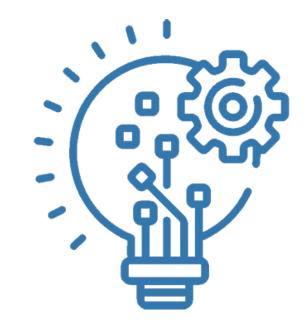


# Why is research and innovation in health important?

(a practical guide to getting started)



Professor Nigel Harris
Director of Innovation and Growth
West of England Academic Health Science Network

n.harris@bath.ac.uk





# Academic Health Science Networks

Transforming lives through healthcare innovation

## INNOVATION EXCHANGE

Visit our new national gateway for innovators. Direct to the support and resources you need to help take forward your innovation with

Visit the Innovation Exchange >

**Innovation Exchange** 

Case studies

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# "The innovation arm of the NHS"







# Driving the development of a vibrant innovation ecosystem across the West of England

- Providing learning resources: tools, materials, courses and events
- Enabling healthcare professionals and SMEs to develop skills for **innovative thinking**, taking **ideas into action** and creating **tangible solutions**
- Delivering improved care at better value to society



Impact of Covid on the delivery of care. Use of augmented and virtual environments.

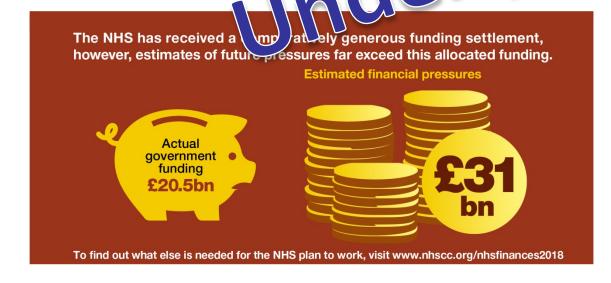
Big data and AI - David Scheinker, University of Stanford, 12th July













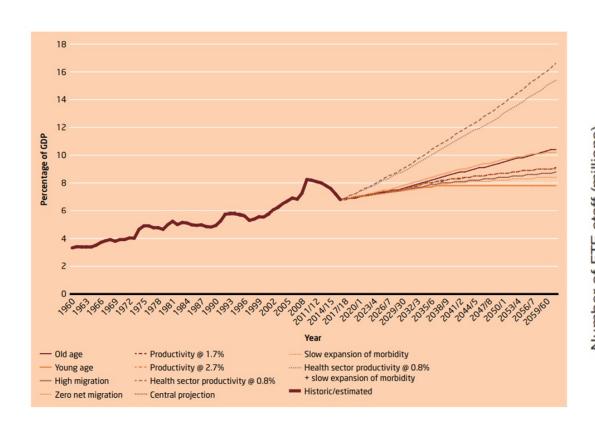
# Why is research and innovation in health important?

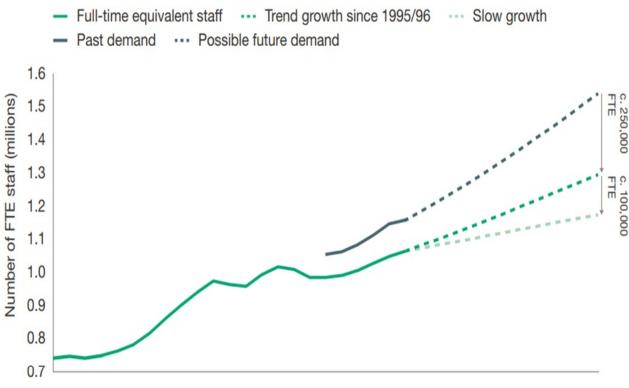


'We need a broader range of people in different professions, working in different ways, supported by more effective use of existing technologies and faster application of scientific and technological innovation. '

