

# Biological Evidence in Adult and Adolescent Sexual Assault Cases: Timing and Relationship to Arrest

Journal of Interpersonal Violence  
2020, Vol. 35(7-8) 1828–1839  
© The Author(s) 2017

Article reuse guidelines:  
sagepub.com/journals-permissions  
DOI: 10.1177/0886260517704229  
journals.sagepub.com/home/jiv



Theodore P. Cross,<sup>1</sup> Megan Alderden,<sup>2</sup>  
Alex Wagner,<sup>3</sup> Lisa Sampson,<sup>4</sup> Brittany Peters,<sup>4</sup>  
and Kaitlin Lounsbury<sup>5</sup>

## Abstract

This study examined the timing of the crime laboratory report relative to arrests in sexual assault cases and explored the relationship between biological evidence and arrest in those cases in which the crime laboratory report came first and thus could have influenced the arrest decision. A random sample ( $N = 528$ ) of cases that occurred between 2008 and 2010 and included a report to police was drawn from a Massachusetts statewide database of medical reports on sexual assault cases. Data from medical providers were merged with data abstracted from crime laboratory reports and with data requested from police departments. The vast majority (91.5%) of arrests took place before crime laboratory analysis could be conducted. The crime laboratory report was available before or near in time to the arrest in 11 cases. These cases were significantly more likely than other cases to have DNA profiles of the assailant, DNA matches to the suspect, and a match to another investigation

<sup>1</sup>University of Illinois at Urbana–Champaign, USA

<sup>2</sup>Saint Xavier University, Chicago, IL, USA

<sup>3</sup>Fisher College, Boston, MA, USA

<sup>4</sup>Massachusetts Executive Office of Public Safety and Security, Boston, USA

<sup>5</sup>University of New Hampshire, Durham, USA

## Corresponding Author:

Theodore P. Cross, School of Social Work, 1010 W. Nevada St., Urbana, IL 61801, USA.

Email: tpcross@illinois.edu

in the FBI's CODIS DNA database. Given that the probable cause needed to make an arrest in these cases was presumably established only after crime laboratory analysis was available, DNA may have helped lead to the arrest in these cases. However, these results should be interpreted very cautiously, because statistically significant results in early, small studies can have inflated effect sizes and often do not replicate in future studies. Because most arrests occur well before biological evidence is available, improvements in recovering biological evidence may have modest effects on arrest rates, though they may impact arrest rates by identifying more serial offenders. Future research on the relationship of biological evidence to arrest should use methods to increase sample size of relevant cases, such as oversampling cases with later arrests and using case control study designs. Future studies should also use case abstraction and interview methods to explore how police use biological evidence to make arrests.

### **Keywords**

sexual assault, criminology, arrest, DNA, forensic evidence, biological evidence

Biological evidence can assist police in making arrests in sexual assault cases. Matching the assailant's DNA profile derived from biological samples to DNA profiles in the Federal Bureau of Investigation's national Combined DNA Index System (CODIS) database can identify unknown assailants (see Burg, Kahn, & Welch, 2011). Matching a suspect's DNA profile, usually obtained voluntarily or by court order, with a DNA profile obtained from the victim's body can be powerful evidence against a suspect's claim that the assault was fabricated. The forensic medical examination of the victim is by far the most common source of biological evidence in sexual assault case in arrest cases (McEwen, 2011). Although we are not aware of any data on the number of the examinations conducted, the International Association of Forensic Nurses (IAFN), whose members conduct many examinations, has grown from 72 members in 1992 (IAFN, n.d.) to 3,161 in 2014 (IAFN, 2014), suggesting substantially greater attention to forensic evidence collection in recent decades. Forensic examinations require a substantial commitment, especially from victims, who undergo procedures that are often long, uncomfortable, and emotionally demanding (U.S. Department of Justice, Office on Violence Against Women, 2013) with the hope of gaining evidence leading to criminal justice action. Yet little research has examined the extent to which biological and DNA evidence is related to making an arrest. The current study examines this

relationship. An important part of the analysis concerns the timing of crime laboratory results, as biological evidence can only be a causal factor in those arrests that occur after crime laboratory analysis has been completed.

