

UNITED STATES OF AMERICA,)
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 Plaintiff,)
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 vs.)
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)
 JEFFREY R. MacDONALD,)
)
 Applicant/Defendant.)
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AFFIDAVIT OF CHRISTINE MUMMA

NOW COMES the Affiant, Christine C. Mumma, who, being duly sworn, attests to the following:

1. I am a licensed attorney in the State of North Carolina and am the Executive Director of the North Carolina Center on Actual Innocence, which coordinates the work of Innocence Projects® in North Carolina and is a member of the national Innocence Network. I have been a licensed attorney since 1999 and I have worked with the North Carolina Center on Actual Innocence since 2001.
2. In the course of my experience investigating and litigating claims of actual innocence, I have gained experience and education in the area of DNA testing. I have reviewed thousands of cases and have worked with forensic scientists who have conducted DNA testing in criminal cases where individuals have been exonerated and on cases where DNA testing has confirmed guilt.
3. Over 273 individuals who were wrongfully convicted of crimes they did not commit have been exonerated by DNA since 1989. In each of those cases, the prosecution was absolutely confident in the guilt of the accused.
4. Since Jeffrey MacDonald's initial request for DNA testing in 1997, there have been significant advancements in the field of DNA testing, which can now be used to identify DNA profiles from very small quantities of trace evidence.
5. Y-STR testing has been developed and enhanced over the last six years. Y-STR testing allows for the specific identification of Y-chromosome (male) markers. It is particularly useful when there is a potential for a mixture of male and female DNA in a sample. It is also useful in including or excluding a specific individual as a contributor of a profile.
6. Laboratory Corporation of America (LabCorp), a private lab used for advanced forensic testing by both prosecution and defense in North Carolina, did not have Yfiler testing kits available from Applied Bioystems (ABI) until late 2006.
7. The "Touch" DNA process of testing for skin cells left through transfer is now possible because of the advancements in the sensitivity of testing kits. Previously, testing was typically only

conducted on visible stains. Testing can now be conducted on swabbings or cuttings even if a stain is not visible. The transfer of just a few skin cells can now result in a detectable profile.

8. Provided the evidence in the Jeffrey MacDonald case has been properly preserved and a chain of custody has been maintained, DNA testing such as Y-STR testing and Touch DNA testing of evidence collected from the investigation of the murders could be very probative.
9. Items collected into evidence which would be significant for testing include the weapons used to commit the MacDonald murders (piece of wood used as a club, two paring knives, and an ice pick); fingernail scrapings taken from the victims; pieces from a surgical glove presumably worn by the perpetrator; and blood drops and smears taken from areas where it appears the perpetrator touched things or may have bled while moving through the home.
10. Although blood typing has been conducted on many of the blood samples collected from the home, each of the MacDonald family members had a unique blood type (O, A, B, and AB) and many people outside the family share those blood types. DNA testing would allow for the development of a unique DNA profile from relevant samples.
11. Advancements in DNA testing since testing of hair evidence was conducted in the Jeffrey MacDonald case have been significant. Y-STR and Touch DNA testing procedures have proven to be critical and effective tools in the pursuit and confirmation of justice.

Further, Affiant says not.

This the 19th day of September, 2011



Christine C. Mumma
Attorney at Law

Sworn to and subscribed before me this, the 19 day of September, 2011



Notary Public

My Commission Expires: May 9, 2016