# Money

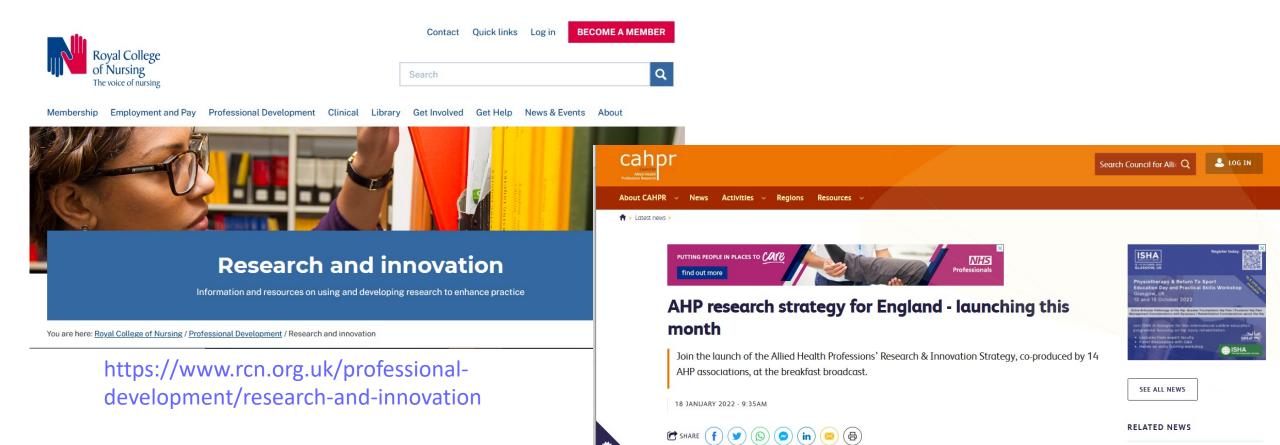
# Staff





# Equity





Building research capacity in health and care professions

https://cahpr.csp.org.uk/about-cahpr





**Research** - designed and conducted to generate new knowledge

Product or service development (Innovation) - translation of knowledge into a realisable solution

Technological or clinical - Process and service - System



#### What routes are there into research?





Academic



NHS locally driven clinical



Commercial clinical trails
Citeline Connect (trialscope.com)



Health and Care Professionals ▼ Researchers ▼ Patients and the Public ▼ Partners and Industry ▼ About us ▼

# National Institute for Health and Care Research

We fund, enable and deliver world-leading health and social care research that improves people's health and wellbeing, and promotes economic growth.



Q Search...



📤 Published: 12/06/2019 📃 Read Time: 10 minutes 🕓 Version: 2019 🔓 Print this document



## Four different types of Fellowships available:

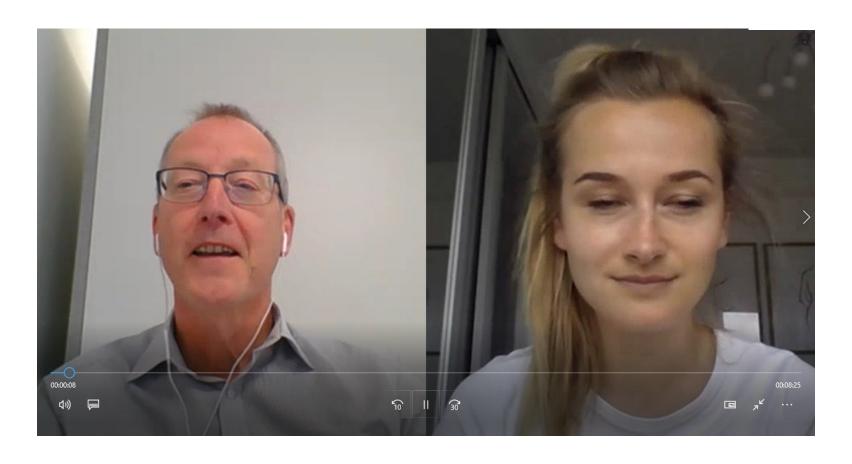
- Pre-Doctoral Fellowship
- **Doctoral Fellowship**
- Advanced Fellowship
- Development and Skills Enhancement Award

announced prior to the launch of each funding round, Doctoral and Advanced Fellowships will be launched twice a year with Pre-Doctoral Fellowships once a year.

