jails and inmates' utilization of HIV care as they transition between correctional and community settings in a southern state populated with small and mid-sized rural jails. We will also explore the ethics of creating a version of our surveillance database that retains identifiers, so that state outreach workers can identify and contact out-of-care HIV-positive inmates to facilitate their re-entry into HIV care during incarceration and after release.
Role: PI (40%), $1,624,102

APP#: 1120004 (Borschmann R)
01.01.2017-12.31.2020
Australian National Health Research Council
Preventing mortality in adults after release from prison: Advancing global knowledge through an international, individual participant data meta-analysis
Role: Co-investigator (in-kind year 1, 5% in year 2, in-kind years 3 and 4), $613,687

Duke Endowment Fund (Ashkin E)
07.1.2017 – 06.30.2020
Formerly Incarcerated Transitions (FIT) Program
The FIT program facilitates continuity of healthcare for released state prisoners returning to the community in Durham and Orange counties (NC).
Role: Co-investigator (8%), $340,000

No number (VanDeinse)
06.01.2019 – 05.31.2020
R25 Pilot Funding
Understanding Support Networks of Probationers with Mental Illness and Substance Use Disorders to Inform Care
Role: Member of Mentorship Team (In-kind support)

Submitted/Under Review

National Science Foundation (Singh M)
06.01.2021- 05.31.2026
Preproposal: Ethics and Safety of Systems of Autonomous, Intelligent Agents in Society
Role: Co-investigator (Budget and % effort TBD)

Duke Endowment Fund (Ashkin E)
01.01.2020 – 12.31.2022
North Carolina Initiative on Medication-Assisted Treatment (MAT) for Incarcerated People with Opioid Use Disorder.
Role: Co-investigator (10%), $443,091

Completed Grants

R01 AI116384 (Rosen DL)
09.18.2014 – 08.31.2019*
NIAID
Assessing the HIV care cascade in a large southern prison system
In a large southern prison system, we will examine HIV-positive prisoners' engagement in healthcare and identify barriers to entering and maintaining care and achieving viral suppression.

By understanding inmates' use of HIV care in prison, we may strengthen efforts to improve their health and reduce their risk for transmission during incarceration and after release.
Role: PI (18%), $750,000

AIDS UNITED/CDC Special Projects of National Significance (Farel CE)
08.1.2016 – 07.31.2019
Transitional Care Coordination: From Jail Intake to Community HIV Primary Care in Wake County, North Carolina
This project seeks to implement a transition care coordination program to improve engagement and continuity of care among jail-involved HIV+ persons in Wake County, NC.
Role: Co-investigator (in-kind support)

R01 MD008979 (Rosen DL)
07.10.2014 – 03.31.2019
NIMHD
Effectiveness of a prison system-based Medicaid enrollment program
Prison-based Medicaid enrollment assistance programs (PBMEAPs) have the potential to improve access to healthcare for prisoners upon their release. Our evaluation of the NC prison system's PBMEAP will provide policy-makers, prison officials, and Medicaid administrators in NC and other states with a data-driven understanding of the impact of this program on healthcare access and health, and will help prison administrators evaluate and improve their program. If found to be effective, adoption of PBMEAPs among other state prison systems could have a profound effect on diminishing health disparities experienced by released prisoners.
Role: PI, (35%), $750,000

No Grant Number (Sheitman B)
01.01.2018 – 12.31.2018
NC TRACS
Evaluation of a Novel Behavioral Health Home with Comprehensive Primary Care for People with Serious Mental Illness.
Behavioral health homes (BHHs) have been proposed as a model for improving care for people with SMI. The BHH model proposes integrating primary care services into behavioral health settings while providing additional services such as care management. Nevertheless, there are have been few studies of the effectiveness of the BHH model. We propose to examine a UNC BHH that integrates behavioral health services with comprehensive primary care services based on the patient-centered medical home (PCMH) model of primary care, assessing how this new clinical approach affects process, outcome, and utilization measures for individuals with SMI.
Role: Co-investigator (in-kind support)

UL1TR001111-03 (Buse J)
09.26.13 – 04.30.18
NIH
UNC Clinical and Translational Science Award

This project funds activities to improve the way biomedical research is conducted, reduce the time it takes for laboratory discoveries to become treatments for patients, engage communities in clinical research efforts, and train the next generation of clinical and translational researchers.
Role: Small Group Leader (5%)

R21 MH099162 (Rosen DL)
09.01.2013 – 08.30.2016
NIMH
Access to Mental Health Services among Released State Prisoners
This project will compare the effect of Medicaid policies, which either terminate or suspend Medicaid benefits upon incarceration, on prisoners' post-release use of Medicaid funded healthcare, the cost of that care, and re-incarceration events
Role: PI, (35%) $275,000

R01 DA030778 (Rich JD, Solomon L)
09.30.2010 – 06.30.2016
NIDA
Improving Linkage to HIV Care Following Release from Incarceration
This multistate data linkage project linking prison records with Ryan White care records will create an easily replicable monitoring strategy to identify geographic areas with high and low levels of success in linking HIV-infected inmates into community care following their release from prison. Qualitative evaluations will enhance understanding of the correlates of enhanced linkage and will help to ultimately inform the design of best practice models for the support of linkages to care following release from corrections.
Role: Co-Investigator (17%), $619,316

T32 HS019442 (Carey T)
07.01.2010 – 06.30.2012
AHRQ
Postdoctoral Training in Comparative Effectiveness
UNC postdoctoral training program in comparative effectiveness research. The components of CER include evaluation of current evidence through systematic reviews; observational studies and analyses such as pharmacoepidemiology and modeling research; conduct of large effectiveness trials; and dissemination and implementation activities.
Role: Trainee (100%)

F30 MH077546 (Rosen DL)
07.01.2006 - 06.30.2010
Determinants of voluntary HIV testing among inmates
The goal of the research project was to determine the use of voluntary HIV testing among prisoners, determine systemic- and individual-level factors associated with uptake of testing in prison, and determine the associations between prisoner characteristics and serostatus.
Role: PI (100%), $117,672

T32 AI07001-29 (Sparling PF)
07.01.2005-06.30.2006
Training in Sexually Transmitted Diseases and AIDS
Long-running training grant providing substantive and methodological background necessary to conduct research in the fields of sexually transmitted diseases and AIDS. This program includes affiliation with excellent sexually transmitted diseases clinics, a large HIV clinic, and a superb international research site in Malawi. Faculty are drawn from the School of Medicine and School of Public Health, with multiple cross cutting and interdisciplinary interactions and research projects.
Role: Trainee (100%)

Professional Service

To discipline

2019 – Present	Member. Ad Hoc Host Committee. 13th Academic and Health Policy on Conference on Correctional Health
2017 – Present	Loan Repayment Program Ambassador. National Institutes of Health
2016 – Present	Member. Academic Consortium of Criminal Justice and Health
2016 – 2017	Member. International Association of Providers of AIDS Care
2014	Evaluator. Faculty Promotion/Tenure, Univ. of Oklahoma Health Sciences Center
2011 – 2012	Staff. Evidence-Based Practice Systematic Review Committee – Comparative Effectiveness of Medication Adherence Interventions
2011 – 2012	Member. AcademyHealth Association
2006 – 2007	Member. Academy of Correctional Health Professionals
2004 – 2005	Member. American Public Health Association

Within UNC

2018 – Present	Affiliate. UNC Injury Prevention Research Center
2017 – Present	Member. UNC Center for AIDS Research (CFAR) NC Prevention Working Group
2017 – Present	Affiliate. UNC Center for Health Equity Research (CHER)
2016 – Present	Lead. UNC Prison/Criminal Justice Working Group
2012 – Present	Staff. UNC Center for AIDS Research, Social and Behavioral Sciences Research Core
2019	Reviewer. NC TRACS mock review, UNC (4.22.19)
2018	Member. UNC CFAR Clinical Core Internal Advisory Board. (Nov 2, 2018)
2018	Member. UNC CFAR TechEngage Interest Group
1999 – 2015	Member. UNC Prison/Criminal Justice Working Group
2015	Reviewer. NC TRACS mock review, UNC

2014 Study Section Member. UNC CFAR Developmental Grant Awards
2011 – 2014 Member. UNC CFAR, Structural Determinants Working Group
2011 Member. EXPORT Pilot Award Study Section, UNC
2007 Judge. UNC John B. Graham Research Society Student Research Day

REVIEWER (ad hoc)

2018 Lancet HIV
2015 – 2017 PLOS One
2017 JAIDS (Journal of Acquired Immune Deficiency Syndrome)
2015 – 2016 Journal of Immigrant and Minority Health
2010 – 2016 American Journal of Public Health
2016 Journal of Applied Gerontology
2016 Expert Review of Pharmacoeconomics & Outcomes Research
Health Affairs
2016 Social Science and Medicine
2015 Social Science and Medicine – Public Health
2015 STD
2015 Journal of Healthcare for the Poor and Underserved
2014 Addiction
2014 BMC Public Health
2014 Journal of Urban Health
2014 Medical Care
2013 North American Journal of Medical Science
2013 Oncology
2011 AIDS and Behavior

Guest Academic Editor

PLOS One, 07.2017

Guest Editor

North Carolina Medical Journal, 11.2019 issue

Academic Editor

PLOS One, 04.2018 – Present

COMMUNITY SERVICE

2017 – Present **Licensed Foster Parent**
Orange County, NC
2006 – 2007 **English Reading and Writing Tutor**
Orange County Literacy Council
Chapel Hill, NC
1998 **Emergency Medical Technician Volunteer**
ABCCM Indigent Clinic

Buncombe County, NC

1997 – 1998 **Journalist/Documentarian**
Community Sound
Chapel Hill, NC

1995 – 1996 **Emergency Medical Technician Volunteer**
Orange County Rescue Squad
Orange County, NC

EXHIBIT B

Lauren Brinkley-Rubinstein, PhD
333 S. Columbia Street
341b MacNider Hall
Chapel Hill, NC 27599
Lauren_Brinkley@med.unc.edu

EDUCATION

05/15 – 06/16	T32 Postdoctoral Fellow, HIV, Incarceration, and Other Complications of Substance Abuse Division of Infectious Diseases, Warren Alpert Medical School Brown University, Providence, RI
01/12 – 05/15	Ph.D., Community Research and Action Vanderbilt University, Nashville, TN
05/13	Graduate Certificate, Scholarship of Teaching and Learning Scholars Vanderbilt, University, Nashville, TN
08/09 – 12/11	M.S., Community Research and Action Vanderbilt University, Nashville, TN
08/04 – 12/06	M.A., Criminal Justice Policy City University of New York (CUNY), John Jay College of Criminal Justice, New York, NY
08/01 – 05/04	B.A., Sociology Western Kentucky University, Bowling Green, KY

PROFESSIONAL EXPERIENCE

04/19—Present	Adjunct Assistant Professor of Health Behavior, Gillings School of Public Health, University of North Carolina at Chapel Hill
06/16 – Present	Assistant Professor of Social Medicine, University of North Carolina at Chapel Hill
06/16 – Present	Core Faculty in the Center for Health Equity Research, University of North Carolina at Chapel Hill
06/16 – Present	Research Fellow at the Sheps Center for Health Services Research, University of North Carolina at Chapel Hill
06/16 – Present	Affiliated Faculty at the Center for Prisoner Health and Human Rights at Brown University
09/17 – Present	Health Criminology Research Consortium Faculty Fellow, Saint Louis University

09/07 – 6/10 Research Associate, Metro Nashville Public Health Department

08/05 – 12/06 Research Assistant, Vera Institute of Justice

BIBLIOGRAPHY AND SCHOLARLY PRODUCTS

Special Journal Issues Edited

Cloud, D. **Brinkley-Rubinstein, L**., Bassett, M.T., Graves, J., & Fullilove, R.E. (2020). Special Issue of the American Journal of Public Health: Mass Incarceration as a Socio-Structural Determinant of Health Disparities.

Brinkley-Rubinstein, L., Sadacharan, R., Macmadu, A., & Rich, J.D. (2018). Special Issue of the Journal of Urban Health on Incarceration and Health.

Journal Articles

Zaller, N.D., Nehrer, T., Marshall, S.A., Zielinski, M., & **Brinkley-Rubinstein, L.** (2020). Barriers and facilitators to linking high-risk jail detainees to HIV pre-exposure prophylaxis. *PLOSOne.*

Rennie, S., Buchbinder, M., Blue, C., Juengst, E., **Brinkley-Rubinstein, L.**, & Rosen, D.L. (2020). Scraping the web for public health gains: Ethical considerations from a "big data" research project on HIV and incarceration. *Public Health Ethics.*

Buchbinder, M., Blue, C., Juengst, E., **Brinkley-Rubinstein, L.**, Rennie, S., & Rosen, D.L. (2020). Expert stakeholders' perspectives on a Data-to-Care strategy for improving care among HIV-positive individuals incarcerated in jails. *AIDS Care.*

Cloud, D.H., Bassett, M.T., Graves, J., Fullilove, R.E., & **Brinkley-Rubinstein, L**. (2020). Editors Choice. *American Journal of Public Health.*

Brinkley-Rubinstein, L. & Cloud, D.H. (2020). Mass incarceration as a driver of socio-structural health inequities. *American Journal of Public Health.*

Brinkley-Rubinstein, L., Allen, S.A., & Rich, J.D. (2020). Incarceration negatively impacts the health of children. *The Lancet Public Health.*

Macmadu, A., Goedel, W.C,, Adams, J.W., **Brinkley-Rubinstein, L.,** Green, T.C., Clarke, J.G., Martin, R.A., Rich, J.D., Marshall, B.D.L. (2020). Estimating the impact of wide scale uptake of screening and medications for opioid use disorder in US prisons and jails. *Drug and Alcohol Dependence*.

Tomar, N., **Brinkley-Rubinstein, L.**, Ghezzi, M.A., VanDeinse, T.B., Burgin, S., & Cuddeback, G.S. (2019). Internalized stigma and its correlates among justice-involved individuals with mental illness. *International Journal of Mental Health*. 1-11.

Brinkley-Rubinstein, L. & Johnson, T. (2019). Solitary confinement and health. *NC Med J.* 80(6). 359-

360. doi: 10.18043/ncm.80.6.359.

Callander, D., Duncan, D.T., Hyun Park, S., Bowleg, L., **Brinkley-Rubinstein, L.**, Theall, K.P., & Hickson, D.A. (in press). An intersectional analysis of life stress, incarceration and sexual health risk practices among cisgender Black gay, bisexual and other men who have sex with men in the Deep South of the United States: The MARI Study. *Sexual Health.*

Brinkley-Rubinstein, L., Crowley, C., Montgomery, M., Zaller, N.D., Martin, R., Clarke, J., Dubey, M., Chan, P.A. (in press). Knowledge and interest of pre-exposure prophylaxis among men in a criminal justice setting. *Journal of Correctional Healthcare.*

Brinkley-Rubinstein, L., Sivaraman, J., Shanahan, M., Proescholdbell, S., Rosen, D.L., Cloud, D.H., Junker, G., & Ranapurwala, S. (2019). Restrictive housing during incarceration is associated with increased post-release risk of death from suicide, homicide, and opioid overdose. *JAMA Open Network:* 2(10): e1912516. doi:10.1001/jamanetworkopen.2019.12516.

Peterson, M. Rich, J.D., Clarke, J.C., Macmadu, A., Truong, A., Pognon, K., & **Brinkley-Rubinstein, L.** (2019). Pre-Exposure Prophylaxis Awareness and Interest among Participants in a Medications for Addiction Treatment Program in a Unified Jail and Prison Setting in Rhode Island. *Journal of Substance Abuse Treatment.* 106:73-78. doi: 10.1016/j.jsat.2019.08.015.

Martin, R., Gresko, S.A., **Brinkley-Rubinstein, L.**, Stein, L., & Clarke, J. (in press). Post-release treatment uptake among participants of the Rhode Island Department of Corrections Comprehensive Medication Assisted Treatment Program. *Preventive Medicine.* 4 (105766). doi: 10.1016/j.ypmed.2019.105766.

Rhodes B., Costenbader, B., Wilson, L., Hershow, R., Carroll, J., Zule, W., & **Brinkley-Rubinstein, L.** (2019). Urban, Black and multi-racial individuals are impacted by fentanyl-contaminated heroin. *International Journal of Drug Policy.* 19 (73).1-6. doi: 10.1016/j.drugpo.2019.07.008.

Brinkley-Rubinstein, L., Peterson, M., Macmadu, A., Truong, A.Q., Clarke, J.C., Marshall, B.D., Green, T.G., Parker, M., Pognon, K., Martin, R., Stein, L., & Rich, J.D. (2019). The benefits and implementation challenges of the first state-wide comprehensive medication for addictions program in a unified jail and prison setting. *Drug and Alcohol Dependence.* 7;205:107514. doi: 10.1016/j.drugalcdep.2019.06.016.

Hershow, R., Gonzalez, M., Costenbader, B., Golin, C., Zule, W., & **Brinkley-Rubinstein, L.** (2019). Medical providers and harm reduction views on Pre-Exposure Prophylaxis for HIV prevention among people who inject drugs. *AIDS Education and Prevention.* 31(4). 363-379. doi: 10.1521/aeap.2019.31.4.363.

Peterson, M., Rich, J.D., Macmadu, A., Truong, A.Q., Green, T.C., Beletesky, L., Pognon, K. & **Brinkley-Rubinstein, L.** (2019). One guy goes to jail, two people are ready to take his spot: Perspectives on drug-induced homicide laws among incarcerated individuals. *International Journal of Drug Policy.*

Zaller, N.D., Zielinski, M., Coffey, J., & **Brinkley-Rubinstein, L.** (2019). Screening for opioid use disorder in the largest jail in Arkansas: A brief report. *Journal of Correctional Healthcare.* 25(3). 214-218. doi: 10.1177/1078345819852133.

Brinkley-Rubinstein, L., Peterson, M., Zaller, N.D., & Wohl, D.A. (2019). Best practices for identifying men who have sex with men for corrections-based pre-exposure prophylaxis provision. *Health & Justice.* 7(7). 1-5. doi: doi.org/10.1186/s40352-019-0088-7

Ramsey, S.E., Ames, E.G., **Brinkley-Rubinstein, L**., Teitelman, A.M., Clarke, J., & Kaplan, C. (2019). Linking Women Experiencing Incarceration to Community-Based HIV Pre-Exposure Prophylaxis Care: Protocol of a Pilot Trial, Addiction Science & Clinical Practice. *Addiction Science & Clinical Practice.* 14(8), 1-13. doi: 10.1186/s13722-019-0137-5.

Chadwick, C.N., **Brinkley-Rubinstein, L.**, McCormack, M., & Mann, A. (2019). Experiences of HIV stigma in rural Southern religious settings. *International Journal of Culture and Mental Health.* 11(3), 1-17. doi:10.1080/17542863.2018.1556718.

Zaller, N. & **Brinkley-Rubinstein, L.** (2018). Incarceration, drug use, and infectious diseases: A syndemic still not addressed. *Lancet HIV.* 18(12): P1301-1302. doi: 10.1016/S1473-3099(18)30438-3.

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Books and Chapters

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Barnes, S., **Brinkley-Rubinstein, L.,** Doykos, B., Martin, N., & McGuire, A. (2015). *Academics in action! A model for community-engaged research, teaching, and service.* New York, NY: Fordham University Press.

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Brinkley-Rubinstein, L., Chatman, V., Lunn, L. Mann, A. & Heflinger, C.A. (2015). Putting Boyer's four types of scholarship into practice: A community research and action perspective on public health. In S. Barnes, L. Brinkley-Rubinstein, B. Doykos & N. Martin (Eds.) *Academics in action! A model for community-engaged research, teaching, and service,* (pp.124-141). New York, NY: Fordham University Press.

Brinkley-Rubinstein, L., & Mann, A. (2014). The complexity of culture: Culture's impact on health disparities. In R. Gurung (Ed.), *Multicultural approaches to health and wellness in America,* (pp. 29-50). Westport, CT: Praeger.

