Prototype hand-held drug testing device launched

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The world's first prototype of a hand-held fingerprint drug testing device has been created by UK technology company Intelligent Fingerprinting.

The unique device detects drugs and other substances from the sweat contained in fingerprints and will enable mobile testing with instant results.

A spin-out of the University of East Anglia (UEA), Intelligent Fingerprinting Ltd is based in the NRP Innovation Centre at the Norwich Research Park. The company developed the prototype with eg technology – a product design, development and engineering consultancy based in Cambridge.

Paul Yates, business development manager at Intelligent Fingerprinting, said: "The launch of this prototype is a significant milestone. There has already been considerable worldwide interest in the use of the technology for testing within a wide range of applications, including criminal justice forensic science, homeland security, and institutional testing such as prisons and workplaces. But the ability of a hand-held device to carry out testing in-situ brings a whole new range of benefits and opportunities."

The device will enable testing of fingerprints for illegal drugs and other substances using disposable cartridges. The samples are quick and easy to collect and do not require specialist handling or biohazard precautions. Because of the imaging of the fingerprint, they have an in-built

watertight chain of evidence continuity and are almost impossible to cheat.

The potential uses for the device are wide ranging and cover testing individuals in the workplace - especially in safety critical industries where there is a need to judge whether someone is 'fit for duty' - through to screening drivers at the roadside for drug-driving impairment.

David Russell, CTO of Intelligent Fingerprinting and Professor of Chemistry at UEA's School of Chemistry, said: "The development of the Intelligent Fingerprinting hand-held testing device has been a technological success. Working closely with eg technology we have been able to design a device that carries out the full analysis and imaging of a fingerprint in only a few minutes. The first prototype will be able to test individuals for drugs of abuse but we will be working to widen the range of substances to include other drugs and health markers that are found in fingerprints."

The prototype is scheduled to go into full production in 2012 and the team will work with customers to develop new applications.

Danny Godfrey, director of eg technology, said: "Intelligent Fingerprinting's core intellectual property is fascinating, offering a unique, robust way of linking a test result to the individual. Designing a device to automate their well-defined laboratory process has required input from all of our skill groups – microfluidics, optics, electronics, software, industrial and mechanical design. The release of the prototype is a major milestone towards the unveiling of the production device next year and we're delighted to be part of such an exciting development."

Provided by University of East Anglia