

STFC External Innovations and 21st Century Challenges Schemes

November 5th 2019
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Innovation from STFC

People, Training, and Knowledge Exchange

- iCASE Studentships
- RSE Enterprise Fellowship
- IPS Fellows
- Knowledge Transfer Partnership
- GCRF and Newton
- IAA

Brokerage and Engagement

- 21st Century Challenge Networks
- Exploration Awards
- IPS Fellows
- IAA

Commercialisation, Translation, and Company Creation

- Follow on Fund
- Innovation Partnership Scheme
- CLASP
- Innovations Technology Access Centre
- Business Incubation
- UK Innovation & Science Seed Fund
- RSE Enterprise Fellowship
- IAA

21st Century Challenges

Ensures that innovative science, technology, applications and expertise developed through the STFC Science programme are harnessed to provide solutions to 21st Century Challenges

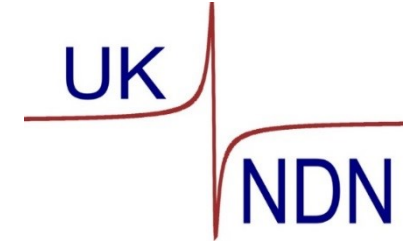
	Networks	Exploration
Brief	Create new multidisciplinary research communities with the inclusion of government departments, agencies, industry and academic communities	Exploration of challenge-led priorities and identification of where STFC-funded capabilities can be applied to help provide solutions to these
Max duration	3-4 years	Up to 12 months
Max fEC cost	£300-600k	<£25k

Current networks



STFC Air Quality Network

Advanced Radiotherapy



Cancer Diagnosis Network+



THE GLOBAL NETWORK ON SUSTAINABILITY IN SPACE



Previous networks



Space weather REsearch Network (SEREN)

STFC/NERC Bioinformatics & Environmental 'Omics Network



International Development Assistance

Global Challenge Research Fund: cutting-edge research that addresses the challenges faced by developing countries

- promote challenge-led disciplinary and interdisciplinary research, including the participation of researchers who may not previously have considered the applicability of their work to development issues
- strengthen capacity for research, innovation and knowledge exchange in the UK and developing countries through partnership with excellent UK research and researchers
- provide an agile response to emergencies where there is an urgent research need



Newton Fund: promote economic development of either the partners countries or, through working with the partner country, to address the wellbeing of communities



More information

<http://www.newtonfund.ac.uk/>

<https://stfc.ukri.org/funding/research-grants/funding-opportunities/gcrf/>

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Bridging for Innovators (B4I)

B4I – Bridging for Innovators – helps companies to overcome product, manufacturing or process performance issues by working closely with STFC facilities to develop projects that address specific innovation challenges to accelerate business productivity



More information

<https://stfc.ukri.org/funding/research-grants/funding-opportunities/closing-calls/bridging-for-innovators-funding-programme/>

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Other Activities

- **Quantum Technologies for Fundamental Physics (QTFP) Programme (£40m)** - Joint STFC and EPSRC call, went live on 30 September. Interdisciplinary research teams to demonstrate how the application of quantum technologies will advance the understanding of fundamental physics questions.
- **National Quantum Computing Centre** - Part of National Quantum Technology Programme
- **Space Weather Innovation, Measurement, Modelling and Risk (SWIMMR) Programme** - Joint with RAL Space and NERC, £20m programme to improve forecasting of solar activity that can disrupt national infrastructures including satellite communications and the National Grid.

Impact Acceleration Accounts

Flexible funding provided directly to institutions

- Enabling knowledge exchange
- Proof of concept projects
- Market analysis
- Industry engagement



The University Of Sheffield.