Brinkley-Rubinstein, L. (2014). Historical perspectives on race and the war on drugs and prolonged effects of racially biased laws and policies. In S. Bowman (Ed.), *Color behind bars: Racism in the U.S. prison system* (pp. 171-190). Santa Barbara, CA: ABC-CLIO.
Brinkley-Rubinstein, L., & Turner, W.L. (2013). Creating healthier communities: Advancing from science to policy to practice. In K. Fitzpatrick (Ed.), *Poverty and health: A crisis among America's most vulnerable,* (pp.241- 258). Westport, CT: Praeger.

Commentaries

Brinkley-Rubinstein, L. (2014). Drug users need treatment, not punishment, *The Tennessean,* 14A.

Brinkley-Rubinstein, L. (2013). Three possible strategies for eliminating racial bias in the criminal justice system, *The Tennessean,* 16A.

GRANTS

Active

U01DA050442 (Brown University) 08/2019 – 07/2024
$11,457,579
National Institute of Drug Abuse
Multiple Principal Investigator (15% of salary)
Using Implementation Interventions and Peer Recovery Support to Improve Opioid Treatment Outcomes in Community Supervision
We propose to conduct an implementation and outcome evaluation to improve medication assisted treatment uptake at sites in North Carolina, Rhode Island, and Pennsylvania.

UG1DA050072-01 08/2019 – 07/2024
(Yale University)
$11,828,050
Site Principal Investigator and Co-Investigator (20% of salary)
Transitions Clinic Network: Post Incarceration Treatment, Healthcare, and Social Support Study
We propose to adapt the Transitions Clinic Network model to use community health workers to connect individuals leaving jails in New Haven, Durham, San Juan, the Bronx, and Milwaukee to community-based medication assisted treatment.

R01MD013573 (University of North Carolina, Chapel Hill) 09/2018 – 08/2023
$2,721,528
National Institute of Minority Health Disparities
Principal Investigator (20% of salary)
The Southern Pre-Exposure Prophylaxis (PrEP) Cohort Study: Longitudinal PrEP initiation and adherence among Parolees.
In this study, we are conducting an observational PrEP cohort study among parolees in three Southern states: NC, KY, and FL.

U54MD002329 11/2017 – 10/2022
$1,402,893
National Institute of Minority Health Disparities (University of Arkansas for Medical Sciences)
Co-Investigator (20% of salary)
Linking High-Risk Jail Detainees to HIV pre-exposure prophylaxis: Pre-Exposure Prophylaxis (PrEP)-LINK
In this study, we are assessing the facilitators and barriers to PrEP uptake among high-risk jail detainees to optimize a future PrEP intervention.

R01AI129731 (University of North Carolina, Chapel Hill) 07/2017 – 06/2021
$681,959
National Institute of Allergy and Infectious Disease
Co-Investigator (7% of salary)
Leveraging Big Data to understand and improve continuity of care among HIV positive jail Inmates
In this study, we are developing a database combining jail and state HIV records, use the database to examine burden of known HIV in county jails, assess inmates' use of HIV services before, during and

after incarceration, and identify inmate and facility factors associated with services before, during and after incarceration.

R34MH114654 (Brown University) 07/2017 – 06/2020
$681,959
National Institute of Drug Abuse
Co-Investigator (5% of salary)
Linkage to Community-Based HIV Pre-Exposure Prophylaxis Care Among at Risk Women upon Release from Incarceration
In this study, we will test a HIV prevention intervention among women at the Rhode Island Department of Corrections.

Completed

Robert Wood Johnson Foundation (University of North Carolina at Chapel Hill) 11/2018-11/2019
$149,245
Principal Investigator (no salary support)
Focusing a special issue of the American Journal of Public Health on how incarceration exacerbates health disparities
This grant funds a special issue of the American Journal of Public Health and pays for the coordination of the issue.

R21DA043487-Supplement 10/2018 – 09/2019
$150,000
Co-Investigator (7% of salary)
Adapting an Agent Based Model to Understand the Impact of Medication Assisted Treatment Accessibility during Prison and Jail on Overdose Outcomes in the Community
In this study, we are using agent-based modeling to demonstrate the effect that access to medication assisted treatment while incarcerated has on overdose outcomes in the community post-release.

Center for AIDS Research Supplement 09/2018 – 08/2019
$150,000
Co-Principal Investigator (15% of salary)
PrEP-aring for Prison Release
In this study, we are conducting qualitative research on how to adapt a community health worker intervention to aid in linkage to PrEP care after release from prison.

R01MD010403 (Yale University) 09/2016 – 08/2019
$1,314,190
National Institute of Minority Health Disparities
Co-Investigator (9.8% of salary)
Building Resilient Neighborhoods and Positive Social Networks to Prevent Gun Violence
We are applying a novel framework to mitigate the impact of gun violence in New Haven neighborhoods by defining gun violence as a chronic, manmade disaster, where prevention efforts can be planned and include the participation of neighborhood residents most impacted.

R21DA043487 (Brown University) 08/2017 – 07/2019

$476,602
National Institute of Drug Abuse
Co-Investigator (10% of salary)
Evaluating the implementation and impact of a novel medication assisted treatment program in a unified jail and prison system
In this study, we are evaluating the implementation and impact of a comprehensive medication assisted treatment program at the Rhode Island Department of Corrections.

The John and Laura Arnold Foundation (Brown University) 08/2017 – 07/2019
$296,234
Improving the Treatment of Opioid Use Disorders among People Transitioning through Correctional Settings
Co-Investigator (10% of salary)
In this study, are evaluating the post-release treatment follow-up of individuals who participate in the Rhode Island Department of Corrections comprehensive medication assisted treatment program.

UNC Committee of Faculty Research and Scholarly Leaves 01/2018 – 01/2019
$10,000
Principal Investigator (no salary support)
Small Grant to supplement other research activities
This is an internal UNC grant that will be used to pay for research assistance.

UNC Center for AIDS Research Developmental Award 01/2018 – 12/2018
Principal Investigator (no salary support)
Exploring the use of pre-exposure prophylaxis among people who inject drugs in Durham County, North Carolina
This project includes conducting qualitative interviews with people who inject drugs to explore HIV risk behaviors, drug use trajectory, and interest in pre-exposure prophylaxis.

R25DA037190 (Brown University)
National Institute of Drug Abuse 05/2015 – 05/2017
Trainee
Criminal Justice Research Program on Substance Use and HIV
This program provided mentoring to promote training in clinical research for new investigators in clinical research with a focus on HIV/AIDS, criminal justice, substance use, mental illness, global health and health disparities.

R25DA035692 (University of California, Los Angeles)
National Institute of Drug Abuse 05/2015 – 05/2017
Trainee
HIV/AIDS, Substance Abuse and Trauma Training Program
This program provided multi-disciplinary, state-of-the-art training to better equip postdoctoral fellows and early career investigators to submit and receive grant funding.

T32DA013911 (Brown University)
National Institute of Drug Abuse 05/2015 – 06/2016
Trainee

Training in HIV and Other Infectious Consequences of Substance Abuse
This training program provided multi-disciplinary training in clinical research in the areas of prevention, diagnosis and treatment of HIV and other infectious aspects of substance abuse.

INVITED PRESENTATIONS

Brinkley-Rubinstein, L. (2019, October). *Incarceration as a Social Determinant of Health.* Invited talk at University of Buffalo, Buffalo, NY.

Brinkley-Rubinstein, L. (2019, March). *HIV infection among people who are incarcerated.* Invited talk at the Southeast AIDS Education and Training Center coordinated by Vanderbilt University, Nashville, TN.

Brinkley-Rubinstein, L. (2019, March). *Barriers and facilitators to implementation of a medication assisted treatment program in a statewide unified correctional setting in Rhode Island.* Invited talk at the Mental Health Seminar Series at Duke University, Durham, NC.

Brinkley-Rubinstein, L. (2019, January). Fentanyl-contaminated heroin among communities of color. Invited talk at the Drug Policy Alliance, New York, NY.

Brinkley-Rubinstein, L. (2018, October). *Opioid use among incarcerated populations.* Invited talk at St. Louis University, St. Louis, MO.

Brinkley-Rubinstein, L. (2018, October). *Initiating medication assisted treatment in incarcerated populations.* Invited talk at the Vermont Center on Behavior and Health, Burlington, VT.

Brinkley-Rubinstein, L. (2018, September). *Understanding substance use, mental illness, and involvement in the criminal justice system: Theory, interventions, and opportunities.* Invited talk at the AHEC, Raleigh, NC.

Brinkley-Rubinstein, L. (2018, June). *Introduction to the social determinants of health and health equity.* Center for Health Equity Research Summer Training Program, University of North Carolina at Chapel Hill, Chapel Hill, NC.

PEER-REVIEWED CONFERENCE PRESENTATIONS

Brinkley-Rubinstein, L. (2019, March). Solitary Confinement is Associated with Increased Risk of Death. Presented at the Academic and Health Policy Conference on Correctional Health. Las Vegas, NV.

Neher, T.L., **Brinkley-Rubinstein, L.,** Marshall, S.A., Zielinski, M., & Zaller, N.D. (2018, November). *HIV risk factors and PrEP knowledge of incarcerated women in a county jail.* Presented at the meeting of the American Public Health Association, San Diego, CA.

Macmadu, A., **Brinkley-Rubinstein, L**, & Rich, J. (2018, March). *Fentanyl*. Paper presented at the Academic and Health Policy Conference on Correctional Health. Houston, TX.

Ashkin, E., Rosen, D., & **Brinkley-Rubinstein, L**. (2018, March). *NC Re-missioning*. Presented at the

Academic and Health Policy Conference on Correctional Health. Houston, TX.

Zaller, N., **Brinkley-Rubinstein, L.,** Cloud, D., & Peterson, M. (2018, March). *The CJ continuum for opioid users at risk of overdose.* Presented at the Academic and Health Policy Conference on Correctional Health. Houston, TX.

Brinkley-Rubinstein, L. (2017, March). *Exploring knowledge, interest, and barriers related to PrEP use among criminal justice involved men who have sex with men.* Presented at the Academic and Health Policy Conference on Correctional Health. Atlanta, GA.

Marshall, B.D.L., King, M., Macmadu, A., **Brinkley-Rubinstein, L.,** Sanchez, J., Beckwith, C.G., Altice, F.L., & Rich, J.D. (2016, June). *The effect of incarceration on HIV care continuum outcomes in the United States: An agent-based modeling approach.* Presented at the Epidemiology Congress of the Americas, Miami, FL.

Brinkley-Rubinstein, L. & Eckstrand, K. (2015, November). *Exploring the health experiences of transgender individuals in a local jail.* Presented at the American Public Health Association Annual Meeting, Chicago, Illinois.

Brinkley-Rubinstein, L. (2015, March). *Health and incarceration of HIV positive individuals.* Presented at the Academic and Health Policy Conference on Correctional Health. Boston, Massachusetts.

Brinkley-Rubinstein, L. (2014, November). *Measuring the health impact of incarceration on the HIV positive individuals.* Presented at the American Public Health Association Annual Meeting, New Orleans, Louisiana.

Brinkley-Rubinstein, L., & Griffith, D. (2014, November). *How do African American men define health and what implications do these definitions have for health practices?* Presented at the American Public Health Association Annual Meeting, New Orleans, Louisiana.

Brinkley-Rubinstein, L. (2014, October). *The usefulness of mixed methods in assessing the health of formerly incarcerated individuals*. Presented at the American Evaluation Association Annual Meeting, Denver, Colorado.

Brinkley-Rubinstein, L. (2014, March). *Measuring the health impact of incarceration on HIV positive individuals.* Presented at the Academic and Health Policy Conference on Correctional Health, Houston, Texas.

Griffith, D.M., **Brinkley-Rubinstein, L.,** & Metzl, J. (2013, December). *How do African American men define health and what implications do these definitions have for health practices?* Presented at the meeting of International Congress on Men's Health, Arlington, Virginia.

Brinkley-Rubinstein, L. (2013, October). *Dual identities of formerly incarcerated HIV positive individuals and the impact on health.* Presented at the American Public Health Association Annual Meeting, Boston, Massachusetts.

Brinkley-Rubinstein, L. & Turner, W.L. (2013, August). *Incarceration as an exacerbation of worsening health among African American HIV positive men.* Presented at the Annual Meeting of the American Sociological Association, New York, New York.

Brinkley-Rubinstein, L. (2013, March). *Difficult pasts, uncertain futures: An exploration of the lived experiences of formerly incarcerated HIV positive African American males.* Presented at the 5th Annual Health Disparities Conference at Teachers College, Columbia University, New York, New York.

Brinkley-Rubinstein, L. & Turner, W.L. (2013, March). *Understanding the compounding effect of stigma among formerly incarcerated HIV positive African Americans: A qualitative exploration.* Presented at the 6th Academic and Health Policy Conference on Correctional Health, Chicago, Illinois.

Brinkley-Rubinstein, L. & Mann, A. (2013, February). *The complexity of culture: Using an intersectional and social ecological lens to examine the impact of culture on health disparities.* Presented at the Cross Cultural Health Care Conference, Honolulu, Hawaii.

Brinkley-Rubinstein, L. (2012, October) *Incarceration as a catalyst for worsening health.* Presented at the Annual Meeting of the American Public Health Association, San Francisco, CA.

Meinbresse, M. & **Brinkley-Rubinstein, L.** (2012, September). *Exploring the incidence of violence among high-risk homeless populations.* Presented at the National Association for Community Health Centers Annual Conference. Orlando, FL.

Craven, K., Geller, J., Doykos, B., O'Connor, B., **Brinkley-Rubinstein, L**. & Bess, K. (2012, February). *Contextual barriers to collective action and community organizing in a high poverty, high crime neighborhood.* Presented at the Annual Meeting of the Association of American Geographers, New York, NY.

Brinkley-Rubinstein, L., Craven, K.L. & McCormack, M.M. (2011, November*). Incarceration as exposure: An assessment of the efficacy of community organization to mediate involvement with the juvenile justice system.* Presented at the International Conference on Urban Health, Belo Horizonte, Brazil.

Brinkley-Rubinstein, L. (2011, August). *The cascading effects of social capital: From parenting to mediating sexual behavior.* Presented at the Society for the Study of Social Problems Annual Meeting. Las Vegas, NV.

Brinkley-Rubinstein, L. (2011, July) *Type of charge most often associated with HIV positive prisoners.* Presented at the International AIDS Society Biannual Meeting. Rome, Italy.

DiPietro, B. & **Brinkley-Rubinstein, L**. (2011, June). *Show me the (UDS) Data: Difference between homeless & non-homeless health center patients.* Presented at the National Health Care for the Homeless Conference & Policy Symposium. Washington, DC.

Brinkley-Rubinstein, L. (2011, June). *Investigating the premises of empirical desert.* Presented at the Law and Society Annual Meeting. San Francisco, CA.

Brinkley-Rubinstein, L. (2011, May). *Perceived barriers to successful reintegration after release from prison.* Presented at the 7th Annual International Congress of Qualitative Inquiry. Champaign-Urbana, IL.

Brinkley-Rubinstein, L., Rhodes, L., & O'Connor, B. (2011, April). *Examining spatial distribution of incidence rates of sexually transmitted diseases and socio-economic measures.* Presented at the American Association of Geographers Annual Meeting, Seattle, WA.

Rhodes, J., & **Brinkley-Rubinstein, L.** (2010, October). *Examining incidence rates of sexually transmitted infections and socio-economic measures: A cross-sectional study in Nashville/Davidson County, TN*. Presented at the 9th Annual International Conference on Urban Health, New York City, NY.

Brinkley-Rubinstein, L. (2010, July). *Demographics and other characteristics associated with increased risk of incarceration and re-incarceration among HIV positive individuals*. Presented at the International AIDS Conference, Vienna, Austria.

Brinkley-Rubinstein, L., Rhodes, J., McKelvey, B., & Solivan, A. (2010, June) *Demographics and characteristics associated with the incidence of HIV among youth*. Presented at the NIMH Annual International Research Conference on the Role of Families in Preventing and Adapting to HIV/AIDS, Nashville, TN.

Brinkley-Rubinstein, L. & Rhodes, J. (2010, March). *Syphilis and HIV co-infection in Nashville/Davidson Co., Tennessee: A case for improving syphilis and STI testing among persons living with HIV.* Presented at the 4th Annual Southeast Regional HIV/AIDS Conference sponsored by the Jefferson Comprehensive Care System, Inc., Little Rock, AR.

Brinkley-Rubinstein, L., & Rhodes, J. (2010, March). *Early Syphilis and HIV syndemic in Nashville/Davidson Co., Tennessee: Implications for improving syphilis screening for people living with and at risk for HIV.* Presented at the National STD Prevention Conference, Atlanta, GA.

TEACHING ACTIVITIES

University of North Carolina, Chapel Hill, Chapel Hill, NC
Instructor of Record, Fall 2018

- Taught Social and Health Systems III to 16 second year medical students. This class focused on incarceration and health and covered the following subtopics: women and incarceration, substance use, HIV/AIDS, post-release healthcare access issues, how incarceration affects known social determinants of health (housing, employment, etc.), and healthcare delivery in correctional settings.

University of North Carolina, Chapel Hill, Chapel Hill, NC
Instructor of Record, Fall and Spring, 2017, 2018

- Taught Social and Health Systems I & II to 15 first year medical students
- Lectures given encompassed topics such as: influence of race, culture, gender, and sex on health outcomes and health disparities; health reform; bioethics; and health policy as clinically relevant for medical professionals.

Brown University, School of Public Health, Providence, RI
Co-Instructor of Record, Spring, 2016

- Taught the Tri-Lab: Designing better education for prisoner and community health
- Gave lectures related to race and incarceration, community-based participatory research methods, and the impact of incarceration on health
- Mentored student groups who were designing education interventions to improve prisoner health. Group topics included: Hepatitis C, PrEP, navigating the healthcare system post-release, and PTSD

Vanderbilt University, Department of Human and Organizational Development, Nashville, TN
Co-Instructor of Record, Spring, 2015

- Taught HOD 3600: Ethnography
- Gave lectures related to field work, data analysis, ethnographic methods
- Mentored students to develop ethnographic research projects and research proposals

HONORS AND AWARDS

2014- 2016	Recipient, Langeloth Scholarship for the Academic and Health Policy Conference on Correctional Health
2015	Participant, SBSRN Mentor Day
2015	Winner, Newbrough Award for best scholarly work in the Department of Human and Organizational Development at Vanderbilt University
2013-2014	Winner, Society for Community, Research & Action Southeast region graduate student of the year
2012-2014	Recipient, Peabody College Honor Scholarship
2010-2014	Recipient, Peabody College tuition and stipend award
2014	Recipient, of a Vanderbilt Graduate School dissertation enhancement grant
2013	Recipient, Social Justice Institute Training for Mass Incarceration Scholarship
2012-2013	Nominated, Vanderbilt University Teaching Award

PROFESSIONAL SERVICE

Associate Editorial Board: *BMC Public Health, 2017-Present; BMC Infectious Diseases 2018-Present*

Editorial Board: *Health & Justice 2016-Present*

Peer Reviewer 2018-2019: *PLOSone, Journal of Healthcare for the Poor and Underserved, SAHARA-J: Journal of Social Aspects of HIV/AIDS, AIDS Care, HIV/AIDS and Social Services, Health & Justice, Drug and Alcohol Dependence, Addictive Behaviors, Preventive Medicine, American Journal of Public*

Health, American Journal of Preventive Medicine, Annals of Internal Medicine, AIDS & Behavior, American Journal of Public Health

Local Host Committee: Academic and Health Policy Conference on Correctional Health 2020 annual meeting

Executive Steering Committee Member: Justice, Substance Use, HIV/AIDS Involved Populations Inter-CFAR working group

DSMB Member: Integrated Treatment Adherence Program for Bipolar Disorder at the Time of Prison Release (R34MH117198; PI: Weinstock, Lauren)

DSMB Member: Kentucky Communities and Researchers Engaging to Halt the Opioid Epidemic (CARE2HOPE) (UH3DA44798; PIs: Young, April & Cooper, Hannah)

PROFESSIONAL AFFILIATIONS

American Public Health Association
International Association of Urban Health
International AIDS Society
Society for Community Research and Action
Academic Consortium on Criminal Justice and Health

EXHIBIT C

BIOGRAPHICAL SKETCH

NAME	POSITION TITLE
Gavin Mark Yamey	Director, Center for Policy Impact in Global Health, Duke Global Health Institute (DGHI); Associate Director for Policy, DGHI; Professor of the Practice of Global Health & Public Policy, Duke University.