## **The Relationship of Biological Evidence to Arrest and the Issue of Timing**

Du Mont and White (2007) reviewed several early studies (predating use of DNA) that examined the relationship between a laboratory finding of sperm and arrest or the related outcome of filing criminal charges. No study found a significant relationship. Two studies in the DNA era, Johnson, Peterson, Sommers, and Baskin (2012) and Tasca, Rodriguez, Spohn, and Koss (2013), found that biological evidence was significantly related to arrest in multivariable logistic regression models (Johnson et al.'s variable was *lab-examined evidence* and Tasca et al.'s was *forensic evidence*). R. Campbell, Patterson, Bybee, and Dworkin's (2009) multivariable analysis found that the presence of a DNA profile was significantly related to greater progress in the criminal justice system, as measured by the following ordinal variable: (a) not referred by the police for prosecution, (b) referred to the prosecutor but not warranted for prosecution, (c) warranted by the prosecutor but later dropped or acquitted, and (d) guilty plea or conviction.

However, Johnson et al. (2012) identified a problem with interpreting the relationship between biological evidence and arrest: In their study, the arrest preceded the analysis of physical evidence (including both biological and other physical evidence) in 98.4% of cases that had both. In such cases, biological evidence could not have a causal impact on arrest because it was not available when the arrest was made. Tasca et al. (2013) did not measure timing quantitatively, but their qualitative analysis of narratives in police reports indicated similarly that most arrests took place before crime laboratory analysis had been conducted. Both Johnson et al. and Tasca et al. suggest that the statistical relationship between biological evidence and arrest may have been a function of the victim's willingness to undergo an examination, echoing previous research on police officers' decision to arrest (Alderden, 2008; Bouffard, 2000). Tasca et al.'s qualitative analysis suggested that officers' anticipation of the availability of biological evidence once a medical examination was completed and the greater credibility they accorded victims who decided to have an examination were factors in the arrest decision. Without knowing more about timing, it is difficult to interpret R. Campbell et al.'s (2009) finding relating DNA evidence to progress in the criminal justice system. DNA may have contributed to criminal justice decision making in these

cases, but it is also possible that cases that progressed on other grounds were later more likely to yield DNA evidence.

## **Current Study**

This analysis first examined the timing of crime laboratory reports and arrests to identify those cases in which DNA evidence was available and could have had an effect on the arrest decision. It then examined whether DNA evidence is more frequent in these cases than in cases with no arrest or cases in which the arrest preceded the crime laboratory report. This article was adapted from the authors' National Institute of Justice final report (Cross et al., 2014), with some new analyses.

## **Method**

### *Data Sources*

Data were obtained from four data sources: (a) the Provider Sexual Crime Report (PSCR) database, a data set derived from standardized reports that the Massachusetts Executive Office of Public Safety and Security (EOPSS) has required since 1999 from medical examiners in sexual assault cases; (b) standardized forms included in the Massachusetts Sexual Assault Evidence Collection Kit that document the results of the forensic medical examinations; (c) crime laboratory reports on the results of testing of samples from evidence kits and other samples collected in the investigation; (d) data collection sheets asking for information regarding arrests in the sample; these sheets were mailed by EOPSS for this project to 144 police agencies, of which 141 (97.9%) responded through fax, email, or phone call. Data from the four sources were linked via a common set of unique identifiers connecting two or more data sets at a time in a "daisy chain fashion," using IDs assigned to the evidence kit and by the police to the crime incident. PSCR data were downloaded directly, but most data were hand-coded. Project researchers entered data from crime laboratory reports and evidence kit forms at two crime laboratories in the state, where the kits were stored, and also entered data sent by police.

