

Forensic expert says DNA testing not foolproof

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DAYTON — DNA testing is not foolproof and could incriminate an innocent person, an expert said Friday. Marc Scott Taylor offered a kiss as an example.

Taylor, a California forensic science expert, told a conference he had set up a study that showed DNA could be transferred by a kiss on the cheek and later transferred to an assailant's glove that brushed across the same cheek of the victim.

An individual's DNA can be transferred from person to person, handed off like a hot potato, until miniscule but detectable DNA traces wind up where they could incriminate innocent people, Taylor said.

Taylor, technical adviser to the old "Quincy" television series, has worked on such high-profile criminal cases as O.J. Simpson, "Unabomber" Ted Kaczynski and Kobe Bryant.

He addressed about 75 students, forensic lab workers and attorneys attending the third annual Forensic Bioinformatics Conference at the University of Dayton School of Law.

Just-washed hands offer little or no DNA, but a rub of the nose or touch to the mouth, even drawing the fingers through the scalp, can cover hands with detectable traces that labs can identify, Taylor said.

He pointed to a speck of blood smaller than the tiny raised letters on a penny to demonstrate the potency of DNA detection.

DNA can also be transferred from one material to another when the two are stored together for a long time, Taylor said.

"So transfer does take place, and we need to be aware of it," he said.

In one case, Taylor said, his lab overturned the conclusions of another lab that had meticulously washed its lab benches and exchanged multiple pairs of gloves during its preparation of a human rib bone for DNA testing. The lab workers neglected to consider that the DNA swabs they took from the bone surface may have been left from the hands of those who recovered the bone. Taylor's lab cleansed the bone surface and took its sample from within the bone. It determined that the bone came from a man and not a woman as the original lab had concluded.

The Bioinformatics Conference is directed by Dan Krane, an associate professor of biological sciences at Wright State University. It is a joint presentation of Wright State, the UD School of Law and Forensic Bioinformatics Inc., a DNA testing firm directed by Krane.

More information about the conference can be found at www.bioforensics.com.