#### Contents

- 1. Summary
- 2. NIHR Pre-doctoral Fellowship 100% strategic
  - Eligibility Criteria
  - Assessment Criteria
  - 3. Support provided
- 3. NIHR Doctoral Fellowship response mode and strategic
  - 1. Eligibility Criteria
  - 2. Assessment Criteria
  - 3. Support provided
- 4. NIHR Advanced Fellowship response mode and strategic
  - 1. Eligibility Criteria
  - 2. Assessment Criteria
  - Support provided
- 5. NIHR Development and Skills Enhancement Award response mode and strategic
  - 1. Eligibility Criteria
  - Assessment Criteria
  - 3. Support provided
  - 4. Strategic Themes
  - 5. Partnership Fellowships





Interview with Rosie Harper
NIHR Doctoral Fellowship candidate with Bournemouth University



# West of England Clinical Research Network



Research Induction



Research
Competency
Framework



Study Support Service



Upcoming Training



Access your NIHR Learn account



# National Institute for Health Research Funding Schemes

- 1. Efficacy and Mechanism Evaluation (EME)
- 2. Evidence synthesis
- 3. Health Services and Delivery Research (HS&DR)
- 4. Health Technology Assessment (HTA)
- 5. Invention for Innovation (i4i)
- 6. Programme development grants
- 7. Programme Grants for Applied Research (PGfAR)
- 8. Policy research programme (PRP)
- 9. Research for Patient Benefit (RfPB)



# UK Research and Innovation

# Funding schemes

https://www.ukri.org/



#### Arts and Humanities Research Council (AHRC)

AHRC funds world-class, independent researchers in a wide range of subjects. Their research provides social and cultural benefits and contributes to the economic success of the UK but also to the culture and welfare of societies around the globe.





#### Biotechnology and Biological Sciences Research Council (BBSRC)

BBSRC invests in world-class bioscience research and training. Their research is helping society to meet major challenges, including food security, green energy and healthier, longer lives and underpinning important UK economic sectors, such as farming, food, industrial biotechnology and pharmaceuticals.





#### Economic and Social Research Council (ESRC)

ESRC is the UK's largest funder of research on the social and economic questions facing us today. Their research shapes public policy and contributes to making the economy more competitive, as well as giving people a better understanding of 21st century society.





#### Engineering and Physical Sciences Research Council (EPSRC)

EPSRC invests in world-leading research and postgraduate training across the engineering and physical sciences. Their research builds the knowledge and skills base needed to address scientific and technological challenges and provides a platform for future UK prosperity by contributing to a healthy, connected, resilient, productive nation.





#### Innovate UK

Innovate UK works with people, companies and partner organisations to find and drive the science and technology innovations that will grow the UK economy. They drive growth by working with companies to de-risk, enable and support innovation.

Innovate UK



#### Medical Research Council (MRC)

MRC is at the forefront of scientific discovery to improve human health. Their scientists tackle some of the greatest health problems facing humanity in the 21st century, from the rising tide of chronic diseases associated with ageing to the threats posed by rapidly mutating micro-organisms.











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#### Member directory

We have over 140 member charities that fund all stages of research - from basic science projects to clinical trials - in all areas of health and disease throughout the UK and overseas.

They vary considerably in size, but each plays a vital role in the UK life sciences and economy. In 2018, 146 member charities invested over £1.3 billion in medical research across the UK. This accounts for 41% of all publicly funded medical research nationally: more than the Medical Research Council or the National Institute of Health Research.

You can find out more about the impact of our member charities in our sector infographics and reports. You can also access a breakdown of the spending of our member charities in our Member Dashboard which can be found on this page. These data are collected from AMRC members during an annual data collection.

Filter our member directory to discover charities of interest and learn more about each charity on their individual profile pages. If you want to download a list of all our members, click here.

Disclaimer

#### Charities can be a good source of funding







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#### **Funding Support Service**

Programme(s): Industry and Innovation

Workstream(s):

Signpost and Direct Innovators to Further Support or Market Access

Product development, market research and regulatory compliance are not cheap and the healthcare market expects substantial evidence of efficacy, which can also become very costly.

Non-equity funding is available from a multitude of sources, if you know where to look, as illustrated by our interactive funding map (available in the resources section).

Our funding support service helps innovators and SMEs to find and apply for grants for product development or evaluation, for example from the Small Business Research Initiative (SBRI), NIHR, Health Foundation, Innovate UK, etc.