### *Sampling Procedure*

A retrospective sampling frame was used that included sexual assault forensic medical examinations statewide from 2008 through 2010 that were in the PSCR database ( $n = 3,530$ ). Because of the time and resource demands of coding paper files, only a sample of the total  $N$  could be included in the sample. Because cases with victims less than 12 years old had a special

pediatric examination with different data forms (see Meunier-Sham, Cross, & Zuniga, 2013), and because these cases were likely to be very different, we analyzed them separately (see Cross et al., 2014). The final sample here consisted of 528 cases of sexual assault involving victims of 12 years and older, excluding cases that were not reported to police and cases without evidence kit numbers. See Cross et al. (2014) for further details on methodology.

## **Variables**

In this analysis, a number of demographic and assault characteristics included in the PSCR database and kit documents were used to describe the sample. Relevant dates were coded from kit documents, crime laboratory reports, and the data sheet completed by police agencies. A set of yes/no variables were coded from crime laboratory reports to represent whether different forms of biological and DNA evidence were found: sperm, saliva, blood, DNA profile of the assailant developed, DNA matched to suspect, and DNA hits in the CODIS offender database and in the CODIS investigation database. An arrest yes/no variable was coded from police responses.

## **Results**

### ***Sample Characteristics***

The vast majority of victims (95.8%) were female and their mean age was 26.5 years. Although the majority of victims in the sample were White non-Hispanic, Black non-Hispanic and Hispanic–Latino victims appeared to be over-represented relative to the Massachusetts state population in 2010. Although it was beyond our scope to carry out a detailed comparison taking into account age, the sample percentage of 9.2% for Black non-Hispanic was significantly higher than 6.6%, the percentage of Massachusetts residents identified as Black or African American in the 2010 United States Census (see U.S. Census Bureau, n.d.),  $\chi^2(1, N = 519) = 5.91, p < .015$ . Also, the sample percentage of 17.1% for Hispanic or Latino was significantly higher than 9.6%, the percentage of Massachusetts residents identified as Hispanic or Latino in the 2010 United States Census,  $\chi^2(1, N = 519) = 35.84, p < .001$ . Over two thirds (67.9%) of victims were assaulted by someone known to them.

### ***Frequency of Biological Evidence and Police Outcomes***

Almost all cases (99.4%) had completed forensic evidence kits, and 77.4% of cases were tested by the crime laboratory. Some form of biological evidence (semen, sperm, saliva, blood, and/or other biological materials) was found in

65.3% of the total sample and in 84.6% of cases in which kits were analyzed. A DNA match to a suspect in the case was found in 7.6% of cases in the total sample, a DNA match to a convicted offender in CODIS in 4.4% and a DNA match to another investigation in CODIS in 1.9%. Police founded 64.3% of cases in the total sample, that is, found sufficient reason to suspect a crime had occurred, to pursue an investigation, and possibly to make an arrest. Arrests occurred in 26.6% of cases in the total sample.

### *Timing of Case Events*

The median time between assault and examination was 12 hours, and 94% of the victims had a forensic medical examination within 72 hours. The median time span from assault to arrest was 1 day; 93.5% occurred within 90 days. The median time span for the evidence kit to arrive at the crime laboratory was 8 days after the examination, and the median time from kit arrival at the crime laboratory to laboratory report to the police was 43 days. Thus, the vast majority of arrests occurred well before crime laboratory analysis could even be conducted. In only eight cases did the arrest follow forensic results being reported to police. An additional three cases had arrests only a day or two before the crime laboratory report; it is reasonable to infer in these three cases that crime laboratory results were likely known prior to the arrest. The 11 cases represent 2.1% of the total sample ( $N = 528$ ) and 8.5% of arrests ( $n = 130$ ).