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	MM/YY	FIELD OF STUDY
Oxford University	BA	06/90	Physiological Sciences
University College London	MB BS	06/94	Medicine
Royal College of Physicians UK	MRCP	06/97	Internal Medicine
Oxford University	MA (honorary)	06/07	Physiological Sciences
London School of Hygiene & Tropical Medicine	MSc.	09/10	Public Health

A. Personal Statement

I am a Professor of the Practice of Global Health at DGHI, the Associate Director for Policy in DGHI, and Director of the DGHI Center for Policy Impact in Global Health. I am also a Professor of the Practice of Public Policy at the Duke Sanford School of Public Policy. In my prior position as an Assistant Professor of Epidemiology & Biostatistics in the Global Health Group at the University of California, San Francisco, I was co-PI on a $2.7 million grant from the Gates Foundation that funded the Evidence to Policy initiative, which I directed. I have 191 publications in peer-reviewed journals indexed in PubMed. I have also served as an external consultant to the World Health Organization and the Special Programme for Research and Training in Tropical Diseases (TDR), and provided policy advice to multiple bilateral and multilateral donors. As a physician and a global public health and policy researcher, I have had the privilege of serving on several international health commissions, including the Lancet Commission on Investing in Health, the Lancet Commission on Global Surgery, and the Lancet Commission on Tuberculosis. I have successfully collaborated with researchers internationally in multiple disciplines and have significant experience serving as a research mentor to dozens of students and junior faculty.

B. Principal Positions Held

Present	Director, Center for Policy Impact in Global Health, Duke Global Health Institute (DGHI); Associate Director for Policy, DGHI; Professor of the Practice of Global Health and Public Policy, DGHI and the Sanford School of Public Policy
2010-2015	Lead, Evidence-to-Policy Initiative (E2Pi), The Global Health Group, Global Health Sciences, University of California, San Francisco (UCSF); Associate Professor, Epidemiology & Biostatistics; Course Director for Global Health Policy, Masters in Global Health, UCSF; Course Director for Health Policy, Process and Power, Masters in Public Health, London School of Hygiene & Tropical Medicine
2004-2010	Senior Editor, PLoS Medicine & Editorial Consultant, PLoS Neglected Tropical Diseases, Public Library of Science (PLoS)
2002-2004	Assistant Editor, BMJ (British Medical Journal) and Deputy Physician Editor, Best Treatments
2000-2002	Deputy Editor, Western Journal of Medicine (co-owned by BMJ Publishing Group and University of California)
1999-2000	Editorial Registrar (a fellowship in medical journalism and editing), BMJ
1994-1999	Clinical appointments (internal medicine, London, UK)

C. Selected Peer-reviewed Publications

1. **Yamey, G**. WHO in 2002: Have the latest reforms reversed WHO's decline? BMJ 2002;325:1107-1112.
2. **Yamey G**. WHO in 2002: WHO's management: struggling to transform a "fossilised bureaucracy." BMJ 2002;325:1170-1173.
3. **Yamey G** . WHO in 2002: Faltering steps towards partnerships. BMJ 2002;325:1236-1240.

4. **Yamey G**. WHO in 2002: Why does the world still need WHO? BMJ 2002;325:1294-1298.
5. **Yamey G**. WHO in 2002: Interview with Gro Brundtland. BMJ 2002;325:1355.
6. **Yamey G**, Greenwood R. Religious views of the 'medical' rehabilitation model: a pilot qualitative study. Disabil Rehabil. 2004;26(8):455-62.
7. **Yamey G**. Excluding the poor from accessing the biomedical literature: a rights violation that impedes global health. *Health Hum Rights* 2008;10(1):21-42. At: http://bit.ly/1I2jgSE. This paper was selected for inclusion in Faculty of 1000 Medicine (http://f1000.com/), as an outstanding paper (rating: "1, recommended"); see http://f1000.com/prime/4082956
8. 10. Schäferhoff M, Schrade C, **Yamey G**. Financing maternal and child health-what are the limitations in estimating donor flows and resource needs? PLoS Med 2010;7(7):e1000305.
9. Feachem R, **Yamey G**, Schrade C. A moment of truth for global health. BMJ 2010;340:1316-1317.
10. Schäferhoff M, Schrade C, **Yamey G**. Financing the child and maternal health goals (peer-reviewed book chapter). Commonwealth Finance Ministers Reference Book 2010 (www.commonwealthministers.com/publications/commonwealth_ministers_reference_book_2010/). Pages 53-56.
11. Schäferhoff M, **Yamey G**. Estimating benchmarks of success in the Affordable Medicines Facility-malaria Phase 1. Peer reviewed by nine external peer reviewers and published by the Global Fund to Fight AIDS, Tuberculosis and Malaria (www.theglobalfund.org/documents/amfm/E2PI_EstimatingBenchmarksInAMFm_Report_en.pdf
12. Montagu D, **Yamey G**, Visconti A, Harding A, Yoong J. Where do poor women give birth? A multi-country analysis of Demographic and Health survey data. PLoS ONE 2011;6(2): e17155.
13. **Yamey G**. Scaling up global health interventions: a proposed framework for success. PLoS Med 2011;8(6):e1001049.
14. **Yamey G**, Feachem R. Evidence-based policymaking in global health-the payoffs and pitfalls. *Evidence Based Medicine*,2011;16(4):97-99.
15. Montagu D, **Yamey G**. Pay-for-performance and the Millennium Development Goals. *Lancet* 2011;377:1383-1385.
16. Sabot O, Schroder K, **Yamey G**, Montagu D. Scaling up oral rehydration salts and zinc for the treatment of diarrhoea. BMJ 2012;344:e940.
17. **Yamey G**, Schäferhoff M, Montagu D. Piloting the Affordable Medicines Facility - malaria: what will "success" look like? *Bulletin of the WHO*; 2012;90:452-460.
18. Cohen JM, Smith DL, Cotter C, Ward A, **Yamey G**, Sabot OJ, Moonen B. Malaria resurgence: a systematic review and assessment of its causes. *Malaria Journal* 2012;24;11:122.
19. **Yamey G**. What are the barriers to scaling up health interventions in low and middle income countries? A qualitative study of academic leaders in implementation science. *Globalization and Health* 2012;8:11
20. Opiyo N, **Yamey G**, Garner P. Subsidising artemisinin-based combination therapies supplied to the private sector: impact on use, availability, price and market share (Protocol). Cochrane Database of Systematic Reviews 2012, Issue 6. Art. No.: CD009926. DOI: 10.1002/14651858.CD009926.
21. Rosinski AA, Narine S, **Yamey G**. Developing a scorecard to assess global progress in scaling up diarrhea control tools: a qualitative study of academic leaders and implementers. PLoS ONE 2013;8(7):e67320.
22. Singhrao R, Huchko M, **Yamey G**. Reproductive and maternal health in the post-2015 era: cervical cancer must be a priority. PLoS Med 2013;10(8):e1001499.
23. Jamison DT, Summers LH, Alleyne G, Arrow KJ, Berkley S, Binagwaho A, Bustreo F, Evans D, Feachem RG, Frenk J, Ghosh G, Goldie SJ, Guo Y, Gupta S, Horton R, Kruk ME, Mahmoud A, Mohohlo LK, Ncube M, Pablos-Mendez A, Reddy KS, Saxenian H, Soucat A, Ulltveit-Moe KH, **Yamey G**. Global health 2035: a world converging within a generation. *Lancet* 2013;382:1898-955
24. Norheim OF, Jha P, Admasu K, Godal T, Hum RJ, Kruk ME, Gómez-Dantés O, Mathers CD, Pan H, Sepúlveda J, Suraweera W, Verguet S, Woldemariam AT, **Yamey G**, Jamison DT, Peto R. Avoiding 40% of the premature deaths in each country, 2010-30: review of the national mortality trends to help quantify the UN Sustainable Development Goal for health. *Lancet* 2014 Sep 18. pii: S0140-6736(14)61591-9.
25. Verguet S, Norheim OF, Olson ZD, **Yamey G**, Jamison DT. Annual rates of decline in child, maternal, HIV, and tuberculosis mortality across 109 countries of low and middle income from 1990 to 2013: an assessment of the feasibility of post-2015 goals. *Lancet Glob Health*;2(12):e698-709.
26. Powell R, Mwangi-Powell FN, Radbruch L, **Yamey G**, et al. Putting palliative care on the global health agenda. *Lancet Oncology* 2015 Feb;16(2):131-3.
27. Meara JG, Leather AJ, Hagander L, Alkire BC, Alonso N, Ameh EA, Bickler SW, Conteh L, Dare AJ, Davies J, Mérisier ED, El-Halabi S, Farmer PE, Gawande A, Gillies R, Greenberg SL, Grimes CE, Gruen RL, Ismail EA, Kamara TB, Lavy C, Lundeg G, Mkandawire NC, Raykar NP, Riesel JN, Rodas E, Rose J, Roy N, Shrime MG, Sullivan R, Verguet S, Watters D, Weiser TG, Wilson IH, Yamey G, Yip W. Global Surgery 2030: evidence and solutions for achieving health, welfare, and economic development. *Lancet* 2015 Apr 21. pii: S0140-6736(15)60160-X

28. Dieleman JL, Yamey G, Johnson EK, Graves CM, Haakenstad A, Meara JG. Tracking global expenditures on surgery: gaps in knowledge hinder progress. *Lancet Glob Health.* 2015 Apr 27;3 Suppl 2:S2-4.
29. Verguet S, Alkire BC, Bickler SW, Lauer JA, Uribe-Leitz T, Molina G, Weiser TG, **Yamey G**, Shrime MG. Timing and cost of scaling up surgical services in low-income and middle-income countries from 2012 to 2030: a modelling study. Lancet Glob Health. 2015 Apr 27;3 Suppl 2:S28-37.
30. Schäferhoff M, Fewer S, Kraus J, Richter E, Summers LH, Sundewall J, **Yamey G**, Dean T Jamison. How much donor financing for health is channelled to global versus country-specific aid functions? *Lancet*, July 13, 2015. http://dx.doi.org/10.1016/
31. Munshi V, **Yamey G**, Verguet S.Trends In State-Level Child Mortality, Maternal Mortality, And Fertility Rates In India. *Health Aff (Millwood).* 2016 Oct 1;35(10):1759-1763.
32. Gutnik L, **Yamey G**, Riviello R, Meara JG, Dare AJ, Shrime MG. Financial contributions to global surgery: an analysis of 160 international charitable organizations. *Springerplus.* 2016 Sep 13;5(1):1558. doi: 10.1186/s40064-016-3046-z.
33. Kruk ME, Kujawski S, Moyer CA, Adanu RM, Afsana K, Cohen J, Glassman A, Labrique A, Reddy KS, **Yamey G.** Next generation maternal health: external shocks and health-system innovations. *Lancet.* 2016 Nov 5;388(10057):2296-2306. doi: 10.1016/S0140-6736(16)31395-2.
34. González-Pier E, Barraza-Lloréns M, Beyeler N, Jamison D, Knaul F, Lozano R, Yamey G, Sepúlveda J. Mexico's path towards the Sustainable Development Goal for health: an assessment of the feasibility of reducing premature mortality by 40% by 2030. *Lancet Glob Health.* 2016 Oct;4(10):e714-25. doi: 10.1016/S2214-109X(16)30181-4.
35. Japan Global Health Working Group. Protecting human security: proposals for the G7 Ise-Shima Summit in Japan. *Lancet.* 2016 May 21;387(10033):2155-62. doi: 10.1016/S0140-6736(16)30177-5.
36. Dare AJ, Lee KC, Bleicher J, Elobu AE, Kamara TB, Liko O, Luboga S, Danlop A, Kune G, Hagander L, Leather AJ, Yamey G. Prioritizing Surgical Care on National Health Agendas: A Qualitative Case Study of Papua New Guinea, Uganda, and Sierra Leone. *PLoS Med.* 2016 May 17;13(5):e1002023. doi: 10.1371/journal.pmed.1002023.
37. **Yamey G**, Horváth H, Schmidt L, Myers J, Brindis CD. Reducing the global burden of Preterm Birth through knowledge transfer and exchange: a research agenda for engaging effectively with policymakers. *Reprod Health.* 2016 Mar 18;13:26. doi: 10.1186/s12978-016-0146-8.
38. Kruk ME, **Yamey G**, Angell SY, Beith A, Cotlear D, Guanais F, Jacobs L, Saxenian H, Victora C, Goosby E. Transforming Global Health by Improving the Science of Scale-Up. *PLoS Biol.* 2016 Mar 2;14(3):e1002360. doi: 10.1371/journal.pbio.1002360.
39. **Yamey G**, Morel C. Investing in Health Innovation: A Cornerstone to Achieving Global Health Convergence. *PLoS Biol.* 2016 Mar 2;14(3):e1002389. doi: 10.1371/journal.pbio.1002389.
40. Participants at the Bellagio Workshop on Implementing Pro-Poor Universal Health Coverage: Bump J, Cashin C, Chalkidou K, Evans D, González-Pier E, Guo Y, Holtz J, Htay DT, Levin C, Marten R, Mensah S, Pablos-Méndez A, Rannan-Eliya R, Sabignoso M, Saxenian H, Feachem NS, Soucat A, Tangcharoensathien V, Wang H, Woldemariam AT, **Yamey G**. Implementing pro-poor universal health coverage. *Lancet Glob Health.* 2016 Jan;4(1):e14-6. doi: 10.1016/S2214-109X(15)00274-0. No abstract available.
41. **Yamey G,** et al. Financing of international collective action for epidemic and pandemic preparedness**.** *Lancet Glob Health.* 2017 May 18. pii: S2214-109X(17)30203-6. doi: 10.1016/S2214-109X(17)30203-6.
42. Horvath H, Brindis CD, Reyes EM, **Yamey G**, Franck L; Knowledge Transfer and Exchange (KTE) Working Group. Preterm birth: the role of knowledge transfer and exchange. *Health Res Policy Syst.* 2017 Sep 6;15(1):78.
43. **Yamey G**, Summers LH, Jamison DT, Brinton J. How to convene an international health or development commission: ten steps. *Health Policy Plan.* 2018; 33(3):429-435.
44. Schar DL, **Yamey GM**, Machalaba CC, Karesh WB. A framework for stimulating economic investments to prevent emerging diseases. *Bull World Health Organ*. 2018; 96(2):138-140
45. McArthur JW, Rasmussen K, **Yamey G**. How many lives are at stake? Assessing 2030 sustainable development goal trajectories for maternal and child health. *BMJ* 2018; 360:k373
46. **Yamey G**, Batson A, Kilmarx PH, Yotebieng M. Funding innovation in neglected diseases. *BMJ* 2018; 360:k1182.
47. Yang X, Tang S, **Yamey G**, Qian X. Strengthening maternal and child health in China: lessons from transforming policy proposals into action. *Biosci Trends.* 2018 2018 May 13;12(2):211-214
48. **Yamey G**, Schäferhoff M, Kennedy K. Improving tracking of aid for women's, children's, and adolescents' health. *Lancet Glob Health.* 2018 Aug;6(8):e814-e815
49. Terry RF, **Yamey G**, Miyazaki-Krause R, Gunn A, Reeder JC. Funding global health product R&D: the Portfolio-To-Impact Model (P2I), a new tool for modelling the impact of different research portfolios. Version 2. *Gates Open Res.* 2018 Jul 19 [revised 2018 Jan 1];2:24. doi: 10.12688/gatesopenres.12816.2. eCollection 2018.
50. Yamey G, Jamison D, Hanssen O, Soucat A. Financing Global Common Goods for Health: When the World is a Country. *Health Syst Reform.* 2019;5(4):334-349.

51. **Yamey G**, Schäferhoff M, Hatchett R, Pate M, Zhao F, McDade KK. Ensuring global access to COVID-19 vaccines. *Lancet* 2020 Mar 31. pii: S0140-6736(20)30763-7

D. Research Support

CURRENT

OPP1199624 (Principal Investigator)	11/1/2018 – 10/31/2020
Bill & Melinda Gates Foundation	$1,577,647
Driving Health Progress during Disease, Demographic, Domestic Finance and Donor Transitions (the "4Ds"): Policy Analysis and Engagement with Six Transitioning Countries	

OPP1151682 (Principal Investigator)	30/10/2016 - 29/10/2018
Bill & Melinda Gates Foundation	$1,999,201
The Center for Policy Impact in Global Health: A New Policy Lab Designing Innovative Policy Solutions to Close Global Health Financing Gaps	

PAST

OPPGH4830/UCSF Award A124347 (Principal Investigator)	11/01/2014 - 12/31/2015
Bill & Melinda Gates Foundation	$1,277,789 direct/yr 1
Commission on Investing in Health (CIH) Phase 3: Leveraging Global Health 2035 to Shape the SDGs and the Health Investments of Donor-, Low- and Middle-Income Countries	$1,368,205 total direct

OPPGH4830/UCSF Award A113448 (Co-Investigator)	11/01/2009 - 10/31/2014
Bill & Melinda Gates Foundation	$1,680,471 direct/yr1
Core financing to the E2Pi project. The goal of this ongoing project is to develop and synthesize evidence to inform global health policy and decision-making	$2,705,513 total direct

OPP1106213/UCSF Award A123077 (PI)	03/01/2014 - 09/30/2014
Bill & Melinda Gates Foundation	$295,454 direct/yr1
Commission on Investing in Health (CIH) Phase 2: Leveraging the Convergence Indicators to Shape the Post-2015 Development Goals	$295,454 total direct

A123102 (PI)	03/17/2014 - 12/31/2014
Swedish Expert Group for Aid Studies	$12,811 direct/yr1
The Future Role of Swedish Health Aid	$12,811 total direct

A120829 (PI)	10/01/2012 - 02/28/2014
Center for Disease Dynamics, Economics and Policy (Prime funder: Bill & Melinda Gates Foundation)	$21,794 directs/Yr 1

Lancet Commission on "Investing in Health: World Bank World Development Report 1993 @ 20 Years" — $302,945 total direct

A122550 (PI) — 07/01/2013 - 11/30/2013

SEEK Development — $12,072 direct/yr1
(Prime Funder: Global Fund to Fight AIDS, Tuberculosis and Malaria)

Quantitative estimation of the Global Fund's contribution to MDGs 4 & 5 — $12,072 total direct

P0054012 (PI) — 03/19/2012 - 12/31/2012

SEEK Development — $9,350 direct/yr1
Prime: World Health Organization/UNITAID

Independent 5-Year Evaluation of UNITAID — $9,350 total direct

A119267 (PI) — 02/06/2012 - 05/31/2012

Bill & Melinda Gates Foundation — $153,655 direct/yr 1

Establishing Service Delivery Unit Cost Benchmarks for Antiretrovirals, DOTS, and Bed Nets to Inform Payment Rates by the Global Fund — $153,655 total direct

A118651 (PI) — 07/12/2011 - 09/30/2011

Contractor: SEEK Development — $79,164 direct/yr1
Prime: WHO/Partnership for Maternal, Newborn and Child Health

Options for Improving Maternal, Newborn and Child Health through Strengthening the Global Aid Architecture — $79,164 total direct

A116241 (PI) — 11/01/2010 - 08/31/2011

Clinton Health Access Initiative — $276,875 direct/yr1

Securing Sustained Financing for Successful Malaria Control: Building the Evidence Base and Supporting Practical Country Solutions — $276,875 total direct

A115807 (PI) — 05/26/2010 - 12/31/2010

Global Fund to Fight AIDS, Tuberculosis & Malaria — $51,903 direct/yr1

Review of Experience to Identify How to Assess Success of the Affordable Medicines Facility-malaria (AMFm) Phase 1 — $51,903 total direct

N/A (Investigator) — 01/01/2009 - 12/31/2009

Kaiser Family Foundation — $8,000 total

An Investigation of Large Scale Implementation of Evidence-Based Tools in East Africa: Sudan, Kenya, Uganda (Investigative Journalism Fellowship)

39544 (PI) — 03/02/2006 - 03/01/2010

Bill & Melinda Gates Foundation — $1,092,194 total

Grant to launch PLoS Neglected Tropical Diseases (www.plos.ntds.org)

EXHIBIT D

MIKE DOLAN FLISS

UNC / DPH Public Health Epidemiologist
Experienced local / state public health
informatics & epidemiology collaborator.

