GUIDANCE ON FORENSIC SCIENCE RESEARCH FUNDING ROUTES

Introduction

This document provides guidance on options for funding for forensic science research based on the current landscape. This is intended to aid project owners in identifying the most appropriate funding route and in doing so increase the chance of a successful funding application.

This guide has been put together based on the information available at the time and is not exhaustive.

Funding routes are mapped based on attributes such as research focus/type, sector and discipline. These attributes are explained in more detail in the following sections.

1.0 Attributes

1.1 Research focus/type

UKRI categorizes research in their forensic science portfolio in four categories:

- Foundational tools/techniques
- Application/use
- Infrastructure/Capability
- Impact/effect

For the purpose of this guidance document, "Horizon Scanning/Blue sky thinking" has been added as a fifth category due to the frequent citing of this as a gap and priority action area for forensic science across stakeholders within the forensic science community.

Technology readiness level (TRL) is a scale often used to describe research focus. Table 1 below maps the categories of research focus/type against the TRL scale for ease of reference and comparison. This is not intended to be an exact match, only to give some reference to facilitate users of this guide in identifying which category their research falls into.

Table 1

Research focus/type	Equivalent TRL
Horizon Scanning/Blue sky thinking	TRL 1 & 2
Foundational tools/techniques	TRL 3 & 4
Application/Use	TRL 4, 5 & 6
Infrastructure/Capability	TRL 7
Impact/Effect	Any TRL

1.2 Sector

Certain funds are sector specific and therefore the research lead and project partners may have an effect on the most appropriate funding route.

The sectors used within this guidance include:

- · Policing focused with academic partners
- Research Institutions
- Private Sector- All
- Private sector SME's
- All sectors

Relevant sectors for each fund are indicated through block colour on the map as follows:

Research Institutions
All Sectors
Private - All
Private – SME's
Policing focused with academic partners

1.3 Discipline

Many funds are discipline specific and therefore research topic is an attribute used within this guidance document. Broadly the topics used to categorise funding routes within this guidance document are:

- All Forensic Science Disciplines
- Analytical Chemistry
- Biology/Biochemistry
- Digital and Cyber
- DNA and Genetics
- Fingerprints
- Identification
- Language, Linguistics and Speech
- Policing and Criminal Justice
- Psychology
- Sensors and Imaging
- Other

2.0 Map

The map below guides the user to identify the most suitable funding routes for any specific piece of research based on the attributes of the research as described above. The map is a summarised format for this information and funding streams may have additional conditions over and above those stated in the diagram.

Some additional information is presented within Table 2; however users of this guide should also refer to relevant additional materials provided by the funding body in addition to the information provided in this guide.

For an accurate up to date list of open calls, please see the funding finder search tool hosted on the UKRI website, linked here: Opportunities – UKRI

