**The Universal Biopsy Tool**

**Dr Eleanor Graham, Prof Guy Rutty & Mr Jim Strupish**

**BACKGROUND**

The universal biopsy tool combines the two vital components of DNA sample collection and preservation, into a single, safe, easy to use instrument. Originally designed for use in disaster victim identification projects. The device is designed to be used in any environment, indoors or outdoors to allow rapid and safe collection of soft-tissue samples for identification of the deceased. The preservation buffer performs a dual function by initiating the DNA extraction process whilst protecting the DNA at room-temperature. Safe handling of the sample is continued in the DNA laboratory as contaminated tissues no longer require manual maceration prior to extracting DNA.

**DEVELOPMENT TIMELINE**

| Jan 2005 | Idea conceived after Asian Tsunami |
| Jan 2006 | Home Office funded six-month Disaster Victim Identification project |
| Aug 2006 | Internally funded 18-month design development and prototype testing |
| April 2008 | EMDA Innovation Fellowship awarded |
| July 2008 | Worldwide patent application filed |

**INSTRUCTIONS FOR USE**

1. Identify sample to be collected, clean surface if required
2. Place devise onto flat surface, unscrew and remove biopsy tool
3. Press the tool approx 2-3cm into the collection site
4. Rotate the biopsy tool 360° and remove from sample collection site
5. Replace biopsy tool in original container and firmly tighten the lid – Store at room temperature

**CURRENT ACTIVITY**

- External testing of prototype with the national Forestry Commission and international partners in Germany, Australia and America
- Design finalisation
- Market assessment
- Business plan production
- Identification of additional markets
- Expansion of product range to suit different markets

For more information contact:

**Dr Eleanor A.M. Graham**

East Midlands Forensic Pathology Unit
3rd Floor RKCSB, Leicester Royal Infirmary
Leicester, LE2 7LX, UK
Email: eamg1@le.ac.uk Tel: 0116 252 5872