### *Biological Evidence When the Crime Laboratory Report Preceded Arrest*

Because they are the only cases in which biological evidence found by the crime laboratory could have influenced the arrest decision, we examined the frequency of biological evidence in these 11 cases compared with cases in which the arrest was made before crime laboratory analysis and cases with no arrest (comparisons made for sperm, blood, saliva, other biological products, and any biological product). The 11 cases did not differ from other cases on the presence of biological products, except that evidence of saliva was actually significantly more common when arrests took place before crime laboratory analysis (50.4%) than in the 11 cases of later arrest (18.2%) or in nonarrest cases (28.7%),  $\chi^2(2, N = 398) = 18.52, p < .001$ .

Ten of the 11 cases had valid data on DNA. Eight of these cases had a DNA profile of the assailant, a rate (80.0%) significantly higher than for other arrests (41.2%) and for nonarrests (30.5%),  $\chi^2(2, N = 393) = 13.278$ ,

$p = .001$ . In five of the 10 cases, there was a match between DNA from a suspect and the assailant DNA profile, again a significantly higher rate (50.0%) than in other arrest cases (17.5%) and nonarrest cases (5.2%),  $\chi^2(2, N = 393) = 32.08, p < .001$ . Three of the 10 cases had a DNA hit to another investigation in CODIS, which again was a significantly higher rate (30.0%) than in other arrests (1.8%) and in nonarrests (1.9%; because of small cell sizes, this was tested with a Monte Carlo exact test,  $p = .001$ ). Two of the 10 cases also had a DNA hit to a convicted offender in CODIS. Although this represented a higher rate (20%) than in other arrests (5.3%) and in nonarrests (5.2%), this difference was not statistically significant (Monte Carlo exact test,  $p = .13$ ).

## **Discussion**

As in other studies, (Briody, 2002; Johnson et al., 2012; Tasca et al., 2013) the vast majority of arrests took place before crime laboratory analysis. In the present sample, this was mostly due to how quickly arrests occurred and not due to delays at the crime laboratory. Many arrests for sexual assault may be “quick clearance” cases requiring little investigation (see Puckett & Lundman, 2003), in which officers were able to identify the suspect quickly and obtain nonbiological evidence to support probable cause. The percentage of cases in which crime laboratory analysis was conducted prior to arrests was higher in our study (8.5%) than in Johnson et al.’s (1.6%), because Johnson et al. included cases without medical examinations.

### ***DNA Evidence in the Few Arrests Made After Crime Laboratory Analysis***

This is the first study to examine the frequency of biological evidence in cases in which laboratory analysis came first and therefore could have influenced the arrest decision. The few cases in which an arrest was made close to or after the crime laboratory analysis were significantly more likely than other arrests and nonarrests to have a DNA profile generated, a DNA match to an identified suspect, and a DNA match to another investigation in CODIS. Given that the probable cause needed to make an arrest was presumably established only after crime laboratory analysis was available, DNA may have helped lead to the arrest in these cases. However, these results should be interpreted very cautiously, because statistically significant results in early, small studies can have inflated effect sizes and often do not replicate in future studies (see, for example, Ioannadis, 2008). This finding is a first step. More data in larger samples are needed to assess the degree to which obtaining

biological evidence makes a difference in arresting some perpetrators. This research could potentially provide empirical support for the investment in technology, personnel, and training that makes biological evidence available in these cases. Given the overrepresentation of people of color in the study population, these results could have added implications for social justice.

### *Limitation of the Impact of Biological Evidence*

Case flow in the criminal justice response to sexual assault has been described as a funnel, with an ever narrowing number of cases because of attrition at each step (see, for example, Siegel & Worrall, 2014). Many cases are not reported to police and many investigations do not lead to arrests. Improvements in recovering biological evidence may have modest effects on arrest rates, because the vast majority of arrests occur before crime laboratory analysis has taken place. Nevertheless, biological evidence can be the determining factor in some cases (e.g., if assailants cannot be identified without it).

