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## **HANDOUT 5**

### **AN ACT REGARDING POST-CONVICTION RELIEF ON GROUNDS OF CHANGES IN FORENSIC SCIENTIFIC EVIDENCE**

#### SECTION 1. LEGISLATIVE INTENT

The legislature of Arkansas finds that:

- A. Forensic scientific evidence and the expert testimony that describes its value to a criminal case, is relied upon by law enforcement and prosecutorial agencies in Arkansas to conduct investigations and secure convictions, and has a powerful impact on fact-finders;
- B. The misapplication of forensic scientific evidence, including the misuse of forensic techniques or improper testimony by forensic analysts, was a contributing factor to the underlying wrongful conviction of 46% of the nation's 341 DNA-based exonerations;
- C. These misapplications include reports and/or testimonial conclusions made by experts and forensic analysts concerning a technique that has not been scientifically validated or demonstrated reliable; reports and/or testimonial conclusions concerning a technique that has been discredited by the advance of scientific knowledge; and reports and/or testimonial conclusions that exceeded the capabilities or fitness-for-purpose of the forensic technique at issue;
- D. Over the past several years, the scientific knowledge underpinning many forensic disciplines has grown and evolved. This growth in knowledge has led to the discrediting of a number of techniques and disciplines, which had been used to obtain convictions. Many of these changes in science relating to and including fields of arson, comparative bullet lead analysis ("CBLA"), bite mark analysis, and hair microscopy, have been acknowledged by the nation's preeminent scientific institutions:

1. In 1992, the National Fire Protection Association (“NFPA”) published NFPA 921, a “Guide for Fire and Explosive Investigation,” which set the standards for arson investigations. NFPA 921 found no scientific basis for previous claims by fire experts that certain factors were evidence of arson. Therefore numerous arson investigations and convictions prior to the mid-1990s, when NFPA 921 was widely accepted, may have relied on erroneous science.
2. In 2004, the National Academy of Sciences (“NAS”) issued a report about the technique used in CBLA, which originally assumed that the chemical compound of individual melts of lead were unique, and thus bullets produced from the same batch had identical chemical signatures. However, the report found that there were significant issues with the technique, particularly in the interpretation of the significance of purported CBLA “matches,” when it was determined that two different melts of lead could, in fact, be indistinguishable and analysts could not therefore evaluate the probative value of an association between bullets. In light of this report, the Federal Bureau of Investigation (“FBI”) stopped relying on CBLA in 2005.
3. In 2009, the NAS issued a report in which it found no scientific basis for the assumption that bite mark evidence can establish a positive identification in criminal investigations. Further studies have shown that human skin is not a reliable medium for capturing human dentition due to the elastic properties of skin. Bite mark evidence has been generally discredited by the scientific community, and it has contributed to over two dozen known wrongful convictions and indictments nationwide.
4. The 2009 NAS report also indicated that microscopic hair analysis could not be used for individual identification purposes; nor could it be used to determine how



likely it was that a particular hair originated from a particular individual. It was

shown that hair examiners were overstating the value of hair evidence without scientific evidence to support their conclusions. In response to the NAS report, the U.S. Department of Justice, the FBI, the Innocence Project, and the National Association of Criminal Defense Lawyers (“NACDL”) conducted a joint review of trial transcripts and FBI lab reports where FBI analysts testified for the prosecution as to the strength of microscopic hair comparison evidence. In April of 2015, the group concluded that the testimony of FBI analysts was flawed and exceeded the bounds of science in more than 90% of the cases reviewed. Additionally, the FBI trained hundreds of state level hair analysts, potentially perpetuating the same flawed reports and testimonial conclusions in state courts across the country.

- E. Expert witnesses, who testified for the prosecution that led to a conviction, may subsequently modify or repudiate their opinions in light of evolving standards of forensic science and changes in scientific knowledge;
- F. Advances in science may not merely discredit previously offered scientific evidence, but can also offer new ways of affirmatively proving innocence which were unavailable at trial;
- G. In Arkansas, while the wrongfully convicted may have the opportunity to introduce DNA evidence to prove their innocence, it is particularly difficult for individuals to obtain relief based on newly discovered non-DNA evidence or because of changes in science or expert repudiation;
- H. In Arkansas, while people who have been convicted of crimes may have the opportunity to introduce newly discovered evidence regarding the changed or repudiated testimony of lay witnesses, procedural bars, including strict statutes of limitations, make it particularly

difficult or impossible for people who are convicted, in whole or in part, through the use of forensic scientific evidence to obtain relief based on changes in scientific understanding of the evidence at issue; and

- I. People whose convictions relied upon the misapplication of forensic techniques, improper reports and/or testimony by forensic analysts, or expert testimony that has changed or been repudiated since trial are entitled to a legal mechanism to obtain relief.