919.699.5591
mike.dolan.fliss@gmail.com
LinkedIn goo.gl/rFcoJA
web http://epimike.web.unc.edu/

Experienced public health epidemiologist & informatician on impactful local and state level projects. Background in computer science, program evaluation, data visualization, social work, & management.

Technical: Causal inference, statistics, data analysis, data science, machine learning, spatial analysis, data visualization / grammar of graphics, website building, prediction, classification, cluster detection, database design, workflow automation & reporting, text mining, EHR implementation, KPIs.

Familiar w/ over a dozen statistical languages & programming tools:

Expert:	R, QGIS, Tableau.
Proficient:	SQL, SAS, HT/XML, CSS, ArcGIS, JavaScript, LaTeX, VBA.
Novice:	Python, D3, Orange, WEKA, Data Miner, Perl.

Management: Program evaluation. Group facilitation. Budgeting & accounting. Supervision & volunteer mgmt. Personal organization (GTD). Anti-oppression-based organization development. Public speaking.

EDUCATION

PhD	**Epidemiology:** University of North Carolina	2019
MPS	**Biomedical and Health Informatics:** University of North Carolina	2018
MSW	**Community, Management & Policy Social Work:** University of North Carolina	2009
	Certificate in Nonprofit Executive Leadership: University of North Carolina	2009
	Certificate in Nonprofit Management: Duke University	2009
	Certificate in Nonprofit Leadership & Diversity Training: Public Allies, Durham, NC	2004
BS/BA	**Computer Science & Philosophy (Dual):** Duke University. Minor: Religion	2003

MISSION

To support state and local health departments to collect, integrate, analyze, and visualize health indicators to drive surveillance, programs, and policy interventions for healthier communities and reduced disparities.

- My tools to do this are strategic, practice-focused research projects; informatics infrastructure improvements; and community collaborations.
- These activities move dollars to public health focus areas; increase citizen and decision-maker public health data fluency; reduce racial-ethnic, rural-urban, and socio-economic position disparities; drive high quality interventions; and ultimately, create healthier, longer lived, happier communities.

Mike Dolan Fliss mike.dolan.fliss@gmail.com 919.699.5591

PROFESSIONAL EXPERIENCE

UNC Injury Prevention Research Center (IPRC), Raleigh, NC 2018-present
Research scientist. Projects including child maltreatment, multi-state data sharing, death by law enforcement, rapid overdose, space-time clustering.

NC Division of Public Health / Injury Epidemiology Unit, Raleigh, NC 2015-present
Informatics / data viz consulting on multiple projects in unit. Building dashboards, designing automation, ad-hoc mapping and analysis projects. Overdose epidemic, alcohol outlet density, violent death.

Orange County Health Department, Hillsborough, NC 2012-2015
Public Health Informatics Manager: Integrate & analyze multiple internal (clinic) and partner (i.e. hospitals, schools, vital records) data-sources to track and improve county population health outcomes. Community health assessments, billing QA/QI, poverty indices, EMRs, data dashboards.

Consulting, Chapel Hill, NC 2006-2012
Self-employed: epidemiology & informatics consulting for public health / nonprofit / social justice groups. Examples: Research with national tobacco control & NC foster care nonprofits; Built social work eldercare database for SAS; websites for environmental initiatives, NC Pride LGBT festival.

Stone Circles, Mebane, NC 2008-2010
Created individual donor plan; built program and donor databases; strengthened volunteer program.

North Carolina School of Science and Math, Durham, NC 2005-2007
Directed service requirement, 30,000 hours of service a year. Set all-time hall community activity record.

H & R Block, Hillsborough, NC 2005
Professionally prepared tax returns; gave free public seminars on low-income tax basics.

Durham Nativity School, Durham, NC 2003-2004
Coordinated 1000+ service hours. Taught history of sexism, religions on anger; gender/race pay-gap.

Family Services Camp Kindred Lead Counselor, Burlington, NJ 2003-2004
Supervised 4 counselors at summer foster-care system camp; facilitated activities, staff schedules.

Hogares del Valle, Inc., Albuquerque, NM 2002
Facilitated youth groups at residential treatment center; full-time internship awarded by Duke.

Duke University Engineering Teaching Assistant 2001-2002
Evaluated novel internet technologies (e.g. Adobe FLASH) and designed course assignments.

Lockheed Martin, Inc., Moorestown, NJ 1998-2000
Created advanced database w/ automated report generation, Pearl CGI; US gov't Secret clearance.

MEMBERSHIPS

Council of State and Territorial Epidemiologists (CSTE)
American Public Health Association (APHA)
National Academy of Social Workers (NASW)

TEACHING ACTIVITIES

UNC EPID 799C: R for Epidemiologists **Lead Instructor**
Lead instructor for annual, full-credit class on epidemiology analysis in R (Fall 2016 to present).

Mike Dolan Fliss mike.dolan.fliss@gmail.com 919.699.5591

PEER-REVIEWED PUBLICATIONS

- Young A, Fliss MD, Ising A. Improving Local Non-Communicable Disease Surveillance within a Changing Data Environment. *Online Journal of Public Health Informatics*. 2015;7(1). doi:10.5210/ojphi.v7i1.5845
- Shanahan ME, Fliss MD, Proescholdbell SK. Child Maltreatment Surveillance Improvement Opportunities: A Wake County, North Carolina Pilot Project. *North Carolina Medical Journal*. 2018;79(2):88-93. doi:10.18043/ncm.79.2.88
- Ward JB, Gartner DR, Keyes KM, Fliss MD, McClure ES, Robinson WR. How do we assess a racial disparity in health? Distribution, interaction, and interpretation in epidemiological studies. *Annals of Epidemiology*. 2019;29:1-7. doi:10.1016/j.annepidem.2018.09.007
- Fliss MD, Baumgartner F, Delamater P, Marshall S, Poole C, Robinson W. Re-prioritizing traffic stops to reduce motor vehicle crash outcomes and racial disparities. Inj Epidemiol. 2020;7(1):3. doi:10.1186/s40621-019-0227-6
- Fliss M, Cox MB, Proescholdbell S., Simon M., Wallace J. Methods for measuring alcohol retail environment exposure, clusters, and disparities in Durham, North Carolina. (*North Carolina Medical Journal.* Under Review.)
- Fliss M, Gartner D, McClure L, Rennie S, Ward J. Public Health, Private Names: Prevalence and ethical considerations of branding schools of public health. (Target: *Critical Public Health*. Accepted, Final typesetting.)

PAPERS IN PROGRESS

- Fliss M. Residential-based rates underestimate racial disparities in police traffic stops. (Target: *American Journal of Public Health / Journal of Quantitative Criminology*. Estimated submission: Summer 2019.)
- Fliss M, Shanahan M E, Waller A, Proescholdbell S. Spatial disparities in emergency department underutilization of child maltreatment diagnosis codes. (Target: *Online Journal of Public Health Informatics*.)
- Fliss M, Caves J, Geary S, Proescholdbell S. Community-based surveillance vs. violent death reporting system surveillance differences in death by legal intervention. (Target: *American Journal of Public Health*.)
- Fliss M, Cox MB, Proescholdbell S., Simon M., Wallace J. Historical redlining and the association with present-day alcohol retailer density. (Target: *Preventing Chronic Disease.*)
- Fliss M, Chen F, Pulimood N, Wang J, Myers A. Open data for ascertainment and categorization of tobacco retailers: web scraping, machine learning, and human mTurk validation. (Target: *Tobacco Control*.)
- Albertson E, Farquhar S, Chen r, Matheson A, Ursua M, Fliss, M. Impact of Public Housing Redevelopment on Reported and Perceived Crime in a Seattle Neighborhood. (Target: *Urban Affairs Review*. Submitted.)
- Fliss M, Quist, A, Johnston J, Christenson E. Racial-ethnic and income disparities in multiple exposure to concentrated animal feeding operations. (Target: *American Journal of Public Health*.)
- Fliss M, Quist, A. Flood risk to multiple environmental hazards in North Carolina. (Target: *American Journal of Public Health*.)

CONFERENCE PRESENTATIONS & COMMITTEE WORK

Council of State & Territorial Epidemiologists: Alcohol Outlet Density Disparities	2019
NC Opioid Summit: From data to local action using dashboards	2019
State Health Director's Conference: Local Public Health Informatics	2015
NACCHO webinar: Local Initiatives to Address Social Determinants of Health	2015
NC DHHS Epidemiology & Evaluation Team: Modern Informatics Tools	2014

EXHIBIT E

SHABBAR I. RANAPURWALA, PhD, MPH, BHMS

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Chapel Hill, NC 27517
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Email: sirana@email.unc.edu

EDUCATION

2014	PhD, Epidemiology University of North Carolina, Chapel Hill, NC, USA
2009	MPH, Environmental Health Western Kentucky University, Bowling Green, KY, USA
2004	BHMS (Bachelor of Homoeopathic Medicine and Surgery), Maharashtra University of Health Sciences, Nashik, India

PROFESSIONAL EXPERIENCE

10/2016 – present	Research Assistant Professor, Department of Epidemiology, and Core Faculty Member, Injury Prevention Research Center, University of North Carolina at Chapel Hill, NC.
11/2016 – present	Adjunct Assistant Professor, Epidemiology, University of Iowa, Iowa City, IA.
06/2014 – 09/2016	Postdoctoral Research Scholar, Injury Prevention Research Center, College of Public Health, University of Iowa, Iowa City, IA.
09/2010 – 05/2014	Graduate Research Trainee, Divers Alert Network (DAN), Durham, NC.
06/2010 – 08/2010	Data Analyst, North Carolina Institute for Public Health, University of North Carolina, Chapel Hill, NC.
8/2009 – 05/ 2009	Instructor, Department of Liberal Arts and Science, Western Kentucky University Community College, Bowling Green, KY
02/2008 – 05/2009	Graduate Research Assistant, Department of Public Health, Western Kentucky University, Bowling Green, KY.
02/2009 – 05/2009	Intern, Kentucky Department of Environmental Protection, Division of Water, Bowling Green, KY.
12/2008 – 01/2009	Environmental Health Intern, International Health and Human Service Learning Program – Belize 2009, CHHS, Western Kentucky University in Gales Point, Belize.
01/2007 – 08/2007	Resident Medical Officer, Dharmadhikari Hospital, Nagpur, India.
11/2005 – 01/2007	Senior Resident Medical Officer, KRIMS Hospital, Nagpur, India.
01/2005 – 12/2005	Resident Intern, Nagpur College of Homoeopathy & Hospital, Nagpur, India.

AWARDS AND HONORS

2016 Clinical Trials, Statistical, and Data Management Center Poster Award for the poster: *Predictors of injury in a farm vehicle crash: modifiable and non-modifiable factors*. College of Public Health Research Week, University of Iowa, Iowa City, IA

2016 Rural Policy Research Institute Poster Award for the poster: *Predictors of injury in a farm vehicle crash: modifiable and non-modifiable factors*. College of Public Health Research Week, University of Iowa, Iowa City, IA

2015 Collegiate Poster Award for the poster entitled: *To report or not to report? Effect on Crime Victimization*. College of Public Health Research Week, University of Iowa, Iowa City, IA

2014 Delta Omega Theta Chapter Service Award for service and leadership, Gilling's School of Global Public Health, University of North Carolina, Chapel Hill, NC

2013 Robert Verhalen endowed scholarship for Injury Prevention and Trauma Management, Gilling's School of Global Public Health, University of North Carolina, Chapel Hill, NC

2013 Class of 2013 scholarship, Gilling's School of Global Public Health, University of North Carolina, Chapel Hill, NC

2013 Society for Public Health Education (SOPHE)/ Center for Disease Control and Prevention (CDC) Unintentional Injury Prevention Fellowship: 2013-2014

2009 Outstanding Graduate Student for Environmental Public Health, College of Health and Human Services, Western Kentucky University, Bowling Green, KY

2008 World Toppers scholarship, travel and study for the 2009 International Health and Human Service Learning Program, Western Kentucky University, Bowling Green, KY
2008 College of Health and Human Services travel scholarship for the 2009 International Health and Human Service Learning Program, Western Kentucky University, Bowling Green, KY

PROFESSIONAL MEMBERSHIPS

2014 – Society for Advancement of Violence and Injury Research
2011 – Society for Epidemiologic Research
2009 – American Public Health Association

PUBLICATIONS

Peer Reviewed Journals (*Denotes that the first author was an advisee or student mentee)

1. Geary S, Graham L, Moracco KE, **Ranapurwala SI**, Proescholdbell SK, Macy R. Understanding intimate partner violence related deaths in North Carolina: North Carolina Violent Death Reporting System, 2011-2015. NC Med J. 2020 (in press).
2. Register-Mihalik JK, Guskiewicz KM, Marshall SW, McCulloch KL, Mihalik JP, Martin Mrazik, Murphy I, Naidu D, **Ranapurwala SI**, Schneider K, Gildner P, McCrea M, and Active Rehab Study Consortium Investigators. Methodology and implementation of a randomized controlled trial (RCT) for early post-concussion rehabilitation: The Active Rehab Study. Front Neurol. 2019; 10:1176.
3. MARIC consortium (includes **Ranapurwala SI**). Multi-national meta-analysis of all-cause mortality after release from incarceration (MARIC): a protocol. Int J Popul Data Sci. 2019; In press.
4. Brinkley-Rubinstein L, Caves JJ, Junker G, Rosen D, Proescholdbell SK, Shanahan ME, **Ranapurwala SI**. Association of restrictive housing during incarceration with post-release mortality. JAMA Netw Open. 2019 Oct 2;2(10):e1912516.
5. *Wong E, **Ranapurwala SI**. Cardiovascular Risk Associated with Medical Use of Opioids and Cannabinoids. Curr Cardiovasc Risk Rep (2019) 13: 30. (Invited Systematic Review).
6. Naumann RB, Durrance CP, **Ranapurwala SI**, Austin AE, Proescholdbell SK, Childs R, Marshall SW, Kansagra S, Shanahan ME. Impact of a community-based naloxone distribution program on opioid overdose death rates. Drug Alcohol Depend. 2019 Nov 1;204:107536. Epub 2019 Aug 30..
7. **Ranapurwala SI**, Young T, Wu H, Peek-Asa C, Cavanaugh JE, Ramirez MR. Public health application of predictive analysis: Forecasting the risk of farm crash injuries. Inj Epidemiol. 2019. 6(1); 31.
8. **Ranapurwala SI**. Identifying and addressing confounding bias in violence prevention epidemiology. Curr. Epidemiol Report. June 2019. 6(2); 200-207.
9. *Sivaraman J, **Ranapurwala SI**, Moracco KE, Marshall SW. Impact of firearm regulatory strictness on intimate partner homicide and homicide-suicide. Am J Prev Med. 2019 Jan;56(1):125-133. doi: 10.1016/j.amepre.2018.09.007.
10. Bernard SA, Chelminski PR, Ives TJ, **Ranapurwala SI**. The Management of Pain in the United States—Implications for the Opioid Epidemic (invited review). Health Serv Insights. 2018 Dec 26;11:1178632918819440. doi: 10.1177/1178632918819440.
11. **Ranapurwala SI**, Shanahan ME, Alexandridis AA, Proescholdbell ST, Naumann RB, Edwards D, Marshall SW. Opioid overdose mortality among former North Carolina inmates: A retrospective cohort 2000-2015. Am J Public Health. 2018 Sep;108(9):1207-1213. doi: 10.2105/AJPH.2018.304514. Epub 2018 Jul 19.
12. **Ranapurwala SI**, Naumann RB, Austin AE, Dasgupta N, Marshall SW. Methodologic limitations of prescription opioid safety research and recommendations for improving the evidence base. Pharmacoepidemiol Drug Saf. 2019 Jan;28(1):4-12. doi: 10.1002/pds.4564. Review.
13. **Ranapurwala SI**, Kucera KL, Denoble PJ. The healthy diver: A cross-sectional survey to evaluate the health status of recreational scuba diver members of Divers Alert Network (DAN). PLoS ONE. 2018. 13(3): e0194380.
14. **Ranapurwala SI**, Carnahan R, Brown G, Hinmann J, Casteel C. Impact of prescription monitoring program on opioid pain reliever prescribing patterns in Iowa. Pain Med. 2018. doi: 10.1093/pm/pny029. [Epub ahead of print]
15. Brinkley-Rubenstein L, Macmadu A, Marshall B, Heise A, **Ranapurwala SI**, Rich JD, Green TC. Risk of fentanyl-involved overdose among those with past year incarceration: Findings from a recent outbreak of illicit synthetic fentanyl overdose in 2014 and 2015. Drug Alcohol Depend. 2018 Feb 9;185:189-191. doi: 10.1016/j.drugalcdep.2017.12.014. [Epub ahead of print]
16. Rosenberg M, **Ranapurwala SI**, Townes A, Bengtson AM. Do Black Lives Matter in public health research

and training? PloS ONE. 2017; Oct 10;12(10):e0185957.
17. **Ranapurwala SI**, Wing S, Poole C, Kucera KL, Marshall SW, Denoble PJ. Mishaps and unsafe conditions in recreational scuba diving and pre-dive checklist use: A prospective cohort study. Inj Epidemiol. 2017 Dec;4(1):16. doi: 10.1186/s40621-017-0113-z. Epub 2017 Jun 5.
18. **Ranapurwala SI**, Peek-Asa C, Casteel C. Volunteering in Adolescence and Adult Delinquency: A Longitudinal Analysis from the Add Health Study. Inj Epidemiol. 2016 Dec;3(1):26. PMID: 27807807.
19. **Ranapurwala SI**, Denoble PJ, Poole C, Marshall SW, Kucera KL, Wing SB. Factors influencing adherence to pre-dive checklists among recreational scuba divers. Undersea Hyperb Med. 2016;43(7):827-32.
20. **Ranapurwala SI**, Mello ER, Ramirez MR. A GIS-based matched case-control study of road characteristics in farm vehicle crashes from nine Midwestern US states. Epidemiology. 2016;27(6):827-34. [Epub: Jul 27, 2016] doi: 10.1097/EDE.0000000000000542. PMID: 27468005.
21. **Ranapurwala SI**, Berg MT, Casteel C. Reporting crime victimizations to the police and the incidence of future victimizations: A longitudinal study. Plos One. 2016; 11(7):e0160072. doi: 10.1371/journal.pone.0160072. PMID: 27466811.
22. **Ranapurwala SI**, Denoble PJ, Poole C, Marshall SW, Kucera KL, Wing S. The effect of using a pre-dive checklist on the incidence of diving mishaps in recreational scuba diving: A cluster randomized trial. International Journal of Epidemiology, 2016; 45(1):223-231. [Epub: Nov 3, 2015]. doi: 10.1093/ije/dyv292. PMID: 26534948.
23. Hatzenbuehler ML, Schwab-Reese L, **Ranapurwala SI**, Hertz M, Ramirez MR. Anti-Bullying Policies Reduce the Risk of Bullying Victimization: A State-Level Analysis. JAMA Pediatrics, 2015; 169(10):e152411. [Epub: Oct 5, 2015] doi: 10.1001/jamapediatrics.2015.2411. PMID: 26437015.
24. **Ranapurwala SI**, Bird N, Vaithiyanathan P, Denoble PJ. Scuba diving injuries among Divers Alert Network members 2010-2011. Diving and Hyperbaric Medicine, 2014; 44(2):79-85. PMID: 24986725.
25. Denoble PJ, Nelson CL, **Ranapurwala SI**, Caruso JL. Preval ence of left ventricular hypertrophy in scuba diving and traffic accident victims. Undersea and Hyperbaric Medicine, 2014; 41 (2):127-33. PMID: 24851550.
26. Zanchi J, Ljubkovic M, Denoble PJ, Dujic Z, **Ranapurwala S**, Pollock NW. Influence of repeated daily diving on decompression stress. International Journal of Sports Medicine, 2014; 35(6):465-8. doi: 10.1055/s-0033-1334968. PMID: 23771833.
27. Denoble PJ, **Ranapurwala SI**, Vaithiyanathan P, Clarke RE, Vann RD. Per-capita claims rates for decompression sickness among insured Divers Alert Network members. Undersea and Hyperbaric Medicine, 2012; 39(3):709-15. PMID: 22670551.
28. Lartey GK, Habib F, **Ranapurwala SI**, Bowles T. Health Departments' Activities in Promoting Motor Vehicle Safety Among Children. American Journal of Health Studies, 2008; 23(3):124-29.