However, if improvements in recovering biological evidence catch more serial offenders through CODIS, that may increase the impact of biological evidence on arrest rates. Testing backlogged forensic evidence kits has identified suspects who appear to be serial rapists (Campbell, Fehler-Cabral, et al., 2015; Campbell, Shaw, & Fehler-Cabral, 2015; B. Campbell & Wells, 2014). Lisak and Miller (2002) found that while only 6.4% of undergraduate men surveyed reported committing rape, 63% of those rapists reported multiple offenses. These findings are consistent with research showing that a small proportion of offenders are responsible for a significant number of crimes (see Kleinman, 2009). More effective use of DNA to catch serial rapists may augment the impact of biological evidence.

### *Study Limitations*

The small sample of cases in which crime laboratory analysis preceded arrest is an obvious limitation. This study also has only limited information from police, so it is impossible to tell how biological evidence was used and the arrest decision made. It is also impossible to distinguish from our data whether biological evidence came from forensic medical examinations or other sources (e.g., crime scene investigations), so we cannot assess the unique contribution of medical examinations in producing biological evidence.

### *Future Research*

To increase sample sizes, researchers could oversample cases without an arrest in the 30 days following assault, as these cases are more likely to



have biological evidence before arrest (Cross et al., 2014), or could use a case control study design, matching cases with no arrests to cases with an arrest following crime laboratory analysis. Studies could include multiple jurisdictions over an extended time. Future research should analyze police files to explore how biological evidence was used. Researchers could record whether there was a need to identify the perpetrator or to corroborate the victim's account in the face of counter-claims by the assailant, whether laboratory analysis was done routinely or in response to a specific police or prosecutor request, whether and when specimens were taken from the suspect, and whether biological evidence spurred investigative and prosecutorial actions such as search warrants or subpoenas. Researchers could supplement case data collection with interviews with medical examiners, police, crime laboratory professionals, and prosecutors to explore policies and practices for using biological evidence and how they influence the arrest decision.

Because most assailants are known and the most common defense to charges of sexual assault is consent rather than denial of sexual contact (Spohn & Tellis, 2014), the impact of biological evidence on criminal justice outcomes will likely always be limited. More research is needed on other types of evidence, such as witnesses who can corroborate the victims' account of the assault, and other methods to improve law enforcement response to victims, such as specialized law enforcement training on sexual assault (see Spohn & Tellis, 2014).

### **Acknowledgments**

The authors deeply appreciate the substantial assistance of the Boston Police Department Sexual Assault Unit and Crime Laboratory, the Massachusetts State Police Crime Laboratory, the Massachusetts Executive Office of Public Safety and Security, the Massachusetts Sexual Assault Nurse Examiners Program, and the Suffolk County District Attorney's Office; without their help this study would not have been possible. The authors offer special thanks to Joan Meunier-Sham, Laura Siller, Maja Vlajnic, and Timothy Edson for reviewing the manuscript.

### **Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### **Funding**

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This study was funded by the grant 2011-WG-BX-0005 from the National Institute of Justice to the University of Illinois at Urbana-Champaign.

