

Making the Most of Masters Work based projects

# Investigating Innovative Forensic Science Techniques through Industry Focused Research

This 13 week work based project was based at LGC Forensics in Culham. The project title was "Examining the Performance and Robustness of the ParaDNA® Screening and Intelligence Assay Systems"

This project involved assessing the impact of common forensic presumptive tests on the ability to obtain results using novel ParaDNA systems.

## The results demonstrated:

- Forensic fingerprint enhancement tests and body fluid presumptive tests show little impact on a novel rapid DNA technology.
- Direct PCR shows robust amplification of forensic samples.

### PROGRAMME COORDINATOR

LYNSEY SHAW - CENTRE FOR FORENSIC SCIENCE, UNIVERSITY OF STRATHCLYDE

"Work based MSc projects give our students an opportunity to work in the forensic science industry, applying their newly acquired knowledge to a current and relevant piece of forensic research. This is an ideal preparation for the time after their studies and helps to ease the transition from university into a career.

In this instance Gillian excelled and published valuable research as a result of her project, gaining an excellent reference and subsequent employment in the field of scientific research."

## EMPLOYER EXPERIENCE

"Having MSc students working with the ParaDNA team has enabled us to carry out research into a number of areas of our technology that we would not otherwise have had the resource to investigate. In some cases the results of this work have been incorporated into major project streams leading to improved product performance. In other cases they have carried out valuable proof of principle work for alternative applications which we have been able to share with other parts of the LGC business. Many of the research projects have also resulted in publications in peer review journals.

It also allows staff to gain experience of mentoring, an opportunity that would be otherwise very limited due to the small size of our team. Hosting MSc students at LGC has helped us to foster good relationships with a number of academic institutions and raised the profile of the work we do both here in ParaDNA and across LGC as a whole."



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#### NICOLA DUXBURY - LGC FORENSICS

### STUDENT FEEDBACK

GILLIAN DONACHIE - MSC FORENSIC SCIENCE, UNIVERSITY OF STRATHCLYDE

"I found the Masters placement to be highly beneficial as it allowed me an excellent opportunity to add to my lab experience and learn new skills in an industrial environment. I was able to work with a team of people who put in time and effort with me to develop a research plan which I was interested in and was motivated to work hard to achieve the project aims. We developed a good working relationship which continued after the placement and allowed us to publish my research as a scientific paper, which was an excellent skill for me to learn and add to my CV.

Furthermore, I feel the placement experience has improved my CV and the time I spent on placement was a positive attribute which potential employers were interested in during the job application process. I also found I was less intimidated by job applications (including interviews) as I knew more what to expect as a result of undertaking the same process when applying for my placement role. I fully believe the placement experience has helped me move on in my career and encouraged me that scientific research was an area I wished to remain in."



Strathclyde Glasgow