In review
29. Cholera R, **Ranapurwala SI**, Linton J, Shmuel S, Miller-Fitzwater A, Best D, Simha S, Flower KB. Healthcare utilization among Latinx children before and after 2017 executive actions on immigration.
30. *Graham LM, **Ranapurwala SI**, Zimmerman K, Fraga C, Martin S, Lanier P, Macy R. Potential years of life lost due to intimate partner violence among partner victims: Data from 16 states for 2006-2015.
31. **Ranapurwala SI**, Ringwalt CL, Pence BW, Schiro S, Fulcher N, DiPrete BL, Marshall SW. Intended and Unintended Consequences Associated with A State Policy to Address Opioid Overprescribing.

Books and chapters
1. Denoble PJ, **Ranapurwala SI**, Vaithiyanathan P, Bird N. Prevalence of sudden cardiac death risk factors in scuba divers – an online survey. In the proceedings of the 4th Conference on Diving Physiology, Technology and Hyperbaric Medicine. Japanese Soceity of Hyperbaric and Undersea Medicine, Tokyo, Japan, November, 2012; 71-74.
2. **Ranpurwala, SI**. (Dissertation) Prevention of scuba diving mishaps using a pre-dive checklist: A cluster randomized trial. Epidemiology Department, Gillings School of Global Public Health, University of North Carolina, Chapel Hill, NC, USA. Chair: Steve Wing, PhD. Committee: Charles Poole, PhD; Stephen W. Marshall, PhD; Kristen Kucera, PhD; Petar Denoble, MD.

CONFERENCES PRESENTATIONS (# = Presenter)

Oral presentations
1. #**Ranapurwala SI**, Caves JJ, Junker G, Rosen D, Proescholdbell SK, Shanahan ME, Brinkley-Rubinstein L. Restrictive housing during incarceration and the risk of death from suicide, homicide, and opioid overdose

post-release in North Carolina: 2000-2015. Society for Advancement of Violence and Injury Research, April 2019; Cincinnati, OH, USA.

2. Geary S, Graham L, Moracco KE, #**Ranapurwala SI**, Proescholdbell SK, Macy R. Intimate partner homicides in North Carolina: 2011-2015. Society for Advancement of Violence and Injury Research, April 2019; Cincinnati, OH, USA.
3. #Sivaraman J, Ali YM, Marshall SW, Ranapurwala SI. Law enforcement-related deaths, the number of statewide restrictive firearm laws, and race in 16 US states: 2010-2016. Society for Advancement of Violence and Injury Research, April 2019; Cincinnati, OH, USA.
4. #Naumann RB, Durrance CP, **Ranapurwala SI**, Austin AP, Proescholdbell SK, Shanahan ME. Impact of a community-based naloxone distribution program on opioid overdose death rates, 2013-2016. Society for Advancement of Violence and Injury Research, April 2019; Cincinnati, OH, USA.
5. #Brinkley-Rubinstein L, Caves JJ, Rosen D, Proescholdbell SK, Shanahan ME, **Ranapurwala SI**. Solitary confinement and the risk of post-release death. 12th Academy and Health Policy Conference on Correctional Health, March 2019; Las Vegas, NV, USA.
6. #Macmadu A, Brinkley-Rubenstein L, Marshall B, Heise A, **Ranapurwala SI**, Rich JD, Green TC. Risk of fentanyl-involved overdose among those with past year incarceration: Findings from a recent outbreak of illicit synthetic fentanyl overdose in 2014 and 2016. 11th Academy and Health Policy Conference on Correctional Health, March 2018; Houston, TX, USA.
7. #**Ranapurwala SI**. Confounding and Directed Acyclic Graphs: Innovations in research and training at NCIPC funded Injury Prevention Research Centers. American Public Health Association annual conference, November 2017; Atlanta, GA, USA.
8. #**Ranapurwala SI**, Shanahan ME, Alexandridis AA, Proescholdbell ST, Naumann RB, Edwards D, Marshall SW. Opioid overdose mortality among former North Carolina inmates: 2000-2015. American Public Health Association annual conference, November 2017; Atlanta, GA, USA.
9. #**Ranapurwala SI**, Hinmann J, Carnahan R, Brown G, Casteel C. Association of Iowa PMP with opioid pain reliever prescribing patterns: An interrupted time series approach. American Public Health Association annual conference, November 2017; Atlanta, GA, USA.
10. #Rauscher KJ, Brown B, Casteel C, **Ranapurwala SI**. Comparing Workplace Violence Experiences of Adolescent and Adult Workers Using the National Crime Victimization Survey. American Public Health Association annual conference, November 2017; Atlanta, GA, USA.
11. #**Ranapurwala SI**, Hinmann J, Carnahan R, Brown G, Casteel C. Impact of prescription monitoring program on opioid pain reliever prescribing patterns in Iowa. Society for Advancement of Violence and Injury Research, September 2017; Ann Arbor, MI, USA.
12. #**Ranapurwala SI**, Young T, Wu H, Cavanaugh JE, Peek-Asa C, Ramirez MR. Public health application of predictive modeling: Forecasting the risk of farm crash injuries. Society for Epidemiologic Research Annual Conference, June 2017; Seattle, WA, USA.
13. #**Ranapurwala SI**, Young T, Ramirez MR. Predictors of injury in a farm vehicle crash: modifiable and non-modifiable factors. Midwest Rural Agricultural Safety and Health Conference, November 2015; Decorah, IA, USA.
14. #**Ranapurwala SI**, Casteel C. Effect of doing volunteer work in formative years on adult delinquency: A longitudinal study. Society for Advancement of Violence and Injury Research, March 2015; New Orleans, LA, USA.
15. #**Ranapurwala SI**, Mello E, Ramirez MR. Effect of road characteristics on the incidence of farm vehicle-relate crashes; 40th Annual International Traffic Records Forum, October 2014; St. Louis, MO, USA.
16. #Bourque J, **Ranapurwala SI**, Denoble PJ. Divers with implantable cardiac devices; oral presentation; The 47th Undersea & Hyperbaric Medical Society (UHMS) Annual Scientific Meeting, June, 2014; St. Louis, MO, USA.
17. **Ranapurwala SI**, #Bird N, Vaithiyanathan P, Denoble PJ. Diving injury rates: Results from an online survey; oral presentation; The 46th Undersea & Hyperbaric Medical Society (UHMS) Annual Scientific Meeting, June 12, 2013; Orlando, FL, USA.
18. **Ranapurwala SI**, Wing SB, Moore J, #Denoble PJ. A pre-dive safety checklist may prevent diving mishaps: Results from a grouped randomized trial; oral presentation; The 46th Undersea & Hyperbaric Medical Society (UHMS) Annual Scientific Meeting, June 12, 2013; Orlando, FL, USA.
19. #**Ranapurwala SI**, Denoble PJ, Vann RD, Vaithiyanathan P. Decompression Sickness Claims Rate among Insured Divers Alert Network Members; poster presentation; 1st Annual SER Web meeting; November 5, 2011; Web meeting.

20. #Horney JA, Davis SED, Fleischauer A, Davis M, **Ranapurwala S**. Use of the Community Assessment for Public Health Emergency Response (CASPER) in North Carolina, 2003 to 2010; oral presentation; Council of State and Territorial Epidemiologists Annual Meeting; June 12-16, 2011; Pittsburgh, PA.
21. Taylor RR, #**Ranapurwala SI**, Hill M. Protection of Public Health and Capacity Development for Rural Water System in Gales Point, Belize - An Environmental Health Service Learning Project; oral presentation; 137th Annual APHA Meeting; November 7-11, 2009; Philadelphia, PA.
22. #**Ranapurwala SI**, Hill M, Taylor RR. Environmental Health Service Learning and Water Quality in Gales Point, Belize; oral presentation; 2009 Annual KPHA Conference, March 2009, Louisville, KY.
23. #**Ranapurwala SI**, Hill M, Taylor RR. Environmental Health Service Learning and Water Quality in Gales Point, Belize; oral presentation; Annual 39th Student Research Conference, Western Kentucky University, February 2009, Bowling Green, KY.

Poster presentations

1. Graham LM, **Ranapurwala SI**, Zimmer C, Macy RJ, Lanier P, Rizo CF, Martin SL. Disparities in potential years of life lost to intimate partner violence: A study of 16 states from 2006-2015. American Public Health Association annual conference, November 2019.
2. #Hicks C, Ranapurwala SI, Peek-Asa C, Casteel C. Prevalence of workplace violence and victimization outcomes, by victim-offender relationship. Society for Advancement of Violence and Injury Research, April 2019; Cincinnati, OH, USA.
3. #Chawla D, Kinlaw A, Dover SSM, **Ranapurwala SI**. Association of marijuana use with prescription drug misuse. Society for Epidemiologic Research annual conference, June 2018; Baltimore, MD, USA.
4. #Caves J, **Ranapurwala SI**, Moracco KE, Marshall SW. Impact of the number of state firearm safety laws on intimate partner homicide. American Public Health Association annual conference, November 2017; Atlanta, GA, USA.
5. Rosenberg M, Townes A, #**Ranapurwala SI**, Bengtson A. Following the trail of investments in public health research to trace racial health disparities. Society for Advancement of Violence and Injury Research, September 2017; Ann Arbor, MI, USA.
6. #**Ranapurwala SI**, Young T, Ramirez MR. Predictors of injury in a farm vehicle crash: modifiable and non-modifiable factors. University of Iowa, College of Public Health 2015 Research Week – April 2015, Iowa City, IA [Awarded best research poster in two categories].
7. #**Ranapurwala SI**, Berg MT, Casteel C. Does police reporting of victimization help? Relationship with the incidence of future victimization. Society for Epidemiologic Research annual meeting, June 2015; Denver, CO, USA.
8. #**Ranapurwala SI**, Mello E, Ramirez MR. Road segment characteristics and the incidence of farm vehicle-related crashes: A GIS based multistate matched case-control study; Society for Epidemiologic Research annual meeting, June 2015; Denver, CO, USA.
9. #**Ranapurwala SI**, Casteel C, Berg MT. To report or not to report? Effect on crime victimization. The University of Iowa, College of Public Health 2015 Research Week – April 2015, Iowa City, IA [Awarded best research poster in the college in faculty/staff/postdoc category].
10. #**Ranapurwala SI**, Casteel C, Berg MT. To report or not to report? Effect on crime victimization. Society for Advancement of Violence and Injury Research, March 2015; New Orleans, LA, USA.
11. #**Ranapurwala SI**, Mello E, Ramirez MR. Effect of road characteristics on the incidence of farm vehicle-relate crashes; 142nd Annual American Public Health Association Conference, November 2014; New Orleans, LA, USA.
12. **Ranapurwala SI**, #Denoble PJ. Factors affecting adherence to pre-dive checklists: A nested study; poster presentation; The 47th Undersea & Hyperbaric Medical Society (UHMS) Annual Scientific Meeting, June, 2014; St. Louis, MO, USA.
13. #**Ranapurwala SI**, Denoble PJ, Marshall SW, Poole C, Kucera KL, Wing SB. Cultivating safe behaviors in recreational scuba divers: A cluster randomized trial of pre-dive checklists; poster presentation; The 65th Annual Society of Public Health Education conference, March 19, 2014. Baltimore, MD, USA.
14. #**Ranapurwala SI**, Wing SB, Denoble PJ. A pre-dive safety checklist may prevent diving mishaps: Results from a grouped randomized trial; poster presentation; The 46th Annual Society of Epidemiologic Research meeting, June 18, 2013. Boston, MA.
15. #Denoble PJ, Nelson CL, **Ranapurwala SI**, Caruso JL. Prevalence of Left Ventricular Hypertrophy in Scuba Diving and Traffic Accident Victims; poster presentation; The 46th Undersea & Hyperbaric Medical Society (UHMS) Annual Scientific Meeting, June 12, 2013.

16. Covington D, **Ranapurwala SI**, Ebersole DG, #Denoble PJ. Modification of Individual Diving Practices after PFO Diagnosis or PFO Closure; poster presentation; The 46th Undersea & Hyperbaric Medical Society (UHMS) Annual Scientific Meeting, June 12, 2013.
17. #Denoble PJ, **Ranapurwala SI**, Vaithiyanathan P, Clarke RE, Vann RD. Per Capita Claims Rates For Decompression Sickness (DCS) Among Insured Divers Alert Network (DAN) Members; poster presentation; The 45th Undersea & Hyperbaric Medical Society (UHMS) Annual Scientific Meeting, June 22, 2012.
18. #Denoble PJ, **Ranapurwala SI**, Vaithiyanathan P., Bird N. Online Survey Of Health Status Of DAN Members; poster presentation; The 45th Undersea & Hyperbaric Medical Society (UHMS) Annual Scientific Meeting, June 22, 2012.
19. Meija E, *Nochetto M, Bird N, **Ranapurwala S**, Denoble PJ. A Case Series of Decompression Illness in Miskito Fishermen Divers Treated in 2010 at Clinica La Benedicion; poster presentation; 44th Annual Scientific Meeting – Undersea & Hyperbaric Medicine; June 15-18, 2011; Fort Worth, TX.
20. #DiBiase L, Davis S**,** Rosselli R, Smith-Craig H, **Ranapurwala S**, Horney J, Casani J. Evaluating local health departments' H1N1 vaccination campaigns: Lessons learned (with handout); poster presentation; Public Health Preparedness Summit 2011; February 22-25, 2011; Atlanta, GA.
21. Lartey GK, Habib F, #**Ranapurwala SI**, Bowles T. Health Departments' Activities in Promoting Motor Vehicle Safety Among Children; poster presentation; 2008 Annual KPHA Conference, April 2008, Louisville, KY.

INVITED TALKS

1. Addressing confounding in studies examining the safety of abuse deterrent opioid formulations. US Food and Drug Administration, Washington, DC. December 11, 2019.
2. Evaluation of state mandated acute and post-surgical prescribing limits. Centers for Disease Control and Prevention (CDC), Atlanta, GA. September 25, 2019.
3. Confronting the opioid epidemic: From opioid prescribing policies and practices to precision medicine and tailored interventions. FORE foundation, Chapel Hill. August 15, 2019.
4. Opioid Overdose, Suicide and Homicide Deaths among Formerly Incarcerated People in North Carolina: 2000-2015. NC Opioid Prevention Summit 2019, Raleigh. June 9, 2019.
5. Epidemiologic methods for opioid safety research. University of Pennsylvania, Center for Clinical Epidemiology and Biostatistics seminar series with the Penn Injury Science Center, Philadelphia. January 24, 2019.
6. Methodologic Limitations of Prescription Opioid Safety Research: A Call for Integrated Data Systems and Modern Epidemiology. The North Carolina Translational and Clinical Sciences Institute. June 4, 2018.
7. Disproportionate effects of opioids and violence on disadvantaged populations. Gillings School of Global Public Health: The Lunch with the Dean Series. April 26, 2018.
8. Association of Iowa PMP with opioid pain reliever prescribing patterns: An interrupted time series approach. University of Minnesota School of Public Health, Junior Faculty Lunch. April 5, 2018.
9. Policies to prevent opioid poisoning. Cecil G. Sheps Center for Health Services and Research, Chapel Hill, NC, April 2, 2018.
10. Opioid overdose deaths after release from prison. North Carolina Department of Corrections, Raleigh, North Carolina, May 26, 2017.
11. Advancing injury prevention with modern epidemiologic methods: Examples from opioid poisoning, youth violence, and occupational transportation safety. Department of Epidemiology, University of Colorado, Denver. June 23, 2016.
12. Using epidemiologic methods to advance injury prevention in opioid poisoning, youth violence, and occupational transportation safety. Department of Epidemiology, University of North Carolina, Chapel Hill. May 3, 2016.
13. Volunteering and youth violence prevention: My ongoing work and future directions. University of Iowa Injury Prevention Research Center Executive committee meeting. November 5, 2015.

14. Effect of Road Characteristics on the Incidence of Farm Vehicle Crashes: A Matched Case-Control Study. Great Plains Center for Agricultural Health advisory council meeting. January 14, 2015.
15. Road characteristics and incidence of farm vehicle crashes. State Traffic Records coordinating committee, Iowa City, Iowa. September 18, 2014.
16. Prevention of Scuba Diving Mishaps using a Pre-dive Checklist: A Cluster Randomized Trial. Injury Prevention Research Center. Iowa City, Iowa. July 17, 2014.
17. Cultivating Safe Behaviors in Recreation Diving. Divers Alert Network Public Lecture Series, Durham, NC. Dec 4, 2013.
18. Checklists Work: Preventing Diving Mishaps, Injuries, and Fatalities. Down Under Scuba Monthly Meeting, Raleigh, NC. Oct 8, 2013.
19. Pre-dive Safety Checklist Prevents Diving Mishaps: Results from a Group Randomized Trial. Undersea and Hyperbaric Medicine Society Pacific chapter annual meeting, Las Vegas, NV. Sept 7, 2013.
20. Diving Injury Rates: Results from an Online Survey. Undersea and Hyperbaric Medicine Society Pacific chapter annual meeting, Las Vegas, NV. Sept 7, 2013.
21. Epidemiological Studies in Scuba Diving at Divers Alert Network. Center for Hyperbaric Medicine and Environmental Physiology, Duke University Medical Center, Durham, NC. Jan 13, 2012.
22. Principles and Practice of Homoeopathy. Four contributory lectures for Final year and Intern Homoeopathic Medical Students, Nagpur College of Homoeopathy & Hospital, India. Nov, 2006.

Unrefereed articles

1. **Ranapurwala SI**. Opioid Overdose Deaths among the Formerly Incarcerated. Public Health Post, Oct. 2018. Available at: https://www.publichealthpost.org/research/opioid-overdose-deaths-among-formerly-incarcerated-persons/
2. **Ranapurwala SI**. Checklists: Keys to safer diving? Alert Diver. Available at: http://www.alertdiver.com/Checklists
3. **Ranapurwala SI**. Scuba Diving Research: A Sneak Peek Into the Process. Alert Diver. Available at: http://www.alertdiver.com/Scuba_Diving_Research_A_Sneak_Peak_Into_the_Process

TEACHING EXPERIENCE

At the University of North Carolina, Chapel Hill

Co-instructor, Intervention Epidemiology (EPID 790). Department of Epidemiology, University of North Carolina at Chapel Hill, NC. **Fall 2017**; **Spring 2019**. Six PhD students.
The class covered topics on intervention epidemiology and randomized trials and causal inference in this area. My topics: 1) Causal inference in randomized and observational studies; 2) methods for addressing adherence and contamination in randomized trials including intent-to-treat, per-protocol, as-treated, marginal structural models, and complier average causal effect; 3) quasi-experimental designs specifically interrupted-time-series analysis; and 4) generalizability in intervention studies.