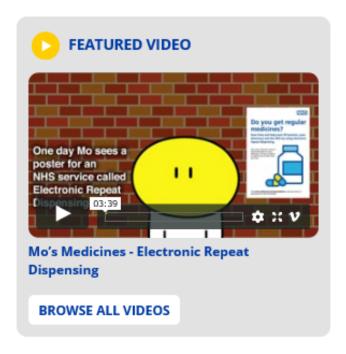
The Money Minutes podcast series (available in the resources section) - downloaded 20,000 times in 2016 - will help keep you up-to-date with new health and life sciences funding opportunities.

The application check – a second pair of eyes that may improve your chances of winning your grant funding – is also available to those organisations supported by Wessex AHSN (Terms and Conditions in the resources section).

For more information on the funding support service, contact Kev Brooks.

The Funding Support Service is itself supported by a grant from the European Structural and Investment Funds (ESIF).

CONTACT US







Planning & improving research

Approvals & amendments

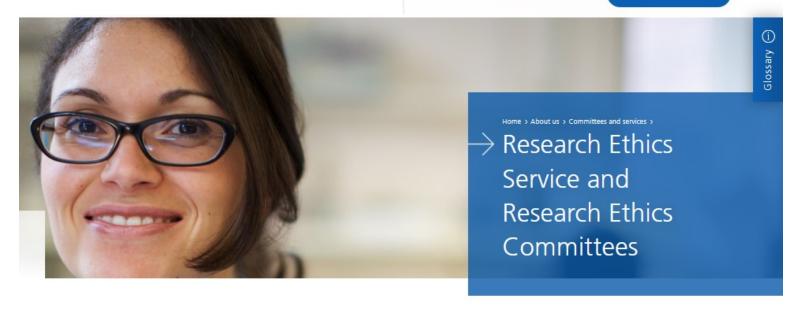
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# **Health Research Authority**

https://www.hra.nhs.uk/



# Pump priming funding

# Research

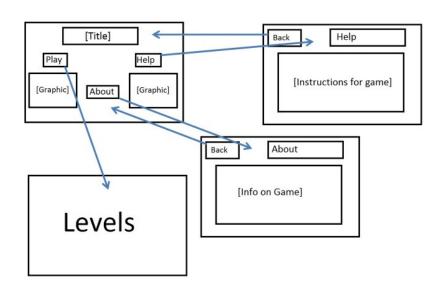
**Innovation** 

- Research capability funding
- Hospital charities
- Professional bodies
- University small grants
- Feasibility studies
- Hackathons
- Business accelerators
- Angel Investors

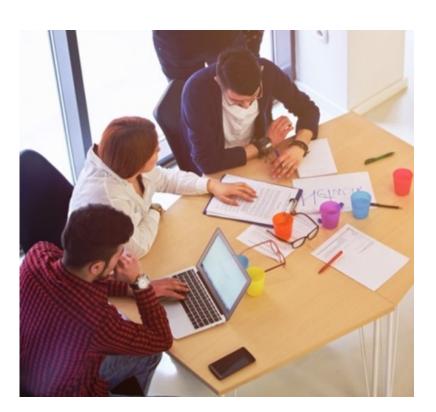




# Stakeholder and public engagement



- Get feedback on your idea
- Primary and secondary users
- Evidence that the solution is acceptable



# **Key selection criteria**

- Evidence of unmet need
- Size of the target population and health service prioritisation
- Opportunity to improve the current standard of care
- Potential for innovation recent research and clinical developments, current market offering
- Cost savings and/or improved clinical outcomes
- Good stakeholder engagement
- Strong research team in place



# **Team and resources**



Do you have the right project team? What are their roles?

# **Costs and value for money**

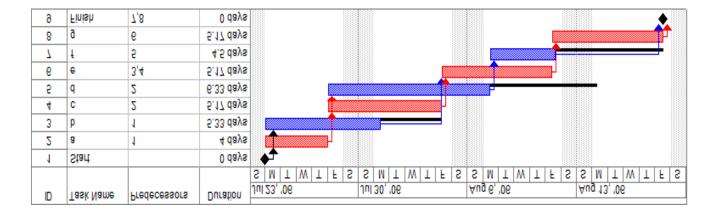


What will the project cost. Does it represent value for money?