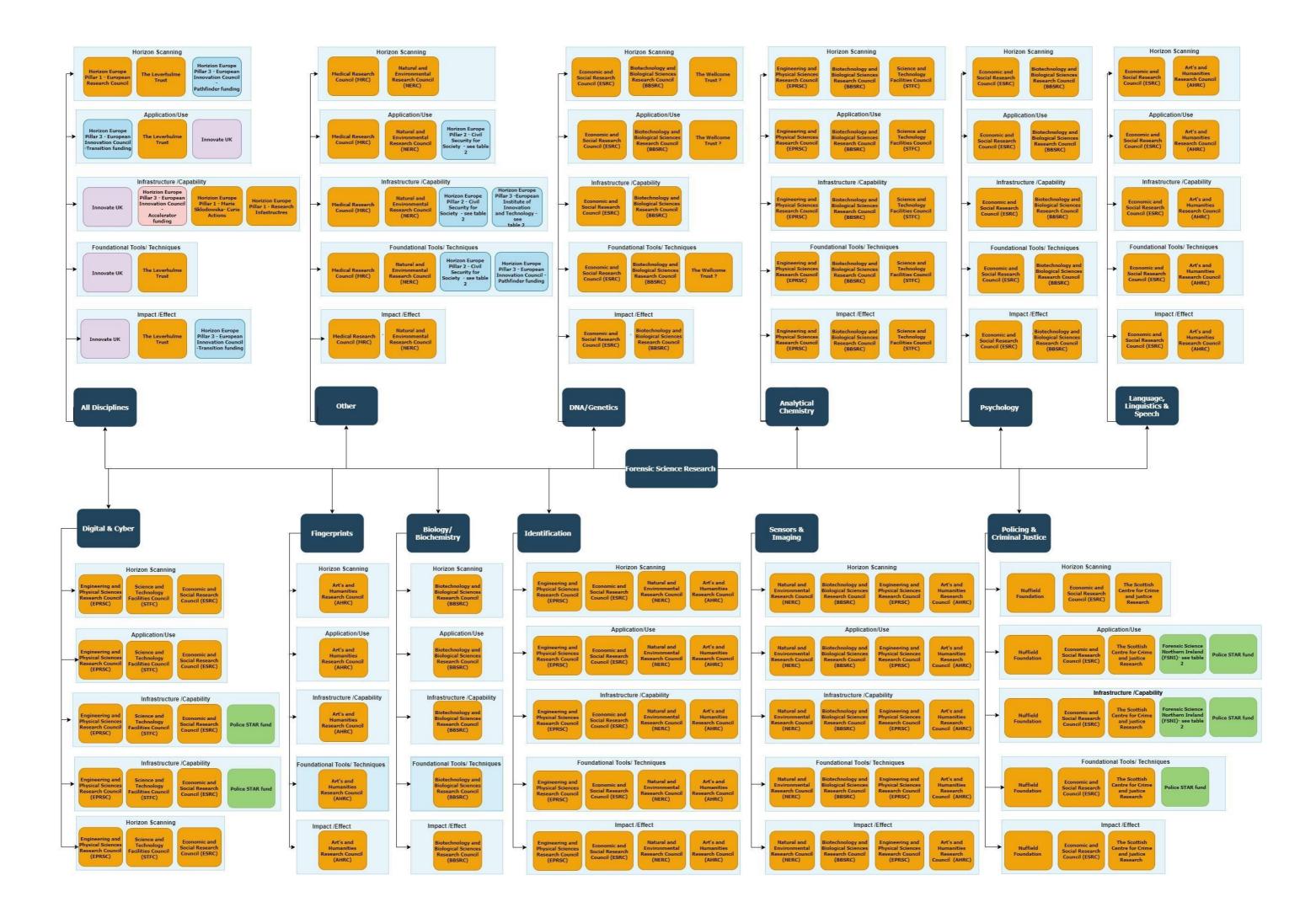


Table 2 - Funding Stream Summary

A short summary of each of the funding streams featured on the map is detailed below for more information.

Funding Stream	Funding type	Scope of fund	Fund Research areas	Historic funding
Horizon Europe Pillar 1 – European Research Centre	International	International	'Frontier Research' in any discipline	New fund
Horizon Europe Pillar 1 – Marie Sklodowska- Curie Actions	International	International	Equipping researches with new knowledge and skills through mobility and training	New fund
Horizon Europe Pillar 1 – Research Infrastructure	International	International	Integrated and interconnected world class research infrastructures - a lot of focus on digital elements of interconnectivity, although not exclusively.	New fund
Horizon Europe Pillar 2 – Cluster 6 – Civil Security for Society	International	International	A varied range of calls under the theme of Civil security including but not limited to biometrics, sexual violence, firearms, crime scene investigations and drugs. Please consult Horizon Europe – Pillar 2 Cluster 6 documentation	New fund
Horizon Europe Pillar 3 – European Innovation Council	International	International	Support to innovations with breakthrough and market creating potential	New fund
Horizon Europe Pillar 3 – European Institute of Innovation and Technology	International	International	Nurturing entrepreneurial talent and supporting new ideas	New fund
Wellcome Trust	3 rd Sector	International	Overall, the fund focuses primarily on mental health, global heating and infectious diseases however genomics/genetics are a large part of the portfolio.	Only one project under the key word 'forensic'. 43 projects under the key word 'DNA'.
Nuffield Foundation	3 rd Sector	National	3 main strands; education, justice and welfare. There is a criminal justice strand within 'Justice' and the primary focus is 'youth justice'. Limited relevance to forensic science.	Unknown
Police STAR fund	Government	National – Police force bids only	Research must be science, technology, analysis and research based and align with police priorities.	5 forensic science projects in 2020/2021 round
The Scottish Centre for Crime and Justice Research (SCCJR)	Government/Scottish Funding Council	National – Primarily Scotland only	Crime and Justice focused with some of the more relevant topics being 'Evidence, statistics and trends' and 'gender, crime and criminal justice'.	No search results for projects directly related to key words such as 'forensic' 'DNA' 'digital forensics' 'fingerprints' etc. Projects focus more broadly on criminal justice and policing.
Forensic Science Northern Ireland (FSNI)	Government	Northern Ireland Only	Mainly focused on innovation as opposed to research. Joint R&D strategy with NI police forces.	Unknown
Economic and Social Research Council (ESRC)	UKRI	National	Main research priorities include; Covid-19 research; Mental health; Housing; Productivity; Understanding the macroeconomy; Climate change; Innovation in health and social care; Trust and global governance in a turbulent age.	ESRC funded 39 forensic science related projects with a total value of £12.6 million between 2009 and 2018. The main subjects of these project were policing/criminal justice, psychology and identification. Currently 5 funding calls open which are relevant.