Guest lectures

Injury Prevention (EPID 627). Department of Epidemiology, University of North Carolina at Chapel Hill, NC. Fall 2017: Topic – Opioid Epidemic.

Injury Prevention (EPID 627). Department of Epidemiology, University of North Carolina at Chapel Hill, NC. Fall 2018: Topic – Opioid Epidemic.

Injury Prevention (EPID 627). Department of Epidemiology, University of North Carolina at Chapel Hill, NC. Fall 2019: Title: Confronting the opioid epidemic: From opioid prescribing policies and practices to precision medicine and tailored interventions.

Use, Misuse and Addiction to Drugs in the 21st Century (SOCM89). University of North Carolina at Chapel Hill, NC. Fall 2019: Title: Confronting the opioid epidemic: From opioid prescribing policies and practices to precision medicine and tailored interventions.

Conference Workshops

Co-instructor, Workshop on Causal Inference and Directed Acyclic Graphs. Society for Advancement of Violence and Injury Research (SAVIR) – September 2017, Ann Arbor, MI, USA. Six attendees.

At the University of Iowa

Co-instructor, Epidemiology III (EPID 7400): Theoretical perspectives. Department of Epidemiology, University of Iowa, Iowa City, IA. Fall 2015. Nine PhD students.
Co-instructor with Audrey Saftlas, PhD. The class covered topics on causal inference in epidemiology. I covered topics on causal inference in randomized and observational studies, directed acyclic graphs, confounding, and mediation.

Guest lectures

Introduction to Oral Epidemiology (DPH 6004). College of Dentistry, University of Iowa, Iowa City, IA. Spring 2016: Topic – Confounding and Directed Acyclic Graphs with journal club discussion.

Injury Epidemiology (OEH 6520). Department of Occupational and Environmental Health, University of Iowa, Iowa City, IA. Spring 2015-2016: Topic – Effect Measure Modification.

Injury Epidemiology (OEH 6520). Department of Occupational and Environmental Health, University of Iowa, Iowa City, IA. Spring 2015-2016: Topic – Confounding and Directed Acyclic Graphs.

Injury and violence prevention (OEH 4510). Department of Occupational and Environmental Health, University of Iowa, Iowa City, IA. Fall 2014: Topic – Introduction to Injury Epidemiology.

Epidemiology seminar. Department of Epidemiology, University of Iowa, Iowa City, IA. Fall 2014: Topic – Directed Acyclic Graphs (DAG) – why and how?

At Western Kentucky University

Instructor, Personal Health (HED 100C). Department of Liberal Arts and Science (Health Education), Western Kentucky University Community College at South Campus, Bowling Green, KY. Fall 2009, Spring 2010. 60 students per semester.

GRANT SUPPORT

Submitted (pending)

1. National Institute of Drug Abuse, National Institute of Health
Strengthening Opioid Prescribing Evidence Base: Foundation for Precision Medicine
04/01/2020 – 03/31/2022 PI: Ranapurwala (20% effort)
To utilize “big data” and modern epidemiologic approaches to generate more granular and higher quality opioid safety evidence and reduce unnecessary opioid consumption by focusing on clinical subpopulations.

Ongoing

1. Office of Violence against Women, NIJ
Evaluation of Electronic Filing for Domestic Violence Protective Orders in North Carolina
11/01/2019-10/31/2021 PI: Moracco
Role: Co-investigator (15% effort)
To conduct a mixed method study to examine the effects of DVPO e-filing in eight NC counties that have implemented e-filing prior to 2019.

2. National Institute of Drug Abuse, National Institute of Health
U01DA050442 - Decrease Overdose among People on Community Supervision in a Justice Community Opioid Innovation Network (JCOIN) Clinical Research Center (CRC) (R01)
09/01/2019-08/31/2024 Co-PIs: Martin (Brown); Brinkley-Rubinstein (UNC)
Role: Co-investigator (15% effort)
To establish a JCOIN CRC at Brown University in collaboration with the University of North Carolina-Chapel Hill, University of Rhode Island, and Temple University, to improve capacity of the justice system to effectively respond to the opioid crisis, thereby improving public health and safety outcomes. We will conduct a type 1

hybrid implementation-effectiveness randomized trial to evaluate the effectiveness of a peer support model on compliance with opioid use disorder treatment, recidivism, illicit opioid use, and overdose.

3. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention
R49 CE003092 - University of North Carolina Injury Prevention Research Center
Project 2: Medicaid expansion and deaths due to opioid overdose, suicides and homicides among formerly incarcerated persons
08/01/2019 – 07/31/2024 PI: Marshall, SW
Role: Project co-lead (20% effort)
To evaluate the impact of Medicaid expansion on deaths due to opioid overdose, suicides and homicides among formerly incarcerated persons.

4. North Carolina Translational and Clinical Sciences Institute (NC TraCS): Carolinas Collaborative Pilot Grant
CCR31812- Measuring Opioid Use Disorders in Secondary Electronic Health Records Data (pilot)
01/01/2019 – 12/31/2019 Co-PIs: Ranapurwala, Wu, Wolfson, Korte
Role: Lead PI (no salary support – Pilot grant)
Total award: $100,000 (Direct only)
To develop a valid algorithm to accurately measure OUD in secondary datasets especially EHR, and determine the sensitivity of opioid abuse and dependence specific ICD9/10 codes using the algorithm. This grant is a multi-institutional collaboration between UNC-CH, Duke, Wake Forest and Medical University of South Carolina, and will lead to an R01 grant.

5. US Food and Drug Administration
HHSF223201810183C - Methodological Advances in Evaluating Abuse Deterrent Opioid Analgesics
09/28/2018 – 09/27/2022 PI: Dasgupta
Role: Project lead (30% effort) for one sub-project (09/28/2019 – 09/27/2022)
To evaluate and compare methods for the confounding by “indication”, the expected likelihood that patients receiving ADF opioids have different risk profiles for experiencing overdose/abuse outcomes than patients prescribed traditional opioids.

6. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention
R01 CE003009 - Evaluation of state-mandated acute & post-surgical pain-specific CDC opioid prescribing guidelines (R01)
09/30/2018 – 09/29/2021 PI: Ranapurwala (35-45% effort)
Total award (direct and indirect): $2,039,524
To examine the impact of a state mandated CDC opioid guideline for acute and post-surgical pain on physicians’ opioid prescribing behaviors and opioid safety outcomes (including fatal and non-fatal overdose) among patients. This is a multi-institutional grant collaboration between UNC-CH, Duke, and Vanderbilt.

7. National Institute for Drug Abuse, National Institutes of Health
R21 DA046048 - Chronic Pain Management, Opioid Misuse, and Risk of Blood-borne Infections (R21)
04/01/2018 – 03/31/2020 PI: Pence
Role: Co-investigator (10% effort)
The overall objective of this application is to leverage a unique combination of “big data” and qualitative data to generate high-quality evidence about optimal strategies to taper or end long-term opioids.

8. National Institute for Occupational Safety and Health, CDC
R01 OH011256 - Trends and Disparities in Fatal Occupational Injury in North Carolina (R01)
09/01/2018 – 08/30/2022 PI: Richardson
Role: Co-investigator (20% effort)
To strengthen the understanding of fatal occupational injuries in NC by identifying trends in fatal injury rates and assessing disparities by industry/ occupation, race, and worker age.

9. North Carolina Department of Health and Human Services
National Center for Injury Prevention and Control, Centers for Disease Control and Prevention

5NU17CE002728 - Prescription Drug Overdose: Prevention for States
03/01/16 – 08/31/2020 Subcontract PI: Naumann, RB (PI: Proescholdbell)
Award (per year direct): $149,398
Role: Co-investigator (15% effort from Oct'16 to Aug'19; 10% thereafter)
To evaluate the impact of prescription monitoring program and other policies in North Carolina on prescription drug overdose

10. National Football League
Role of Active Rehabilitation in Concussion Management: A Randomized Controlled Trial
05/01/2016 – 04/30/2019 PI: Register-Mihalik J
Total award (direct and indirect): $2,599,957
Role: Co-investigator, (45% effort from Oct'16 to Apr'19: did not participate in proposal development)
To evaluate the effect of a concussion rehabilitation program in a cluster randomized trial

11. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention
R49 CE002479 - University of North Carolina Injury Prevention Research Center
Evaluation of North Carolina Medical Board's Safe Opioid Prescribing Initiative (SOPI)
08/01/2017 – 07/31/2019 (07/2020 – no cost extension) PI: Ranapurwala
Total award (direct and indirect): $300,000
Role: Project lead (15% effort)
To evaluate the impact of North Carolina Medical Board's opioid prescribing policies on inappropriate tapering and abrupt stoppage of opioid prescriptions and overdose deaths in North Carolina.

Completed

12. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention
R49 CE001167 - University of Iowa Injury Prevention Research Center
Poisoning: Improved Surveillance for Determining Control Measures
08/01/2015 – 07/31/2017 PI: Peek-Asa
Total award (direct and indirect): $300,000
Role: Co-investigator, 10% (Aug'15 to Sept'16); Subcontract PI, 10% (Oct'16 to Jul'17)
To evaluate the impact of Iowa Prescription Monitoring Program on opioid prescribing behaviors among physicians in Iowa

13. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention
University of Iowa Injury Prevention Research Center
August 2012 – July 2017 PI: Peek-Asa, C
Total award (direct and indirect): $4,525,000
Role: Postdoctoral Research Scholar, 25% (Jun'14 to Aug '16 : did not participate in proposal development)

14. National Institute of Occupational Safety and Health - U50 OH007548-11
U50 OH007548 - Great Plains Center for Agricultural Health
Subproject: Farm Equipment Crash Study (Project lead: Marizen Ramirez)
09/30/2011 – 09/29/2016 PI: Gerr, F
Total award (direct and indirect): $1,644,111 (2014)
Role: Epidemiologist, 25% (Jun'14 to Sept'16: did not participate in proposal development)
To develop a comprehensive epidemiologic profile of farm crashes, analysis of risk factors, and evaluate the impact of lighting and marking policies of farm equipment on the incidence of crashes.

15. University of Iowa
Office of Vice President for Research & Economic Development/ College of Public Health
August 2013 – July 2016 PI: Casteel, C
Total award (direct only- internal funds): $105,354
Role: Postdoctoral Research Scholar, 40% (Jun'14 to July'16: did not participate in proposal development)

16. The University of Iowa Injury Prevention Research Center

Assessment of community service programs/ curricula in middle/junior and high schools
July 1, 2015 – June 30, 2016 PI: Ranapurwala, SI
Total Award (direct): $21,506 (pilot funding)
Role: Principal Investigator, 5%

17. Center for Injury Epidemiology and Prevention, Columbia University
Evaluation of Anti-Bullying Laws across the Country
01/01/2014 – 12/31/2014 Multiple PIs: Ramirez, MR and Hatzenbuehler, M
Total Award: $7,500
Role: Co-Investigator, 2% (Jun'14 to Dec'14: did not participate in proposal development)

18. Divers Alert Network
Scuba diving intervention study: A cluster randomized controlled trial
01/05/2011 – 04/30/2012 PI: Ranapurwala, SI
Total Award (Direct): $32,000
Role: Principal Investigator, 20%
To investigate the effect of using a pre-dive checklist on the incidence of diving mishaps in recreational scuba divers

19. Divers Alert Network
The University of North Carolina at Chapel Hill Graduate Research Training in cooperation with Divers Alert Network
09/01/2010 – 05/25/2014
Total Award: Year 1: $25,000; Year 2: $31,231; Year 3: $31,231; Year 4 (9 months): $27,731.
Role: Epidemiologist and Biostatistician (50%, plus Tuition and Health Insurance at UNC)
Worked on multiple research projects at Divers Alert Network
1. Medical evaluation for fitness to dive: A needs assessment (PI: Bird)
2. Evaluation of decompression sickness claims (PI: Denoble)
3. Prevalence of Left Ventricular Hypertrophy in Scuba Diving and Traffic Fatalities (PI: Denoble)
4. DAN insured members' health survey (PI: Denoble)
5. Diving experience of divers with implanted cardiac devices (Co-PIs: Denoble/ Bourque)

MENTORING

University of North Carolina, Chapel Hill

Current Students

1. Josie Caves – MSPH in Epidemiology, UNC-CH; chaired Master's committee; graduated in 2017; current Doctoral student in Epidemiology, UNC-CH; member of dissertation committee (expected graduation in 2020).
2. Katie Wolfe – Doctoral student in Epidemiology, UNC-CH; member of dissertation committee (expected graduation in 2020).
3. Bethany DiPrete - Doctoral student in Epidemiology, UNC-CH; member of dissertation committee (expected graduation in 2020).

Past students

1. Juliana Prim - Doctoral student in Human Movement Science, School of Medicine, UNC-CH; member of dissertation committee; graduated December 2019; current position – research fellow.
2. Laurie Graham – PhD Social Work, UNC-CH; member of her dissertation committee; graduated May 2019; Current Position – Assistant Professor, Social Work, University of Maryland at Baltimore County
3. Yasmin Ali Mohammed, MD – MPH in Public Health Leadership, UNC-CH – master's practicum preceptor (graduated – May 2018).

PROFESSIONAL SERVICE

University of North Carolina, Chapel Hill

2018 Injury epidemiology substantive qualifying examination committee
2017 Epidemiology methods qualifying examination committee
2016 – Core faculty, UNC Injury Prevention Research Center
2011 Data Collection, North Carolina Institute for Public Health. Rapid needs assessment of wildfire damages at Holy Shelter Game Land, Pender, NC.

2010 Data Collection, North Carolina Institute for Public Health. Household awareness survey about KI distribution within the 10-mile emergency planning zone around the Shearon Harris nuclear power plant, Raleigh, NC.

State of North Carolina
2016 – Opioid and Prescription Drug Abuse Advisory Council, Research and Evaluation Core

Divers Alert Network (DAN), Durham, NC
2017 – Member of the DAN Institutional Review Board

State of Iowa
2014 – 2016 Prescription Drug Abuse Reduction Task Force

University of Iowa
2014 – 2016 Great Plains Center for Agricultural Health Internal Advisory Committee
2014 – 2016 Injury Prevention Research Center Strategic Executive Committee
2014 – 2015 University of Iowa Postdoctoral Association, Public Health representative

Onslow County, NC, USA
2012 Data Analysis, Onslow County Community Health Assessment Survey. 30 hrs.

Western Kentucky University, Bowling Green, KY
2008 – 2009 Secretary, Kentucky Public Health Association student chapter
2008 – 2009 President, International Students Club
2007 – 2008 Public Relations Officer, International Club

Warren County, KY, USA
2008 Student Health Educator, Warren Region Juvenile Detention Center. 50 hours.
Future selves program for incarcerated children and youth provided vocational awareness, education, and practical coping strategies.

Professional Societies
2015 – Society for Advancement of Violence and Injury Research (SAVIR), Science and Research Committee
2017 – Society for Advancement of Violence and Injury Research (SAVIR), Training and Infrastructure Committee
2019 Organized SAVIR Annual Conference Best Science Award, Cincinnati, OH.
2014 – 2015 American Public Health Association Injury Control and Emergency Health Services (ICHES), Policy Committee

Grant Review
2018 National Institute on Disability, Independent Living, and Rehabilitation Research
2018 Western University of Health Sciences Intramural grant

Peer Reviewed Journals
Ad-Hoc Reviewer
American Journal of Epidemiology; American Journal of Education; American Journal of Preventive Medicine; American Journal of Public Health; BMC Public Health; British Medical Journal; Drug Alcohol Dependence; Epidemiology; European Journal of Sports Medicine; Injury Epidemiology; Injury Prevention; Journal of Diabetes Science and Technology; Journal of Family Violence; Journal of Family Medicine and Primary Care; Journal of Trauma and Care; Osteoarthritis and Cartilage; Pain Medicine; PLoS One; Pharmacoepidemiology and Drug Safety; Public Health Reports; Violence and Gender.

Conference Abstract Review
2013 – Society of Epidemiologic Research (SER), Annual conference
2015 – Society for Advancement of Violence and Injury Research (SAVIR), Annual conference
2015 – American Public Health Association, Annual conference
2014 – 2017 Society of Public Health Education (SOPHE), Annual conference
2015 Epidemiology Congress of the Americas 2016 [for Society of Epidemiologic Research]

Conference session moderator

2017 – Society for Advancement of Violence and Injury Research
2017 – American Public Health Association – Injury Control and Emergency Health Services section

Exhibit I

SCPW-20-0000200 and SCPW-20-0000213

IN THE SUPREME COURT OF THE STATE OF HAWAIʻI

SCPW-20-0000200

OFFICE OF THE PUBLIC DEFENDER, Petitioner,

vs.

CLARE E. CONNORS, Attorney General of the State of Hawaiʻi; DONALD S. GUZMAN, Prosecuting Attorney, County of Maui; MITCHELL D. ROTH, Prosecuting Attorney, County of Hawaiʻi; JUSTIN F. KOLLAR, Prosecuting Attorney, County of Kauaʻi; DWIGHT K. NADAMOTO, Acting Prosecuting Attorney, City and County of Honolulu, Respondents.

SCPW-20-0000213

STATE OF HAWAIʻI OFFICE OF THE PUBLIC DEFENDER, Petitioner,

vs.

DAVID Y. IGE, Governor, State of Hawaiʻi; NOLAN P. ESPINDA, Director, State of Hawaiʻi Department of Public Safety; EDMUND (FRED) K.B. HYUN, Chairperson, Hawaiʻi Paroling Authority, Respondents.

ORIGINAL PROCEEDING

ORDER OF CONSOLIDATION AND FOR APPOINTMENT OF SPECIAL MASTER
(By: Recktenwald, C.J., Nakayama, McKenna, Pollack, and Wilson JJ.)

On March 23, 2020, the Office of the Public Defender ("Petitioner") submitted a letter to this court, which was filed as a petition for writ of mandamus in SCPW-20-0000200, pursuant to a March 24, 2020 order. The following were named as respondents: Clare E. Connors, Attorney General of the State of Hawai‘i; Donald S. Guzman, Prosecuting Attorney, County of Maui; Mitchell D. Roth, Prosecuting Attorney, County of Hawai‘i; Justin F. Kollar, Prosecuting Attorney, County of Kaua‘i; and Dwight K. Nadamoto, Acting Prosecuting Attorney, City and County of Honolulu.

On March 26, 2020, Petitioner filed a petition for extraordinary writ in SCPW-20-0000213. The following were named as respondents: David Y. Ige, Governor, State of Hawai‘i; Nolan P. Espinda, Director, State of Hawai‘i Department of Public Safety; and Edmund (Fred) K.B. Hyun, Chairperson, Hawai‘i Paroling Authority.[1]

The petitions seek a reduction of inmates held within correctional centers and facilities housing Hawai‘i prisoners to prevent loss of life and other public health impacts that would result from the introduction and spread of COVID-19 within those facilities.

The COVID-19 pandemic has caused a public health emergency that is impacting Hawai‘i's community correctional centers and facilities. Responding to these petitions requires a careful consideration of interests, both for public health and public safety.

[1] The respondents in both petitions will collectively be referred to as "Respondents."

There is a significant interest in reducing inmate populations to protect those who work at or are incarcerated in these overcrowded facilities. COVID-19 outbreaks within overcrowded facilities or facilities in which appropriate physical distancing is not possible will not only place inmates at risk of death or serious illness, but will also endanger the lives and well-being of staff and service providers who work in the facilities, their families, and members of the community at large. Also, outbreaks within these facilities will severely tax the limited resources of community health care providers, including hospital beds, ventilators, and personal protective equipment because of virulent spread within close quarters, and will also require the utilization of additional resources to provide constitutionally mandated medical care.

This court also recognizes, however, the significant public safety concerns regarding the release of inmates.