## SECTION 2. DEFINITIONS.

- A. “Forensic science” is the application of scientific or technical practices to the recognition, collection, analysis, and interpretation of evidence for criminal and civil law or regulatory issues.
- B. “Forensic scientific evidence” shall include scientific or technical knowledge; a testifying forensic analyst’s or expert’s scientific or technical knowledge or opinion; reports and/or testimony offered by experts or forensic analysts; scientific standards; or a scientific method or technique upon which the relevant forensic scientific evidence is based.
- C. “Scientific knowledge” shall be defined broadly to include the knowledge of the general scientific community and all fields of scientific knowledge on which those fields or disciplines rely and shall not be limited to practitioners or proponents of a particular scientific or technical field or discipline.

## SECTION 3. APPLICABILITY AND BASIS FOR RELIEF.

- A. This article applies to relevant forensic scientific evidence that:
  - (1) was not available to be offered by a convicted person at the convicted person’s trial; or
  - (2) undermines forensic scientific evidence relied on by the state at trial.



- B. A court may grant a convicted person relief if:
  - (1) the convicted person files an application containing specific facts indicating that relevant forensic scientific evidence is currently available and was not available at the time of the convicted person's trial because the evidence was not ascertainable through the exercise of reasonable diligence by the convicted person before the date of or during the convicted person's trial; and
  - (2) the court makes the findings described by Subdivision (1) of this Section and also finds that, had the forensic scientific evidence been presented at trial, there is a reasonable likelihood there would have been a different outcome at the trial.
  
- C. In making a finding as to whether relevant forensic scientific evidence was not ascertainable through the exercise of reasonable diligence on or before a specific date, the court shall consider whether the relevant forensic scientific evidence has changed since:
  - (1) the applicable trial date or dates, or date of entry of guilty or nolo plea, for a determination made with respect to an original application; or
  - (2) the date on which the original application or a previously considered application, as applicable, was filed, for a determination made with respect to a subsequent application.
  
- D. This section does not create additional liabilities, beyond those already recognized, for an expert who repudiates his or her original opinion provided at a hearing or trial or whose opinion has been undermined by later scientific research or technological advancements.

SECTION 4. SERVICE OF PROCESS; RESPONSE BY STATE.

Notwithstanding any other provision of law governing post-conviction relief, a person convicted of a crime and who asserts he did not commit that crime may at any time file a petition relating to forensic scientific evidence that was not available to be offered by a convicted person at the convicted person's trial; or that contradicts forensic scientific evidence relied on by the state at trial. Eligible applicants shall include any and all of the following:



- A. Persons currently incarcerated; civilly committed; on parole or probation; or subject to sex offender registration;
- B. Persons convicted on a plea of not guilty, guilty or *nolo contendere*;
- C. Persons deemed to have provided a confession or admission related to the crime, either before or after conviction; and
- D. Persons who have finished serving their sentences.

SECTION 5. PROCEEDINGS.

The petitioner shall be granted full, fair and prompt proceedings upon the filing of a motion under this Act. The petitioner shall serve a copy of such motion upon the attorney for the state. The state shall file its response to the motion within 30 days of the receipt of service. The court shall hear the motion no sooner than 30 and no later than 90 days after its filing.

SECTION 6. REVIEW BY THE COURT.

- A. If the court determines that the new forensic scientific evidence offered by the petitioner is not favorable to the petitioner, the court shall dismiss the petition.
- B. If the new forensic scientific evidence presented by the petitioner under this Act is favorable to the petitioner, the court shall schedule a hearing to determine the appropriate relief to be granted. Based on the new forensic scientific evidence, the court shall thereafter enter any order that serves the interests of justice, including any of the following:
  - (1) An order setting aside or vacating the petitioner's judgment of conviction, judgment of not guilty by reason of mental disease or defect or adjudication of delinquency;
  - (2) An order granting the petitioner a new trial or fact-finding hearing;



- (3) An order granting the petitioner a new sentencing hearing, commitment hearing or dispositional hearing;
- (4) An order discharging the petitioner from custody; or
- (5) An order granting the petitioner additional discovery on matters related to forensic evidence used to obtain the conviction or sentence under review, including, but not limited to, documents pertaining to the original criminal investigation or the identities of other suspects.

SECTION 7. EFFECTIVE DATE.

This Act shall take effect on [date].