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Unjamming the Backlog

Between 1977 and 1993, 13 young women were strangled to death in Jackson County, Missouri. Forensic evidence showed that the murders were committed by the same suspect, but for more than a decade, the killer was able to elude the authorities. In 2004, laboratory technicians analyzed a blood sample that had been sitting on a shelf since 1987. DNA evidence from this sample identified 53-year-old Lorenzo Gilyard as the alleged murderer.

The blood sample was finally analyzed as the result of work being carried out at the Office of Justice Programs' (OJP) National Institute of Justice (NIJ), which had created a program to help analyze millions of backlogged DNA samples nationwide. Since its inception, this program has uncovered critical evidence to solve thousands of cold cases and has dramatically enhanced the capacity of local law enforcement to use DNA evidence as a crime-fighting tool.

Due to the popularity of television shows like CSI, many Americans are aware that even the tiniest amount of DNA evidence can help solve the most difficult cases. What most do not know is that there has been a huge backlog of unanalyzed DNA evidence. Hundreds of thousands of pieces of DNA evidence that could have solved cases remained untouched for years. In one instance, 12,000 rape kits—evidence collected from victims through an emotionally painful medical exam with the expectation that it will be used to help identify the assailant—were found collecting dust in a warehouse in Queens, New York.

Earlier this decade Congress approved the first Federal funds to help clear up the backlog. Dr. John Morgan, NIJ Deputy Director for Science and Technology, and his team were tasked with developing and administering this program, but they set out to do more than just create a grant program that States and localities could use to support their forensic work. They understood that DNA is the most significant new tool for solving crimes since the fingerprint, so they created a program that would improve all aspects of how DNA technology is used by State and local law enforcement.

According to Morgan, the White House and Congress eventually committed hundreds of millions of dollars to support the President's *Advancing Justice Through DNA Technology* initiative, and its impact has been astounding.

"Through OJP, NIJ has provided funding and technical assistance that has supported the analysis of more than 2 million samples from convicted offenders, clearing out the entire national backlog that existed in 2003," Morgan says.

To link offender DNA samples to crimes, evidence and biological material from crime victims and scenes must

NAMUs, NATIONAL MISSING AND UNIDENTIFIED PERSONS SYSTEM

The National Missing and Unidentified Persons System (NamUs) is the first national online repository for missing persons records and unidentified decedent cases. Launched in July 2007 by the Office of Justice Programs' National Institute of Justice, NamUs will eventually consist of two databases, one filled with records of unidentified decedents and the other with missing persons reports.

The July 2007 launch marked the availability of the unidentified decedents database; medical examiners and coroners can now upload cases to the site. The missing persons database will be in development through September 2008. The website also provides access to resources such as State clearinghouses, medical examiners and coroners, law enforcement, victim assistance resources, and legislation. In 2009, the two databases will be linked and users will be able to search for matches between missing persons and unidentified decedent records.

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also be analyzed. Through OJP, NIJ programs provided funding to perform analysis on these DNA samples from more than 60,000 cases. Thus far, more than 16,000 matches have been documented as a result. These include matches of crime scene evidence to offender samples and matches of crime scene evidence to other crime scene evidence, providing law enforcement with important links between cases. NIJ has also set aside \$4 million for post-conviction tests to help exonerate the innocent.

NIJ's strategy called on individual States to pass laws requiring the collection of DNA samples from all persons convicted of a felony. Forty-three States have passed such a law, dramatically increasing the number of offender samples in State databases and the number of crimes solved.

The DNA initiative provided more than \$100 million to expand the capacity of State and local crime labs, so more DNA testing can be performed in-house, helping to prevent the development of future backlogs. Training continues for persons involved in collecting, analyzing, or using DNA evidence in the criminal justice system. In addition, NIJ funds the research and development of new tools to analyze smaller samples of DNA evidence and highly degraded evidence, and to make analyzing DNA evidence less costly.

"DNA evidence has changed the way law enforcement solves crimes, and NIJ has changed the way that law enforcement uses DNA," Morgan says. "These efforts have already directly contributed to a significant number of arrests, and thanks to the capacity building component of their work, those arrests represent only a small fraction of the number of crimes that will eventually be solved."

This past September, Morgan and his team of researchers, forensic analysts, and lawyers received the 2007 Service to America Medal in Justice and Law Enforcement for their work that has helped solve thousands of cold cases, dramatically expanded the capacity of local law enforcement to use DNA evidence, and produced numerous products that are changing the way the criminal justice community uses DNA to investigate cases, present evidence in court, and handle mass fatalities. These products include training materials, lessons learned from 9/11, solving missing person cases, and the National Missing and Unidentified Persons System.

For more information on the President's DNA Initiative, visit www.dna.gov, which includes training resources, publications, grant funding, research, and news. For more information on the Service to America Medals, visit www.servicetoamericamedals.org.

NamUs (continued)

According to the Bureau of Justice Statistics, in a typical year, medical examiners and coroners handle approximately 4,400 unidentified human decedent cases, 1,000 of which remain unidentified after 1 year. In April 2005, NIJ convened a summit of law enforcement officials, medical examiners, coroners, forensic scientists, policymakers, victim advocates, and families of the missing. As a result of this summit, the Department of Justice created a National Missing Persons Task Force, which recommended improved access to information about these cases through a national database.

As NIJ investigated the challenges involved in researching unidentified decedent cases, the extent of another, related problem became apparent: a lack of reporting of missing persons cases. Cases of missing persons 18 years old and younger must be reported, but for cases involving adults, reporting is voluntary. Very few States require law enforcement agencies to submit missing person reports on adults, leading to an overall low reporting rate. NamUs will work with State clearinghouses and the public to ensure that this data is included in NamUs and other national-level databases. Thus, the NamUs reporting and searching system will improve the quantity and quality of, as well as access to, data on cases involving missing persons and unidentified human remains.

The unidentified decedents database was initially created by the National Association of Medical Examiners (NAME), an NIJ grantee, using volunteer time and effort. NIJ also capitalized on strategic partnerships with the National Center for Forensic Science (www.ncfs.org/) in Orlando, Florida, and NAME for the unidentified decedent reporting component of NamUs, and with the National Forensic Science Technology Center (www.nfstc.org/) in Largo, Florida, for development of the missing persons database.

The NamUs databases are just one element of a broader program to improve the Nation's capacity to address these cases. NIJ also funds free DNA testing on unidentified human remains and provides family reference-sample kits, at no charge, to any jurisdiction in the country. Other efforts include training law enforcement officers, medical examiners, judges, and attorneys on forensic DNA evidence.

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