# **Project management**

- 1. What are the key work packages
- 2. Milestones / Deliverables
- 3. Risk management and dependencies
- 4. Who is the lead partner
- 5. Cost of each work package



Prepare a project plan or Gantt chart





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#### <>< New event launched: NIHR Grant Applications - seminar & support event >>>

The Research Design Service (RDS) is part of the National Institute for Health Research (NIHR). The RDS South West (RDS SW) is one of several regional services around the country making up the national RDS.

We provide help for people preparing research proposals for submission to open, national, peer-reviewed funding competitions for applied health or social care research. Our team of people is based in universities and the NHS across the South West, and are able to advise and provide practical support when you are developing your grant application. As we are funded by the NIHR for this purpose, such help is provided **free of charge**.



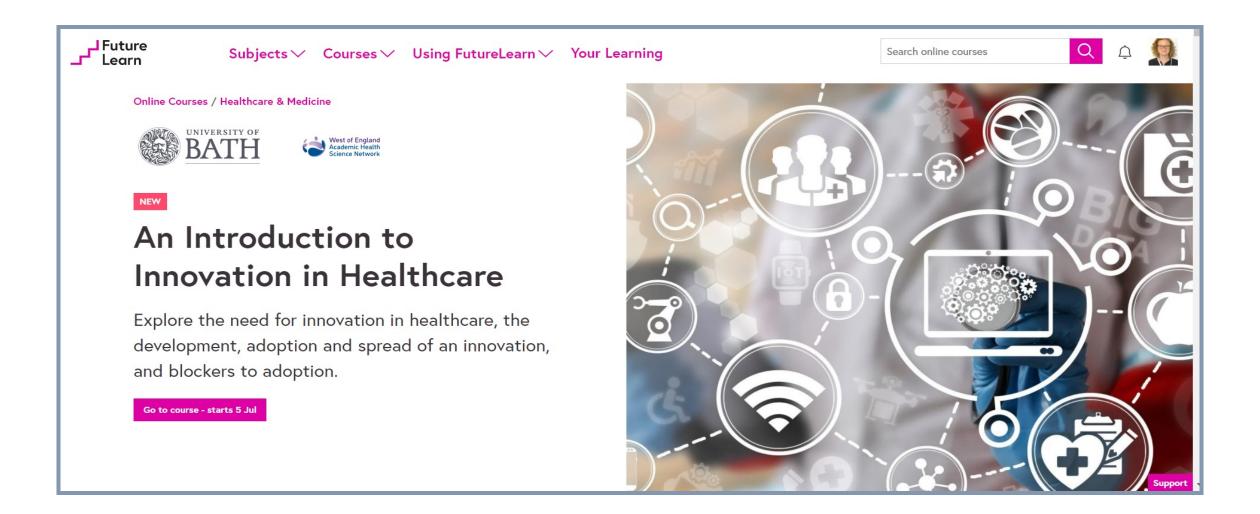
http://www.rds-sw.nihr.ac.uk/

# Top tips

- 1. Have a plan before the call is announced
- 2. Conduct and full literature review
- 3. Check approvals and get good help & advice
- 4. Download the brief and full application form
- 5. Make sure you are able to meet ALL the criteria
- 6. Answer the question and use the full word limit
- 7. Do not leave the finance section to the end ...
- 8. Submit in good time







<u>Introduction to innovation in healthcare - West of England</u> <u>Academic Health Science Network (weahsn.net)</u>







#### Accelerated Access Collaborative

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NHS Accelerated Access Collaborative

#### What we do

How can the AAC help me?

Clinical Entrepreneur training programme

Our clinical entrepreneurs

Small Business Research Initiative for Healthcare (SBRI)

Test beds

Pathway Transformation Fund

The MedTech funding mandate

Early Access to Medicines Scheme

Artificial Intelligence in

Home > NHS Accelerated Access Collaborative > What we do > How can the AAC help me? > Clinical Entrepreneur training programme > Our clinical entrepreneurs

#### Our clinical entrepreneurs

#### Faisal Abbasi

Faisal is a Digital Innovator and Specialist Registrar in Gastroenterology, training in London Deanery. He brings preDoc to the Programme, a clinical decision support system which cuts waiting times, delivers personalised care and crucially, anticipates illness in chronic disease.