With respect to the petition in SCPW-20-0000200, Petitioner requests the release of inmates with short term sentences incarcerated at Hawai‘i’s community correctional centers -- (1) inmates serving a sentence (not to exceed one year or eighteen months) as a condition of felony probation; and (2) inmates serving district court sentences who were convicted of a petty misdemeanor or misdemeanor. A specific category of inmates--those serving intermittent sentences--was brought to this court’s attention by the materials submitted in response to the March 27, 2020 Interim Order in SCPW-20-0000200. These sentences involve defendants serving a sentence that requires them to repeatedly come in and go out of correctional centers, which appear to directly contravene the intent of the current Department of Public Safety policy of disallowing visits from those in the community in an effort to prevent the introduction of COVID-19 into correctional centers.

With respect to the petition in SCPW-20-0000213, Petitioner requests the release of additional categories of inmates, including pretrial detainees, but also seeks the release of inmates from prisons housing State prisoners. Petitioner further seeks, among other relief, the release of "high risk" inmates (e.g., based on age or medical conditions) and an order directing district, family, and circuit courts to vacate all bench warrants and cease the issuance of new bench warrants for failure to appear.

At this time, this court declines to enter a blanket order releasing large numbers of inmates. Rather, to address competing public health and safety concerns and to ensure that social distancing measures are being or can be effectuated within the State's jails and prisons for the safety of the inmates, the staff, and the public, a collaborative effort should first be undertaken.

Thus, as suggested by Petitioner and agreed to by Respondents and the amicus Hawai‘i Correctional Systems Oversight Commission, this court appoints a Special Master to assist in this collaborative effort. With the appointment of a Special Master and pursuant to the provisions set forth in this order, this court establishes a process for the expedited but appropriate consideration of the request to reduce inmate populations within correctional centers and facilities, while preserving Respondents' ability to object to the release of specific inmates or to suggest alternative measures, some of which are discussed below.

Accordingly, upon consideration of the submissions and records in SCPW-20-0000200 and SCPW-20-0000213, and pursuant to this court's authority under Hawai‘i Revised Statutes ("HRS") §§

602-5(3) & (6),[2] the authority of the circuit, district, and family courts pursuant to HRS § 706-625,[3] Governor David Y. Ige's March 16, 2020 Supplemental Emergency Proclamation, and HRS § 601-1.5(a),[4]

IT IS HEREBY ORDERED that:

1. SCPW-20-0000200 and SCPW-20-0000213 are consolidated.

2. To the extent there are individuals serving intermittent sentences, the custodial portion of such

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[2] HRS § 602-5 provides that this court shall have jurisdiction and powers, as follows:

> . . . .
>
> (3) To exercise original jurisdiction . . . arising under writs of mandamus directed to public officers to compel them to fulfill the duties of their offices . . .;
>
> . . . .
>
> (6) To make and award such judgments, decrees, orders and mandates, issue such executions and other processes, and do such other acts and take such other steps as may be necessary to carry into full effect the powers which are or shall be given to it by law or for the promotion of justice in matters pending before it.

[3] HRS § 706-625 provides, in relevant part:

> **§ 706-625 Revocation, modification of probation conditions.** (1) The court, on application of . . . the defendant, or on its own motion, after a hearing, may . . . reduce or enlarge the conditions of a sentence of probation, pursuant to the provisions applicable to the initial setting of the conditions . . . .

[4] HRS § 601-1.5(a) provides, in relevant part:

> **§ 601-1.5 Emergency period; suspension of deadlines.** (a) During an emergency period proclaimed by the governor under chapter 127A, the chief justice shall be authorized to order the suspension, tolling, extension, or granting of relief from deadlines, time schedules, or filing requirements imposed by otherwise applicable statutes, rules, or court orders, in civil or criminal cases or administrative matters, in any judicial circuit affected by the governor's proclamation. The chief justice shall determine the judicial circuits so affected.

defendants' intermittent sentence shall be suspended until the conclusion of the COVID-19 pandemic or deemed satisfied, at the discretion of the sentencing judge.

3. This court appoints the Honorable Daniel R. Foley (ret.) as Special Master to immediately begin assisting the parties in this consolidated proceeding.

a. **Compensation.** The court will fix the Special Master's compensation.

b. **Term of Service.** The Special Master's term of service will be effective upon the filing of this order of appointment and will end when his duties are completed or upon termination by this court, whichever comes first.

c. **Diligence.** The Special Master shall proceed with all reasonable diligence and as expeditiously as possible to perform his duties.

d. **Scope of Work.** The role of the Special Master is to work with the parties in a collaborative and expeditious manner to address the issues raised in the two petitions and to facilitate a resolution while protecting public health and public safety. The Special Master may include, as part of these efforts and discussions, members of the public health community and other affected agencies.

Safety of the inmates, staff, and the public are imperative. The parties shall consider viable options to keep inmates and the public safe (e.g., bracelet monitoring, alternative locations to house inmates, inmate categories such as age or medical condition, etc.).

e. **Meetings/Discussions.** The Special Master shall convene and conduct meetings with the parties and any community agency that the Special Master deems important, in his discretion, to carrying out his role. The Special Master shall facilitate meetings and discussions by adhering to social

distancing mandates. Meetings and discussions with the Special Master should be held remotely, by telephone, video conferencing, or other electronic means. The parties shall utilize their best efforts to make themselves available upon reasonable request of the Special Master.

f. **Authority.** The Special Master shall have the authority to take appropriate measures to perform his duties fairly and efficiently, consistent with this order and understanding the urgency of the issues involved in this matter.

g. **Ex Parte Communications.** The Special Master shall serve as a neutral and unbiased Special Master. The Special Master may engage in ex parte communications for the purposes of gathering documents and information, and to facilitate the collaborative effort.

h. **Report/Recommendation.** The Special Master may file periodic reports regarding progress in his efforts, but shall file an initial summary report by April 9, 2020. The Special Master may also provide periodic recommendations to this court proposing orders to effectuate the goals of these consolidated proceedings, even without agreement of all parties, but shall file initial recommendations for orders by April 9, 2020. In his discretion, the Special Master may file confidential documents under seal.

i. **Other Matters.** The Special Master shall enjoy the same protections from being compelled to give testimony and from liability for damages as those enjoyed by judicial officers performing similar functions. The Special Master will preserve records relating to his work as Special Master until relieved of this obligation by order of the court.

4. The appointment of the Special Master does not limit the ability of the parties or others to request, or of the trial courts to grant, modifications of sentences or bail.

This order also does not affect the Department of Public Safety's authority under the law to release inmates.

5. This court reserves its authority to take emergency measures based on changed circumstances.

DATED: Honolulu, Hawai'i, April 2, 2020.

/s/ Mark E. Recktenwald

/s/ Paula A. Nakayama

/s/ Sabrina S. McKenna

/s/ Richard W. Pollack

/s/ Michael D. Wilson

Exhibit J

SUPREME COURT OF NEW JERSEY
DOCKET NO. 084230

FILED
MAR 22 2020
Heather J. Baker
CLERK

CRIMINAL ACTION

In the Matter of the Request to Commute or Suspend County Jail Sentences

CONSENT ORDER

This matter having come before the Court on the request for relief by the Office of the Public Defender (see attached letter dated March 19, 2020), seeking the Court's consideration of a proposed Order to Show Cause (see attached) designed to commute or suspend county jail sentences currently being served by county jail inmates either as a condition of probation for an indictable offense or because of a municipal court conviction; and

The Court, on its own motion, having relaxed the Rules of Court to permit the filing of the request for relief directly with the Supreme Court, based on the dangers posed by Coronavirus disease 19 ("COVID-19"), and the statewide impact of the nature of the request in light of the Public Health Emergency and State of Emergency declared by the Governor. *See* **Executive Order No. 103 (2020) (Mar. 9, 2020); and**

The Office of the Attorney General, the County Prosecutors Association, the Office of the Public Defender, the American Civil Liberties Union of New Jersey having engaged in mediation before the Honorable Philip S. Carchman, P.J.A.D. (ret.); and

The parties having reviewed certifications from healthcare professionals regarding the profound risk posed to people in correctional facilities arising from the spread of COVID-19; and

The parties agreeing that the reduction of county jail populations, under appropriate conditions, is in the public interest to mitigate risks imposed by COVID-19; and

It being agreed to by all parties as evidenced by the attached duly executed consent form;

IT IS HEREBY ORDERED, that

A. No later than 6:00 a.m. on Tuesday, March 24, 2020, except as provided in paragraph C, any inmate currently serving a county jail sentence (1) as a condition of probation, or (2) as a result of a municipal court conviction, shall be ordered released. The Court's order of release shall include, at a minimum, the name of each inmate to be released, the inmate's State Bureau of Identification (SBI) number, and the county jail where the inmate is being detained, as well as any standard or

specific conditions of release. Jails shall process the release of inmates as efficiently as possible, understanding that neither immediate nor simultaneous release is feasible.

1. For inmates serving a county jail sentence as a condition of probation, the custodial portion of the sentence shall either be served at the conclusion of the probationary portion of the sentence or converted into a "time served" condition, at the discretion of the sentencing judge, after input from counsel.
2. For inmates serving a county jail sentence as a result of a municipal court conviction, the custodial portion of the sentence shall be suspended until further order of this Court upon the rescission of the Public Health Emergency declared Executive Order No. 103, or deemed satisfied, at the discretion of the sentencing judge, after input from counsel.

B. No later than noon on Thursday, March 26, 2020, except as provided in paragraph C, any inmate serving a county jail sentence for any reason other than those described in paragraph A shall be ordered released. These sentences include, but are not limited to (1) a resentencing following a finding of a violation of probation in any Superior Court or municipal court, and (2) a county jail sentence not tethered to a

probationary sentence for a fourth-degree crime, disorderly persons offense, or petty disorderly persons offense in Superior Court. The custodial portion of the sentence shall be suspended until further order of this Court upon the rescission of the Public Health Emergency declared Executive Order No. 103, or deemed satisfied, at the discretion of the sentencing judge, after input from counsel. Jails shall process the release of inmates as efficiently as possible, understanding that neither immediate nor simultaneous release is feasible.

C. Where the County Prosecutor or Attorney General objects to the release of an inmate described in Paragraph A, they shall file a written objection no later than 5:00 p.m. on Monday, March 23, 2020. Where the County Prosecutor or Attorney General objects to the release of an inmate described in Paragraph B, they shall file a written objection no later than 8:00 a.m. on Thursday, March 26, 2020.

1. The objection shall delay the order of release of the inmate and shall explain why the release of the inmate would pose a significant risk to the safety of the inmate or the public.
2. Written objections shall be filed by email to the Supreme Court Emergent Matter inbox with a copy to the Office of the Public Defender.

3. The Office of the Public Defender shall provide provisional representation to all inmates against whom an objection has been lodged under this Paragraph.
4. The Office of the Public Defender shall, no later than 5:00 p.m. on Tuesday, March 24, 2020, provide responses to any objections to release associated with inmates described in Paragraph A, as it deems appropriate. The Office of the Public Defender shall, no later than 5:00 p.m. on Thursday, March 26, 2020, provide responses to any objections to release associated with inmates described in Paragraph B, as it deems appropriate.
5. The Court shall appoint judge(s) or Special Master(s) to address the cases in which an objection to release has been raised.
    a. On or before Wednesday, March 25, 2020, the judge(s) or Special Master(s) will begin considering disputed cases arising from Paragraph A; on or before Friday, March 27, 2020, the judge(s) or Special Master(s) will consider disputed cases arising from Paragraph B.
        i. The judge(s) or Special Master(s) shall conduct summary proceedings, which shall be determined on the papers. In the event the judge(s) or Special

Master(s) conduct a hearing of any sort, inmates' presence shall be waived.

ii. Release shall be presumed, unless the presumption is overcome by a finding by a preponderance of the evidence that the release of the inmate would pose a significant risk to the safety of the inmate or the public.

iii. At any point, the Prosecutor may withdraw its objection by providing notice to the judge(s) or Special Master(s) with a copy to the Office of the Public Defender. In that case, inmates shall be released subjected to the provisions of Paragraphs D-I.

iv. If the judge(s) or Special Master(s) determine by a preponderance of the evidence that the risk to the safety of the inmate or the public can be effectively managed, the judge(s) or Special Master(s) shall order the inmate's immediate release, subject to the provisions of paragraphs D-I.

1. The Order of the judge(s) or Special Master(s) may be appealed on an emergent basis, in a summary manner to the Appellate Division.
2. Should a release Order be appealed, the release Order shall be stayed pending expedited review by the Appellate Division.
3. The record on appeal shall consist of the objection and response filed pursuant to this Paragraph.

v. If the judge(s) or Special Master(s) determine by a preponderance of the evidence that risks to the safety of the inmate or the public cannot be effectively managed, the judge(s) or Special Master(s) shall order the inmate to serve the balance of the original sentence.
    1. The Order of the judge(s) or Special Master(s) may be appealed on an emergent basis, in a summary manner to the Appellate Division.

2. Should an Order requiring an inmate to serve the balance of his sentence be appealed, the Appellate Division shall conduct expedited review.

3. The record on appeal shall consist of the objection and response filed pursuant to this Paragraph.

b. The judge(s) or Special Master(s) should endeavor to address all objections no later than Friday, March 27, 2020.

D. Any warrants associated with an inmate subject to release under this order, other than those associated with first-degree or second-degree crimes, shall be suspended. Warrants suspended under this Order shall remain suspended until ten days after the rescission of the Public Health Emergency associated with COVID-19. *See* Executive Order No. 103 (2020) (Mar. 9, 2020).

E. In the following circumstances, the county jail shall not release an inmate subject to release pursuant to Paragraphs A, B, or C(5)(a)(iii) or (iv), absent additional instructions from the judge(s) or Special Master(s):

1. For any inmate who has tested positive for COVID-19 or has been identified by the county jail as presumptively positive for COVID-19, the county jail shall immediately notify the parties and the County Health Department of the inmate's medical condition, and shall not release the inmate without further instructions from the judge(s) or Special Master(s). In such cases, the parties shall immediately confer with the judge(s) or Special Master(s) to determine a plan for isolating the inmate and ensuring the inmate's medical treatment and/or mandatory self-quarantine.
2. For any inmate who notifies the county jail that he or she does not wish, based on safety, health, or housing concerns, to be released from detention pursuant to this Consent Order, the county jail shall immediately notify the parties of the inmate's wishes, and shall not release the inmate without further instructions from the judge(s) or Special Master(s). In such cases, the parties shall immediately confer with the judge(s) or Special Master(s) to determine whether to release the inmate over the inmate's objection.

F. Where an inmate is released pursuant to Paragraphs A, B, or C(5)(a)(iii) or (iv), conditions, other than in-person reporting, originally imposed by the trial court shall remain in full force and effect. County jails shall inform all inmates, prior to their release, of their continuing obligation to abide by conditions of probation designed to promote public safety. Specifically:

1. No-contact orders shall remain in force.
2. Driver's license suspensions remain in force.
3. Obligations to report to probation officers in-person shall be converted to telephone or video reporting until further order of this Court.
4. All inmates being released from county jails shall comply with any Federal, State, and local laws, directives, orders, rules, and regulations regarding conduct during the declared emergency. Among other obligations, inmates being released from county jails shall comply with Executive Order No. 107 (2020) (Mar. 21, 2020), which limits travel from people's homes and mandates "social distancing," as well as any additional Executive Orders issued by the Governor during the Public Health Emergency associated with COVID-19.

5. All inmates being released from county jails are encouraged to self-quarantine for a period of fourteen (14) days.

6. Unless otherwise ordered by the judge(s) or Special Master(s), any inmate being released from a county jail who appears to be symptomatic for COVID-19 is ordered to self-quarantine for a period of fourteen (14) days and follow all applicable New Jersey Department of Health protocols for testing, treatment, and quarantine or isolation.

G. County Prosecutors and other law enforcement agencies shall, to the extent practicable, provide notice to victims of the accelerated release of inmates.

1. In cases involving domestic violence, notification shall be made. N.J.S.A. 2C:25-26.1. Law enforcement shall contact the victim using the information provided on the "Victim Notification Form." Attorney General Law Enforcement Directive No. 2005-5.

a. Where the information provided on the "Victim Notification Form" does not allow for victim contact, the Prosecutor shall notify the Attorney General.

b. If the Attorney General, or his designee, is convinced that law enforcement has exhausted all reasonable efforts to contact the victim, he may relax the obligations under N.J.S.A. 2C:25-26.1.

2. In other cases with a known victim, law enforcement shall make all reasonable efforts to notify victims of the inmate's accelerated release.

3. To the extent permitted by law, the Attorney General agrees to relax limitations on benefits under the Violent Crimes Compensation Act (N.J.S.A. 52:4B-1, *et seq*.) to better provide victims who encounter the need for safety, health, financial, mental health or legal assistance from the State Victims of Crime Compensation Office.

H. The Office of the Public Defender agrees to provide the jails information to be distributed to each inmate prior to release that includes:

1. Information about the social distancing practices and stay-at-home guidelines set forth by Executive Order No. 107, as well as other sanitary and hygiene practices that limit the spread of COVID-19;

2. Information about the terms and conditions of release pursuant to this consent Order;
3. Guidance about how to contact the Office of the Public Defender with any questions about how to obtain services from social service organizations, including mental health and drug treatment services or any other questions pertinent to release under this consent Order.

I. Any inmate released pursuant to this Order shall receive a copy of this Order, as well as a copy of any other Order that orders their release from county jail, prior to their release.

J. Relief pursuant to this Order is limited to the temporary suspension of custodial jail sentences; any further relief requires an application to the sentencing court.

3/22/2020 9:50 p.m.	/s/Stuart Rabner
Date	Chief Justice Stuart Rabner, for the Court

The undersigned hereby consents to the form and entry of the foregoing Order.

3/22/2020	/s/Gurbir S. Grewal
Date	Office of the Attorney General
3/22/2020	/s/Angelo J. Onofri
Date	County Prosecutors Association of New Jersey
3/22/2020	/s/Joseph E. Krakora
Date	Office of the Public Defender
3/22/2020	/s/Alexander Shalom
Date	American Civil Liberties Union of New Jersey

Exhibit K

IN THE SUPREME COURT OF TENNESSEE
AT NASHVILLE

IN RE: COVID-19 PANDEMIC

No. ADM2020-00428

ORDER CONTINUING SUSPENSION OF IN-PERSON COURT PROCEEDINGS AND EXTENSION OF DEADLINES

On March 13, 2020, in response to the COVID-19 pandemic, the Chief Justice of the Tennessee Supreme Court declared a state of emergency for the Judicial Branch of Tennessee government and activated a Continuity of Operations Plan for the courts of Tennessee. See Tenn. Const. Art. VI, § 1; Tenn. Code Ann. §§ 16-3-501 to 16-3-504 (2009); Moore-Pennoyer v. State, 515 S.W.3d 271, 276-77 (Tenn. 2017); Tenn. Sup. Ct. R. 49. This state of emergency constitutes a "disaster" for purposes of Tenn. Sup. Ct. R. 49 and Tenn. Code Ann. § 28-1-116. In light of ongoing concerns, the Tennessee Supreme Court hereby continues the suspension of in-person court proceedings and the extension of deadlines as set forth in this order. We again emphasize that the local and state courts of the State of Tennessee are open and will remain open under all circumstances, subject to the provisions of this order.

Under the constitutional, statutory, and inherent authority of the Tennessee Supreme Court, we adopt the following provisions. All in-person proceedings in all state and local courts in Tennessee, including but not limited to municipal, juvenile, general sessions, trial, and appellate courts, shall be suspended from the close of business on Friday, March 13, 2020, through Thursday, April 30, 2020, subject to the exceptions below.

