Title – Innovating research – Spotlight on Forensic Science

Organised by – Professor N Nic Daeid and Professor S Black

Venue for first event – Royal Society of Edinburgh, George Street, Edinburgh.
Date – 5th December 2013

Venue for second event – TBC
Date – TBC (early 2014)

Partners – Technology Strategy Board, Forensic Science Special Interest Group, Scottish Enterprise

This event is free to participants and no funds are available to meet travelling costs. Applications to participate must be emailed to **both** n.nicdaeid@strath.ac.uk and s.m.black@dundee.ac.uk by 5pm 18th October 2013 for consideration.

Summary:
These two events aim to galvanise the opportunities for innovation, knowledge transfer, interdisciplinary and commercial gains which could be associated with research in forensic science in its broadest sense. The events will encourage exciting new combinations of academics and practitioners working in direct partnership with SME's, to turn their attention to the major challenges associated with modern forensic science. They will identify research needs and opportunities and define innovation challenges and pathways for short, medium and long term collaboration.

The initial event is aimed at early career researchers, including post doctoral researchers, within the first 7 years of their first academic post. A background in forensic science is not necessary; however a willingness to have an adventurous and creative cross disciplinary approach to research and the desire to work on real world problems is essential.

Event 1 will be run as an unconventional 'sandpit' exercise throughout one full day of intensive interaction. The intention of the event is not to be prescriptive by identifying specific research issues, but rather, to let the innovation and interdisciplinary experience drive the final outcome. Teams of participants will be asked to devise and deliver potential research ideas and scope opportunities centered round the following wide remit:

Theme 1. Identification
        a. Associated with people
        b. Associated with objects

This could include, for example, biological characterisation and identity (Biometrics), chemical characterisation and identity, cyber identity, but also interpretation of Big Data and pattern recognition to elucidate identity.

Theme 2. Interaction
> a. Associated with people
> b. Associated with objects

This could include, for example, how trace evidence (fibres, paint, glass, fingerprints, DNA) may transfer and/or persist across different surfaces under different conditions or the interpretation of Big Data and pattern recognition to elucidate an association between two things such as a drug or an explosive with a precursor, a bullet with a weapon or how people interact with each other electronically.

Theme 3. Communication
> a. Associated with people
> b. Associated with objects

This could include, for example, electronic communication of data or images between people, electronic devices or the internet, or communication between multidisciplinary groups (scientists/legal practitioners/law enforcement) in understanding science.

Each project idea should involve around 10 participants initially and it is important that a wide range of skills and backgrounds are represented in each team. A facilitator will be assigned to each group and as themes start to develop the facilitators will move participants between groups to maximise the overall potential of the team to work on the emerging idea collaboratively. At the end of the day, it is anticipated that 6 teams and 6 projects will emerge.

Each team will have two weeks to prepare a written and PowerPoint presentation – selling their research project to a panel comprising the organisers, facilitators, partners and other co-opted parties. The panel will rank the presentations independently in order of suitability for further refinement and the top two will be selected to progress to the second event.

Event 2 will be a one day workshop driven by Scottish Enterprise and partners. Scottish Enterprise will have identified suitable SME's to work with each successful project team and this event will give them the opportunity to meet with the potential SME partners and refine their proposals. The participants will receive instruction and advice from the specialists on how to prepare their grant application so that it has the best chance of success.

Liaison with funding bodies through the direction of Scottish Enterprise and its partners will ensure that the selected projects have the best chance of success to secure funding. This will be an exciting, dynamic series of events, engaging the participants in a novel way to devise a new mechanism for the development of research within the forensic science domain.

Application Information:

Participation is free and open to early career researchers and post-doctoral researchers from all disciplines across science, engineering and the humanities. Please note that no funds are available to assist with travel.

To apply for a place at the first event please complete the attached form and email to **both** Professor Niamh Nic Daeid (n.nicdaeid@strath.ac.uk) and Professor Sue Black, (S.M.Black@dundee.ac.uk). To be eligible for consideration, applications must be received by 5pm on 18th October 2013 and participants will be notified regarding their success by Friday 1st November. Applicants **must** be early career researchers, including post-doctoral researchers, and within the first 7 years of their first academic post. Applicants must be able to participate for the whole of 5th December in Edinburgh and be available for a full day in January at a time and venue yet to be confirmed.

The first event will be restricted to a maximum of 60 research participants.

Order of events:

Event 1:

Welcome to the event – Prof N Nic Daeid and Prof S Black

Introduction to developing a collaborative approach to research
Professor Sir Jim MacDonald, Principal, University of Strathclyde

Separation into six groups – according to theme and subjects.

Identification of major challenges in each of the 6 areas.

Initial discussion and topic discussion followed by short (5 min) presentation from each group on the broad theme identified.

Re-organisation of teams according to strengths and aligned to emerging topics.

Focus on a single research issue for each theme and preparation of research outlines of an ambitious programme around this subject playing to the strengths and interdisciplinarity of the participants and possible partners.

Final short presentation (10 mins max) on the proposed research and an initial nomination of a Principal Investigator (which can change).

A written proposal (no more than 2 sides of A4) and a PowerPoint presentation (no more than 12 slides including title page and list of team participants) for each project should be sent by email to **BOTH** Prof N Nic Daeid and Prof S Black by 5pm on the Friday 20th December 2013 at the latest. A panel of experts will grade each submission independently and a final two research projects will be selected to progress to the second event. These will be viewed as the research projects that are most likely to secure full research funding.

Event 2:

Welcome to the event – Prof N NicDaeid and Prof S Black

Presentation by Scottish Enterprise
TBA

Presentation by funding bodies, identification of funding streams.
TBA

Separation into two groups – one assigned to each organiser

Each group has a brief introduction from the SME(s) assigned by Scottish Enterprise

Development and refinement of research idea

Presentation of both projects (20 mins max)

After Event 2, advisors will be assigned to each group to assist in the preparation of the proposal for submission to an appropriate funding body (RCUK, EU etc).

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Royal Society of Edinburgh, George Street, Edinburgh. 5th December 2013.

Name………..

Academic Address………

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Email……..

Tel No………

Summary of academic career:

What I will bring to this meeting:

This form must be completed and sent by email to **both** n.nicdaeid@strath.ac.uk and s.m.black@dundee.ac.uk to be received no later than 5pm 18th October 2013. Submission of an application does not guarantee acceptance to the event. Notification of success will be made by email no later than Friday 1st November 2013.