## References

- Alderden, M. A. (2008). *Processing of sexual assault cases through the criminal justice system* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (University Microfilms, UMI Number 3327392)
- Bouffard, J. A. (2000). Predicting type of sexual assault case closure from victim, suspect, and case characteristics. *Journal of Criminal Justice, 28*, 527-542. doi:10.1016/S0047-2352(00)00068-4
- Briody, M. (2002). The effects of DNA evidence on sexual offence cases in court. *Current Issues in Criminal Justice, 14*, 159-181.
- Burg, A., Kahn, R., Welch, K. (2011). DNA testing of sexual assault evidence: The laboratory perspective. *Journal of Forensic Nursing, 7*, 145-152. doi:10.1111/1/j.1939-3938.2011.01111
- Campbell, B., & Wells, W. (2014, June). *Testing sexual assault kits in cold cases and follow-up investigations: Practices used in agencies in the United States* (A Report to the Houston, TX Sexual Assault Kit Action-Research Working Group). Huntsville, TX: Sam Houston State University. Retrieved from <http://houston-sakresearch.org/resources/documents/testing.pdf>
- Campbell, R., Fehler-Cabral, G., Pierce, S. J., Sharma, D. B., Bybee, D., Shaw, J., Horsford, S., . . . Feeney, H. (2015). *The Detroit Sexual Assault Kit (SAK) Action Research Project (ARP) Final Report*. (Document number 248680). Washington, DC: National Institute of Justice. Retrieved from <https://www.ncjrs.gov/pdffiles1/nij/grants/248680.pdf>
- Campbell, R., Shaw, J., & Fehler-Cabral, G. (2015). Shelving justice: The discovery of thousands of untested rape kits in Detroit. *City & Community, 14*, 151-166. doi:10.1111/cico.12108
- Campbell, R., Patterson, D., Bybee, D., & Dworkin, E. (2009). Predicting sexual assault prosecution outcomes: The role of medical forensic evidence collected by sexual assault nurse examiners. *Criminal Justice and Behavior, 36*, 712-727. doi:10.1177/0093854809335054
- Cross, T. P., Alderden, M., Wagner, A., Sampson, L., Peters, B., Spencer, M., . . . Lounsbury, K. (2014). *Forensic evidence and criminal justice outcomes in a state-wide sample of sexual assault cases* (Final Report, NCJ 248254). Washington, DC: National Institute of Justice. Retrieved from <https://www.ncjrs.gov/pdffiles1/nij/grants/248254.pdf>
- Du Mont, J., & White, D. (2007). *The uses and impact of medico-legal evidence in sexual assault cases: A global review*. Geneva, Switzerland: Department of Gender, Women and Health, World Health Organization. Retrieved from [http://apps.who.int/iris/bitstream/10665/43795/1/9789241596046\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/43795/1/9789241596046_eng.pdf)
- International Association of Forensic Nurses. (2014). *2014 annual report*. Retrieved from [http://c.ymcdn.com/sites/www.forensicnurses.org/resource/resmgr/About/IAFN\\_Annual\\_Report\\_2014\\_FINA.pdf](http://c.ymcdn.com/sites/www.forensicnurses.org/resource/resmgr/About/IAFN_Annual_Report_2014_FINA.pdf)
- International Association of Forensic Nurses. (n.d.). *History of the association*. Retrieved from <https://iafn.site-ym.com/?page=AboutUS>

- Ioannadis, J. P. (2008). Why most discovered true associations are inflated. *Epidemiology, 19*, 640-648. doi:10.1097/EDE.0b013e31818131e7
- Johnson, D., Peterson, J., Sommers, I., & Baskin, D. (2012). Use of forensic science in investigating crimes of sexual violence: Contrasting its theoretical potential with empirical realities. *Violence Against Women, 18*, 193-222. doi:10.1177/1077801212440157
- Kleinman, M. A. (2009). *When brute force fails: How to have less crime and less punishment*. Princeton, NJ: Princeton University Press.
- Lisak, D., & Miller, P. M. (2002). Repeat rape and multiple offending among undetected rapists. *Violence and Victims, 17*, 73-84. doi:10.1177/1077801210387747
- McEwen, T. (2011). *The role and impact of forensic evidence in the criminal justice system* (Final Report, NCJ 236474). Washington, DC: National Institute of Justice. Retrieved from <https://www.ncjrs.gov/pdffiles1/nij/grants/236474.pdf>
- Meunier-Sham, J., Cross, T. P., & Zuniga, L. (2013). The seven pillars of quality care in a statewide pediatric sexual assault nurse examiner program. *Journal of Child Sexual Abuse, 22*, 722-739. doi:10.1080/10538712.2013.830665
- Puckett, J. L., & Lundman, R. J. (2003). Factors affecting homicide clearances: Multivariate analysis of a more complete conceptual framework. *Journal of Research in Crime & Delinquency, 40*, 171-193. doi:10.1177/0022427803251125
- Siegel, L. J., & Worrall, J. L. (2014). *Introduction to criminal justice* (14th ed.). Belmont, CA: Wadsworth Publishing.
- Spohn, C., & Tellis, K. (2014). *Policing and prosecuting sexual assault: Inside the criminal justice system*. Boulder, CO: Lynne Rienner.
- Tasca, M., Rodriguez, N., Spohn, C., & Koss, M. P. (2013). Police decision making in sexual assault cases: Predictors of suspect identification and arrest. *Journal of Interpersonal Violence, 28*, 1157-1177.
- U.S. Census Bureau. (n.d.). *QuickFacts: Massachusetts*. Retrieved from <https://www.census.gov/quickfacts/table/PST045215/25>
- U.S. Department of Justice, Office on Violence Against Women. (2013). *A national protocol for sexual assault medical forensic examinations: Adults/adolescents* (2nd ed., NCJ 288119). Retrieved from <https://www.ncjrs.gov/pdffiles1/ovw/241903.pdf>