Exceptions to this suspension of in-person court proceedings include, but are not limited to:

- Proceedings necessary to protect constitutional rights of criminal defendants, including bond-related matters, preliminary hearings for incarcerated individuals, and plea agreements for incarcerated individuals
- Proceedings related to relief from abuse, including but not limited to orders of protection
- Proceedings related to statutory order of protection hearings after entry of an ex parte order as necessary to satisfy any due process concerns

- Proceedings related to emergency child custody or visitation orders
- Proceedings related to the voluntary surrender of parental rights
- Settlements involving a minor or a person with a disability
- Department of Children's Services emergency matters related to child safety, placement, permanency, or federal funding for children in foster care
- Proceedings related to petitions for temporary injunctive relief
- Proceedings related to emergency mental health orders
- Proceedings related to emergency protection of elderly or vulnerable persons
- Proceedings directly related to the COVID-19 public health emergency
- Other exceptions as approved by the Chief Justice

The presiding judge or the designee of the presiding judge of each judicial district is authorized to determine the manner in which in-person court proceedings for the exceptions listed above are to be conducted. Other exceptions to the suspension of in-person court proceedings must be approved by the Chief Justice. Any permitted in-court proceedings shall be limited to attorneys, parties, witnesses, security officers, and other necessary persons, as determined by the trial judge. Judges and their staff shall ensure that social distancing and other such measures are strictly observed. For purposes of implementing procedural matters during this time, the provisions of Rule 18(c) of the Rules of the Tennessee Supreme Court are suspended to allow judges to issue general orders.

Judges are charged with the responsibility of ensuring that core constitutional functions and rights are protected. Additionally, court clerks are charged with ensuring that court functions continue. See Tenn. Code Ann. §§ 18-1-101 (2009); 18-1-105 (Supp. 2019). Nevertheless, all judges and court clerks should minimize in-person contact by utilizing available technologies, including alternative means of filing, teleconferencing, email, and video conferencing.

Any Tennessee state or local rule, criminal or civil, that impedes a judge's or court clerk's ability to utilize available technologies to limit in-person contact is suspended through Thursday, April 30, 2020. See, e.g., Tenn. R. Civ. P. 43.01. With respect to plea agreements for non-incarcerated individuals, this suspension expressly applies to those provisions of Tenn. R. Crim. P. 11 which otherwise would require the proceeding to be in person in open court. See, e.g., Tenn. R. Crim. P. 11(b)(1) and (2), 11(c)(2)(A).

The presiding judge or the designee of the presiding judge of each judicial district shall develop a written plan to affirmatively address issues regarding the incarceration of nonviolent offenders in furtherance of efforts to reduce the jail population, including but not limited to bond reductions or eliminations, deferred sentences, and suspended sentences. The presiding judge or the designee of the presiding judge of each judicial district shall submit its plan to the Administrative Office of the Courts by the close of

business on Monday, March 30, 2020, absent an extension granted by the Chief Justice.

Judges' offices and court clerks' offices may limit in-person contact with the public during the period of suspension, but must remain functional. If it becomes necessary to close judges' or court clerks' physical offices during the period of suspension, these offices shall remain accessible by telephone, email and fax to the extent possible during regular business hours. If available, drop boxes should be used for conventionally filed documents.

This order expressly encourages and does not prohibit court proceedings by telephone, video, teleconferencing, email, or other means that do not involve in-person contact. This order does not affect courts' consideration of matters that can be resolved without in-person proceedings. Although some non-emergency matters will need to be rescheduled, judges are to continue to resolve matters that do not require in-person court proceedings. Court clerks are to work cooperatively and at the direction of the presiding judge of each judicial district to fulfill the clerks' obligation to facilitate continuing court function.

Deadlines set forth in court rules, statutes, ordinances, administrative rules, or otherwise that are set to expire during the period from Friday, March 13, 2020, through Tuesday, May 5, 2020, are hereby extended through Wednesday, May 6, 2020. Statutes of limitations and statutes of repose that would otherwise expire during the period from Friday, March 13, 2020, through Tuesday, May 5, 2020, are hereby extended through Wednesday, May 6, 2020. See Tenn. Code Ann. § 28-1-116 (2017). Deadlines, statutes of limitations, and statutes of repose that are not set to expire during the period from Friday, March 13, 2020, through Tuesday, May 5, 2020, are not extended or tolled by this order.

With regard to notarizing documents at this time, attorneys and judges are encouraged to utilize the "Online Notary Public Act," Tenn. Code Ann. § 8-16-301, et seq., and the regulations promulgated by the Secretary of State at Sec. of State, Tenn. R. and Reg. 1360-07-03-.01. Additionally, with regard to court filings, declarations under penalty of perjury may be used as an alternative to a notary.

Given the increasing economic issues caused by this pandemic, no judge, clerk, or other court official shall take any action to effectuate an eviction, ejectment, or other displacement from a residence during the effective dates of this order based upon the failure to make a rent, loan, or other similar payment absent extraordinary circumstances as determined by a judge in a court of competent jurisdiction. Nothing in this order affects the obligations, terms, or conditions for payment under existing contracts. Judges also are encouraged to work with court clerks and local law enforcement to develop policies severely limiting or eliminating any new garnishments during this time.

Orders of protection and temporary injunctions that would otherwise expire during the period from Friday, March 13, 2020, through Tuesday, May 5, 2020, are hereby extended through Wednesday, May 6, 2020.

This order applies statewide to all courts and court clerks' offices except administrative courts within the Executive Branch and federal courts and federal court clerks' offices located in Tennessee.

Under the terms of this order, the courts of Tennessee remain open, consistent with the Judicial Branch's obligation to mitigate the risks associated with COVID-19. Judges should work with local law enforcement and other county officials to ensure that, to the extent possible, courthouses remain accessible to carry out essential constitutional functions and time-sensitive proceedings.

This order is intended to be interpreted broadly for protection of the public from risks associated with COVID-19.

It is so ORDERED.

FOR THE COURT:

Jeffrey S. Bivins, Chief Justice

Cornelia A. Clark, Justice

Sharon G. Lee, Justice

Holly Kirby, Justice

Roger A. Page, Justice

Exhibit L

DECLARATION OF REV. DR. T. ANTHONY SPEARMAN

I, Rev. Dr. T. Anthony Spearman, hereby declare as follows:

1. I am the elected President of the North Carolina State Conference of the National Association for the Advancement of Colored People ("NC NAACP"), a position I have held since October 2017. I am a U.S. citizen, resident of Greensboro, North Carolina, and a registered voter. I am over eighteen years old and competent to testify.

2. I earned my Bachelor of Science Degree Summa Cum Laude from Mercy College in Yonkers, N.Y.; a Master of Divinity Degree Magna Cum Laude from Hood Theological Seminary in Salisbury, N.C.; and a Doctor of Ministry from the United Theological Seminary in Dayton, Ohio.

3. As President of the NC NAACP, my responsibilities include presiding at all meetings of the NC NAACP, acting as Chair of the Executive Committee, implementing appointive powers over non-elected offices of the NC NAACP, and exercising all general executive authority on behalf of the NC NAACP, subject to ratification by the Executive Committee, including serving as spokesperson, and directing programmatic advocacy, legal, and operational priorities of the NC NAACP.

4. I have been a member of the NAACP for over fifty years. Prior to my current role as President of the NC NAACP, I served in a leadership capacity for the NC NAACP for approximately 12 years. Between 2011-2017, I served as third Vice President of the NC NAACP State Executive Committee. Before that, under immediate past NC NAACP President Rev. Dr. William Barber II, I served as the Chair of NC NAACP Religious Affairs Committee, two years as Education Chair, and two years as President with the Hickory Branch NC NAACP.

5. I have personal knowledge of the matters set forth in this declaration, except for those matters identified as based on information and belief, and if called upon to do so, could and would competently testify thereto.

Overview of the NC NAACP's Mission

6. The National Association for the Advancement of Colored People ("NAACP") was founded in 1909 and is the nation's oldest, largest, and most widely recognized grassroots-based non-profit civil rights organization. The NAACP's mission is to ensure the rights of all persons to political, educational, social, and economic equality, and to eliminate racial discrimination.

7. The NC NAACP is a nonpartisan nonprofit civil rights organization founded in 1938, with its principal place of business located in Greensboro, North Carolina. With more than 90 active branches and over 20,000 individual members throughout the state of North Carolina, the NC NAACP is the largest NAACP conference in the South and the second largest conference in the country.

8. The fundamental mission of the NC NAACP is the advancement and improvement of the political, educational, social, and economic status of minority groups; the elimination of racial prejudice and discrimination; the publicizing of adverse effects of racial discrimination; and the initiation of lawful action to secure the elimination of racial bias and discrimination.

9. As part of its central mission, the NC NAACP frequently litigates in court in order to vindicate the rights of its members, the communities of color that it serves, and North Carolinians generally.

10. The NC NAACP advocates for smarter, results-based criminal justice policies to keep our communities safe, including treatment for addiction and mental health problems, judicial discretion in sentencing, and an end to racial disparities at all levels of the system.

11. The NC NAACP seeks to eliminate harsh and unfair sentencing practices that are responsible for mass incarceration and racial disparities in the prison system.

12. African Americans are incarcerated at more than five times the rate of whites; and the imprisonment rate for African-American women is twice that of white women. Although African Americans and Latinx individuals make up approximately 32% of the U.S. population, they comprised 56% of all incarcerated people in 2017.

13. The NC NAACP is also committed to eliminating barriers for formerly incarcerated individuals, including the restoration of voting rights, the removal of barriers to employment, and the removal of barriers to receive housing and financial aid.

14. As part of the NC NAACP's "14-Point People's Agenda" for 2020, we have advocated for abolishing the racially-biased death penalty and mandatory sentencing laws, and reforming our prisons. The Action Steps that we recommended in furtherance of this agenda include enacting the reform recommendations of the NC Sentencing Commission, funding alternate sentencing programs, and dramatically expanding services to prisoners re-entering society. We also endorse and support the NC Second Chance Alliance's agenda for reform.

Advocacy for Wrongfully Convicted Individuals

15. The NC NAACP advocates for those who have been wrongfully convicted of crimes they did not commit. We are working with coalition partners to further this work so that our communities do not continue to suffer the loss of family members and friends who were wrongfully convicted.

16. In the past, we have advocated for numerous individuals who were wrongfully convicted of crimes they did not commit, including Dontae Sharpe, Kalvin Michael Smith, Darryl Hunt, James Johnson, Glen Edward Chapman and the Wilmington Ten.

17. We are currently working on behalf of Ronnie Long, a man from Concord, North Carolina who has been in prison for 44 years for a crime he maintains that he did commit. (*See* "Concord Man Serving for Crime He Didn't Commit Has to Wait Longer for Appeal Due to COVID-19," https://www.wcnc.com/article/news/investigations/investigators/concord-man-serving-crime-says-didnt-commit-longer-for-appeal-covid-19/275-12d01a15-89a3-45ec-831f-b490103ba809)

18. New evidence has emerged in Mr. Long's case which supports his claim of innocence. As recently as 2015, his attorneys learned of 43 fingerprints that Concord Police collected from the rape scene but never shared; and these fingerprints did not belong to Mr. Long.

19. On March 16, 2020, the United States Court of Appeals for the Fourth Circuit granted Mr. Long's petition for a rehearing en banc of his case. Mr. Long's appeal was set for argument in the Fourth Circuit, but this argument has now been postponed due to the COVID-19 pandemic.

20. While Mr. Long awaits his hearing in front of the Fourth Circuit, he remains incarcerated at the Albermarle Correctional Institution in Stanly County, North Carolina.

21. Mr. Long is a 64-year old man and has complex underlying medical conditions, both of which put him at greater risk for contracting COVID-19.

Impact on NC NAACP and its Members

22. The continued confinement of at-risk prisoners during the COVID-19 pandemic will cause substantial and irreparable harm to both the NC NAACP and its members, who include people who are formerly and currently incarcerated and their family members, and to the North Carolinians to whom our organization provides assistance.

23. The NC NAACP has already expended significant, precious staff time and organization resources to support those who are currently and formerly incarcerated in the State of North Carolina.

24. For example, on March 24, 2020 NC NAACP publicly advocated for the Governor to address the impending crisis in North Carolina prisons. (*See* Exhibit A. NC NAACP Letter to Governor Cooper). In that letter, NC NAACP urged the Governor to take targeted, bold, and immediate action to prevent the unnecessary human suffering that will result if North Carolina does not rapidly accelerate the implementation of a smart, integrated strategy to protect people currently incarcerated in our state from the spread of the novel, and lethal COVID-19 virus. To enact the comprehensive strategy on the timetable necessary to have a demonstrable impact on public health outcomes and to ensure public safety, NC NAACP requested that the Governor immediately appoint a *COVID-19 Justice System Response Special Master/Coordinator* to lead an integrated executive branch response, to issue clear guidance to other actors in the state, and to take swift actions necessary to protect people currently incarcerated most vulnerable.

25. Additional requests NC NAACP made to the Governor at that time included: (1) Ensure and monitor the need for and access to hygiene resources, health care services, and soap and hand sanitizers effective against COVID-19 transmission in all prisons, jails, and detention centers in the state of North Carolina; (2) Immediately oversee a program of emergency commutation of sentences for elderly and otherwise vulnerable people, including those with compromised immune systems and complex medical issues imprisoned in North Carolina; (3) Expedite mass medical release of those permanently disabled, geriatric, or terminally ill through the Department of Public Safety's Home Leave program and Transition Services;(4) Expedite decisions and review of people eligible for parole, particularly those over 65 years of age, pregnant

women, parents of small children, the elderly, and chronically ill in our prisons who present a low public safety risk. (5) Provide targeted guidance and resources specific to supporting the needs and vulnerabilities of youth in detention at this time, and provide guidance to support an accelerated intervention in our jails, where we know those who are detained pre-trial, people who have not been convicted of any crime, make up a disproportionate and vast number of those imprisoned.

26. In the absence of immediate mandamus relief, the NC NAACP will continue to be harmed by having to divert its limited resources away from its central mission and efforts to advocate for the health and safety of those incarcerated during the COVID-19 pandemic.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge.

Executed on April 8 2020, at Greensboro, North Carolina.

T. Anthony Spearman

Rev. Dr. T. Anthony Spearman

ATTACHMENT 1

NATIONAL ASSOCIATION FOR THE ADVANCEMENT OF COLORED PEOPLE
NORTH CAROLINA STATE CONFERENCE

3 Centerview Drive, Suite 165 • Greensboro, NC 27407
Mailing Address: PO Box 7186 • Greensboro, NC 27417
tel: 866-626-2227 • 919-682-4700 • fax: 919-682-4711
www.naacpnc.org

Rev. Dr. T. Anthony Spearman
State President

Mr. Joseph M. Alston
Executive Director

March 24, 2020

The Honorable Roy Cooper
North Carolina Office of the Governor
20301 Mail Service Center Raleigh, NC 27699-0301
Via US Mail & Personal Delivery

Dear Governor Cooper:

I write to you in this unprecedented time, to express the position of the NC NAACP State Conference in support of safety and lives of all those who are currently incarcerated in North Carolina's prisons, jails, and detention centers. We applaud your actions to declare a state of emergency on March 6, 2020, to issue Executive Order 116 and ongoing guidance, and to demonstrate your commitment to ensuring safety of North Carolinians in this time of crisis.

We now urge you to take targeted, bold, and immediate action to prevent the unnecessary human suffering that will result if North Carolina does not rapidly accelerate the implementation of a smart, integrated strategy to protect people currently incarcerated in our state from the spread of the novel, and lethal COVID-19 virus.

To enact the comprehensive strategy on the timetable necessary to have a demonstrable impact on public health outcomes and to ensure public safety, **we ask today that the Governor immediately appoint a *COVID-19 Justice System Response Special Master/Coordinator* to lead an integrated executive branch response, to issue clear guidance to other actors in the state, and to take swift actions necessary to protect people currently incarcerated most vulnerable**. This coordinator, if resourced properly, could speed quick collaboration with experts and non-governmental advisors to ensure North Carolina ultimately leads the nation in protecting people imprisoned, clinical, custodial, and other workers, who are performing necessary duties, and their communities and family members, from the spread and impact of this disease.

Without further decisive and immediate action, experts from across the nation, and here in North Carolina predict that we are in danger of a severe, devastating spread of the disease in our over-crowded prisons and jails. We cannot allow that fate to meet our people, and as people of faith we are called to speak up at this time as we see the tidal wave of pain on the horizon.

We ask that this appointment be immediately made with clear instructions to urgently initiate an expedited and centralized COVID response process in North Carolina's justice system, to respond to resource-support requests, including data sharing and increased re-entry service support to successfully implement necessary risk-reduction strategies, and where appropriate, to issue and share guidance with appropriate offices of NC government at every level of government charged with responding to this crisis in the context of our criminal justice system.

As your office is well-aware, state and federal guidance currently available indicates that COVID-19 poses the greatest risk of death to the elderly as well as to those who are immunocompromised, suffer from diabetes, chronic obstructive pulmonary disorder and other lung conditions, high blood pressure, and those with cancer. We believe the office of the Governor must give directives and take action focused on the following priority areas:

(1) Ensure and monitor the need for and access to hygiene resources, health care services, and soap and hand sanitizers effective against COVID-19 transmission in all prisons, jails, and detention centers in the state of North Carolina;

(2) Immediately oversee a program of emergency commutation of sentences for elderly and otherwise vulnerable people, including those with compromised immune systems and complex medical issues imprisoned in North Carolina;

(3) Expedite mass medical release of those permanently disabled, geriatric, or terminally ill through the Department of Public Safety's Home Leave program and Transition Services;

(4) Expedite decisions and review of people eligible for parole, particularly those over 65 years of age, pregnant women, parents of small children, the elderly, and chronically ill in our prisons who present a low public safety risk.[1]

(5) Provide targeted guidance and resources specific to supporting the needs and vulnerabilities of youth in detention at this time, and provide guidance to support an accelerated intervention in our jails, where we know those who are detained pre-trial, people who have not been convicted of any crime, make up a disproportionate and vast number of those imprisoned.

[1] As detailed in a letter sent by a coalition of partners last week who we work closely with and whose recommendations we support, Article III, Section 5 of the North Carolina Constitution grants the Governor authority to commute sentences for any crime other than impeachment; N.C. Gen. Stat. 15A-1369 authorizes the release of people permanently and totally disabled or geriatric (over 65 and suffering from chronic infirmity), and incapacitated to the extent that they do not pose a public safety risk; and, under N.C. Gen. Stat. § 148-4, incarcerated persons who are permanently and totally disabled can be considered for alternate places of confinement, including a relative's home. Under this statute, incarcerated individuals can be authorized, under prescribed conditions, to leave the confines of prison unaccompanied by a custodial agent to participate in home leave, pre-release, and after-care programs for a prescribed period of time. In all these cases, you or the Secretary of DPS may prescribe conditions of release for a prescribed period.

For over 110 years, the NAACP has been dedicated to ensuring the rights of all persons to political, educational, social, and economic equality, and to eliminate racial discrimination. In North Carolina, the NC NAACP is committed to transforming the discriminatory pipeline and systemic conditions that have resulted in over-incarceration that disproportionately harms people of color and our communities.

Now we are additionally committed to amplifying the universal spirit of service that is emerging from our members across this state, and people all across this nation and world responding to this crisis. As our community continues to take actions to address the public health emergency upon us, we will continue to advocate for and keep central those with the least control over their circumstances, and those most vulnerable, including our children, our elders, those living with disabilities or in compromised health, those who are pregnant during this health crisis, those already living in the grips of poverty and economic insecurity, those who are performing essential services in our communities, risking exposure every day, and those who are imprisoned without power to determine how to protect themselves. It is to these voices and these families, that we are indeed, called to be the staunchest advocates alongside, and that we stand with in this time.

We stand also with all those leaders in this time who are willing to take decisive action to stem the tide of this pandemic. If we can be of further service to you as you consider your comprehensive response to the safety of those who work within the justice system and those who are incarcerated in North Carolina prison, jails, and detention centers, we stand at the ready.

Yours in Truth and Justice,

/s/ *Rev. Dr. T. Anthony Spearman*
Rev. Dr. T. Anthony Spearman
President, North Carolina NAACP