Engineering and Physical Sciences Research Council (EPRSC)	UKRI	National	Remit covers chemistry, engineering, information and communications technologies, materials, mathematical sciences and physics. There are no restrictions on application areas, but the majority of research is in engineering and the physical sciences.	Several of the key themes of the remit are relevant to forensic science research. 37 projects with a total value of £28 million funded between 2009-2018. The main subjects of these projects were digital and cyber, sensors and imaging, and analytical chemistry. Currently 11 funding calls open which are relevant.
Innovate UK	UKRI	National	Overall remit is to drive sustainable economic growth through business-led innovation. No restrictions on application areas, however priority areas include; Al; ageing society, health and nutrition; Clean growth and infrastructure; and mobility, manufacturing and materials.	38 projects with a total value of £4.6 million have been funded between 2009 -2018. The main subjects of these projects were digital and cyber, analytical chemistry and DNA and genetics. Currently 1 funding call open which is relevant.
Biotechnology and Biological sciences research council (BBSRC)	UKRI	National	Three key themes within the research remit which are; Advancing the frontiers of bioscience discovery; Tackling strategic challenges (e.g. sustainable agriculture, health, and clean growth); and building strong foundations.	19 projects with a total value of £5.3 million have been funded between 2009-2018. The main subjects of these projects were sensors and imaging, DNA and genetics and psychology. Currently 6 funding calls open which are relevant.
Medical Research Council (MRC)	UKRI	National	Overall remit is to improve human health through world-class medical research.	1 project with a value of £94,000 funded between 2009-2018. Currently 1 funding call open which is relevant.
Natural and Environmental Research Council (NERC)	UKRI	National	Priority areas within the remit are; Environmental solutions, pushing the frontiers of understanding, Productive environment, Healthy environment, resilient environment, digital environment, global environment and best environment for R&I.	3 projects with a total value of £459,308 between 2009 – 2018. The main subjects of these projects have been very niche areas within the wider topics of identification and sensors and imaging.
Arts and Humanities Research Council (AHRC)	UKRI	National	Broad remit around humanity and society, human interactions and the historical past.	8 projects with a total value of £3.3 million between 2009 – 2018. The main subjects of these projects have been very niche areas within the wider topics of language/linguistics and speech, fingerprints, identification, and sensors and imaging. Currently 6 open funding calls which are relevant.
Science Technology Facilities Council (STFC)	UKRI	National	Overall broad remit is; Discovering the secrets of the Universe; Developing advanced technologies; and Solving real-world challenges. Within this there are strategic themes including but not limited to; data intensive science; developing advanced technologies; solutions for the 21st century.	5 projects with a total value of £1 million between 2009-2018. The main subjects of these projects have been niche areas in analytical chemistry. Currently 4 open funding calls which are relevant.
The Leverhulme Trust	3 rd Sector	National	Overall remit is to fund outstanding scholarship based on the originality, importance, significance and merit of the project. Research aimed at immediate commercial or industrial application is not eligible for funding, as is applied medical research.	Limited projects funded relevant to forensic science however one project of note on DNA traces.
'What Works'	Government (Policing) and UKRI	National	Key areas of research are; crime reduction, local economic growth, public sector reform, public policy, early intervention and wellbeing	Currently 20 projects related to forensics and evidence gathering under the 'Crime Reduction' strand.