## Author Biographies

**Theodore P. Cross** is a senior research professor in the School of Social Work at the University of Illinois at Urbana-Champaign. He has been studying the criminal justice response to sexual assault for more than 25 years, mostly concerning child victims but in recent years in relation to adult and adolescent victims as well. He has been the principal investigator of National Institute of Justice grants on the relationship between forensic evidence of sexual assault and both arrests and prosecution and on the reliability of arrest data in the FBI's National Incident-Based Reporting System (NIBRS).

**Megan Alderden** is the research director at the Illinois Criminal Justice Information Authority, the home of the state's Statistical Analysis Center. Prior to joining the

Authority, she was an associate professor of criminal justice at Saint Xavier University, and preceding her work in academia; she was a researcher for the Chicago Police Department and the Authority. Her work focuses on sexual victimization and policing and she has published several government reports and articles in scholarly journals.

**Alex Wagner** is the director of Institutional Research at Fisher College. His research focuses on data quality to support evidence-based policy decisions, in particular in the areas of criminal justice and traffic safety. He is the co-principal investigator of a National Institute of Justice (NIJ) funded study to investigate arrest data quality in NIBRS, the third NIJ funded project he is part of. In addition to his research experience, he taught information systems, statistics, and other quantitative techniques at several universities and colleges in the United States. He is also on the training committee of the Massachusetts Association of Crime Analysts.

**Lisa Sampson, MS**, is the director of the Research and Policy Analysis Division in the Office of Grants & Research, Massachusetts Executive Office of Public Safety and Security. She is also the director of the Massachusetts Statistical Analysis Center providing crime and justice statistics. Previously, she was deputy director of research and planning at the Massachusetts Department of Correction. In her career, she has conducted research to inform state and national policy and practice, often collaborating with public and private partners. She oversees the Provider Sexual Crime Report Form 2A database on sexual assault and rapes reported to medical providers.

**Brittany Peters** holds a BS in criminal justice from Northeastern University (2002) and an MS in criminal justice from Suffolk University (2007). She worked for the Commonwealth of Massachusetts for over a decade in a variety of capacities before joining the Massachusetts Institute of Technology (MIT) Global Health and Medical Humanities Initiative in 2014. Her most recent position with the Commonwealth was as a research analyst in the Research and Policy Analysis Division (RPAD) of the Executive Office of Public Safety and Security (EOPSS).

**Kaitlin Lounsbury's** professional experience includes involvement in several national research projects on child sexual abuse, especially technology-facilitated crimes against children. Her current work primarily focuses on program evaluation of victim service organizations, especially services for victims of child abuse and sexual assault. She also has direct service experience providing mental health counseling and other services for vulnerable populations, including victims of sexual assault, domestic violence, and homelessness.