## AFFIDAVIT OF JOYE M. CARTER, M.D.

My name is Dr. Joye M. Carter. The following statements are, to the best of my knowledge, true and correct:

I am presently the Chief Forensic Pathologist for Marion County, Indiana. I previously held the position of Chief Medical Examiner of Harris County, Texas. On January 3, 1999, in my capacity as Harris County Medical Examiner, I performed the autopsy of Melissa Trotter (OC 99 - 2). In June of 2000, I testified in Swearingen v. State, cause no. 99-11-06435-CR, in the  $9^{th}$  District Court, Montgomery County, Texas.

At trial in Mr. Swearingen's case I was asked if I had formed an opinion about the date of death in this case. Review of my trial testimony, shows that I testified that I had formed an opinion that the date of death was 25 days prior to disappearance. As reflected in my testimony, this opinion was based primarily on the external appearance of the body, including marked decomposition of the head and neck region, and on the degree of maggot activity in this region of the body. I also remarked on the presence of fungal growth, noting that these organisms thrive in dark, dank and wet environments and are slow growing.

Review of my testimony reveals that I was not asked by prosecutors, or by defense counsel, to address the significance of my internal examination of Ms. Trotter's body. Nor was I asked to address in detail the question of how long Ms. Trotter's body had been left exposed in the Sam Houston National Forest. Instead, the focus of the prosecution and the defense was on whether the forensic evidence indicated a rape or kidnapping had occurred. The majority of the questions from both sides were directed at whether autopsy findings indicated vaginal bruising, blunt trauma to the head, and whether the cause of death was asphyxiation by ligature or a sharp forced entry wound to the neck.

For purpose of making this statement, I have reviewed the autopsy report of Melissa Trotter and autopsy photographs in her case. I have also reviewed several pieces of forensically important information that, to the best of my recollection, were not made available to during trial or pretrial proceedings. This information includes a video of the crime scene dated January 2, 1999, the date the body of Melissa Trotter was recovered from the Sam Houston National Forest, medical records giving Melissa Trotter's weight before she was reported missing, and temperature data showing daily high, low and average temperatures in the Conroe, Texas area for the period December 8, 1998 through January 2, 1999.

The medical record shows that Ms. Trotter weighed 109 pounds at her doctor's office on November 23, 1998, two weeks before the date she was reported missing. The

crime scene video reveals that Ms. Trotter's body was found in a relatively open, only partially shaded space in the Sam Houston National Forest, rather than in a dark, enclosed or sheltered space. Her lower extremities were clothed; however, the clothing on her upper body was bunched up around her arm pits leaving her torso nude from just below the navel to just above the breasts. The temperature data shows that the average temperature for the relevant period was 50° Fahrenheit. The average high temperature was approximately 62°, and the average low temperature was approximately 40°.

The forensic opinions, herein, address the significance of autopsy findings made during the internal examination of Ms. Trotter body in the context of the foregoing information. They represent what I would have testified to at trial if I had been provided this information and if attorneys for the state or defense had asked me to address the significance of findings made pursuant to the internal examination of Ms. Trotter's body.

Decomposition in this case was strikingly uneven. The decomposition seen in during the external examination of the body, particularly of the head and neck region, was substantial. The autopsy report and photographs show partial skeletonization of the head and neck region due to decomposition and insect and mammalian scavenging. As stated in the report, soft tissue was absent from the nose and midfacial areas, and the tongue was dark due to decompositional changes, and there was skin slippage and slippage of the scalp.

The amount of decomposition described pursuant to the internal examination of the body appears less advanced. The autopsy report reflects that internal organs were in their usual anatomic positions. Several of these organs, including the pancreas, the spleen and the liver, were dissected out, sectioned, examined for pre-existing pathology, photographed and described. Organ weights were near or within normal range.

Pancreas, spleen and liver tissues is known to autolyze quickly. At room temperature, it is not unusual for these organs to liquefy within days. In this case, the body was found exposed in relatively open, only partially shaded space. Temperatures data indicates and average temperature of approximately 50 degrees, with high temperatures occasionally reaching the mid-seventies. The presence of these organs in the condition described at autopsy supports a forensic opinion that the body of Ms. Trotter was not exposed in the Sam Houston National Forest until some time after December 12, 1998. These internal findings support a forensic opinion that the body had not been exposed more than two weeks in the forest environment.

The description of the gastrointestinal tract also supports the foregoing forensic opinion based on autopsy descriptions of the pancreas, spleen and liver in this case. Mild and moderate decompositional changes were noted in some regions; however, the gastrointestinal system was found intact. Furthermore, gastric mucosa, a fragile tissue which decomposes quickly, was still present and was rinsed and described.

Several other findings pursuant to the internal examination are consistent with a date of exposure in the Sam Houston National Forest within fourteen days of discovery,

and incompatible with exposure for a longer period of time. For example, the breast tissue was firm and intact, and the gallbladder mucosa is described as yellow-green and velvety in appearance.

The weight of the Trotter's corpse at autopsy increases the level of confidence that can be placed in the forensic conclusions drawn from findings made during the internal examination of the body. Whether the process of decomposition results in liquification or in desiccation of body tissues, substantial weight loss will normally occur in bodies left for a three week period in the type of environment in which Ms. Trotter's body was found. In this case, the weight of the body nude at autopsy (105 lbs) was only four pounds less than her weight at her doctor's office (109 lbs) two weeks before her appearance. (A newspaper account at the time of disappearance gives her weight alive as 105 pounds). This indicates that Ms. Trotter's body lost less than 4% of its weight from the time the body was left in the woods to the time it was autopsied, and supports a forensic opinion that Ms. Trotter's body was left in the woods within two weeks of the date of discovery on January 2, 1999.

Signet, Joye M. Carter, M.D.

SUBSCRIBE and SWORN before me the undersigned authority on 315 day of Colober, 2007, to certify which witness my hand and seal of office.

Notary Public

COUNTY OF MARION STATE OF INDIANA

SEAL SEAL

CONNIE M. FULP Commission # 514090 Res. of Marion Co. Comm. Exp. 2-8-2016