

## **DNA Identification of Human Remains Obtained from a Tiger Shark**

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On September 4, 2010 a local investment banker caught a 12ft tiger shark while on a deep-sea fishing trip off the coast of New Providence, Bahamas. While hauling in the shark he noticed a human leg was in the mouth of the shark and called the Royal Bahamas Defense Force. Upon examination the officers with the Defense Force found human remains including the right leg, two severed arms and a severed torso inside the shark. The Royal Bahamas Police Force suspected the human remains were those of a man who disappeared from a boat off Jaws Beach (named after an island where one of the Jaws movies was filmed). The suspected victim went on a boating trip with friends off Jaws Beach off of New Providence Island on August 29, 2010 and encountered engine trouble. The victim tried to swim to Jaws Beach in the Bahamas after his boat's engine failed. It is unclear if the victim was alive when he was eaten. Initially, fingerprints were used to identify the victim, but human DNA identification was ultimately desired for resolution of this case.

This presentation will describe the process used to perform DNA identification in this case and the results obtained. Significant in this process was the relative short time from the incident and the recovery of the remains. This factor and the quick response of the RBPF for the recovery and conservation of evidence, made DNA identification possible and a quick resolution to this case. All items submitted for testing were processed for DNA analysis using Promega's PowerPlex16® kit. The loci tested were D3S1358, TH01, D21S11, D18S51, Penta E, D5S818, D13S317, D7S820, D16S539, CSF1PO, Penta D, vWA, D8S1179, TPOX, FGA and the gender determination locus Amelogenin. The results reported in this case were determined by procedures that have been validated according to the FBI's Quality Assurance Standards for Forensic DNA Testing Laboratories.