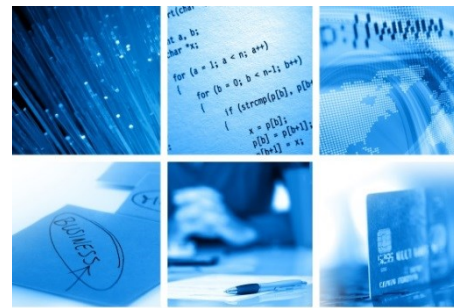
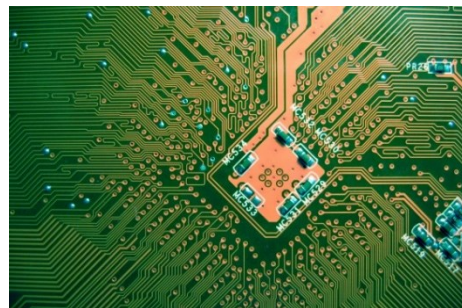


More information

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Knowledge Exchange Schemes

	IPS	Follow on fund	IPS Fellowships	CLASP
Brief	To use STFC funded research or technology to develop or enhance a new product or technique	To provide proof of concept funding to develop an idea which could lead to a commercial endpoint	To work alongside academics and encourage industry engagement with the university.	Themed call to apply STFC funded research/technology to help address societal challenge areas
Max duration	3 years	1 year	4 years	3 years
Max fEC cost	£450k	£110k	No max cost	No max cost
Industry support?	Essential	Not required	-	Advised



KE 2020

	Call opens	Call closes	Panel meeting
CLASP EOI	6 th November 2019	8 th January 2020	February 2020
CLASP full stage	9 th March 2020	20 th May 2020	August 2020
KE February 2020	4 th December 2019	20 th February 2020	May 2020
KE September 2020	3 rd June 2020	3 rd September 2020	December 2020

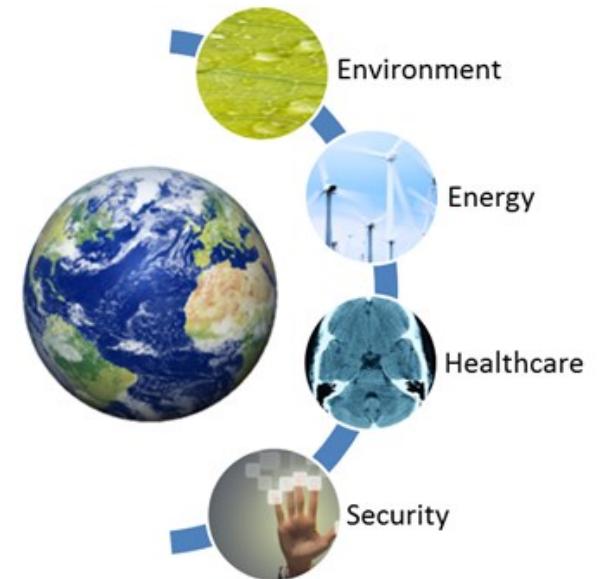
Challenge Led Applied Systems Programme (CLASP)

- Supports the de-risking of the R&D process for industry/users
- Development of technology demonstrators and industry-ready prototypes
- Draw on technology and expertise from the STFC research community
- Provide solutions to four global research challenges
- Demonstrable potential economic and/or societal benefits

Two stage application process – outline and full proposal

Shortlisted applicants:

- Develop full proposals with advice from CLASP Panel
- Present their final proposals to Panel
- **2020 joint themes are Security and Environment**
- **2021 joint themes are Healthcare and Energy**



CLASP 2020

Security areas

- Cyber security
- Food security
- Nuclear security
- Border security
- National/international security
- Responding to security disasters
- Monitoring chemical exposure

Environment areas

- Natural environment
- Air quality
- Space environment
- Urban environment
- Waste management
- Predicting and/or responding to environmental disasters
- Pollution monitoring



Project Outcome and Impact Scheme

- We want to know what's happening with your research
- Connecting with the community
- Impact case studies
- Building relationships: IPS Fellows, TTO Offices, IAA recipients, Academics