#### **Basit Abdul**

Basit is a Healthcare Scientist with specialism in Clinical Engineering. His current HCS fellowship is to help grow Healthcare Science Apprenticeships within London and South-East (LaSE) region, and to work with the other four HCS Fellows to explore and develop HCS roles in community to help achieve the Long Term Plan.





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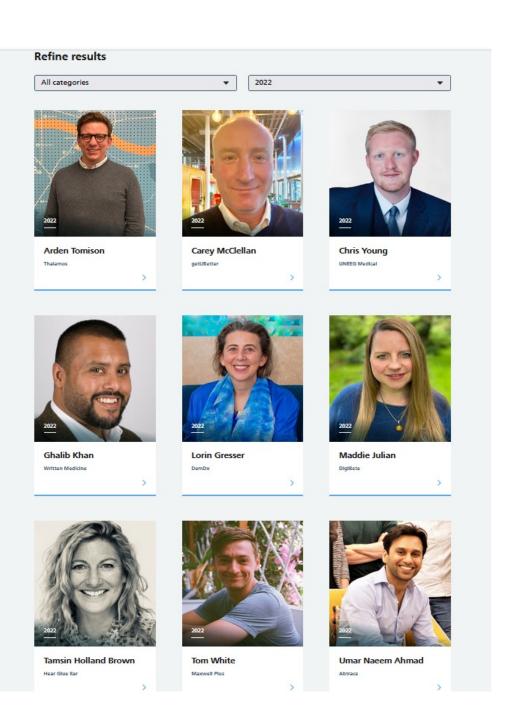
You are here: Home / About Us / Healthcare Science Innovation Fellowships



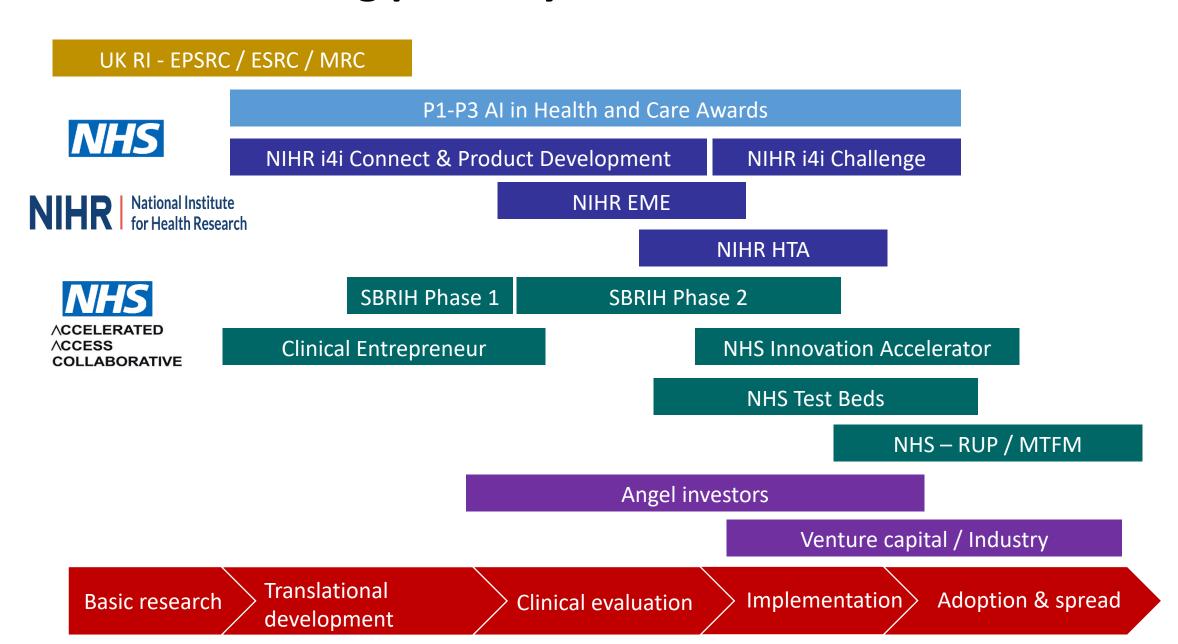
## **NHS Innovation Accelerator**

### **NIA Fellows**

£30,000 of support
Structured development programme
Mentoring
Support from the AHS Network

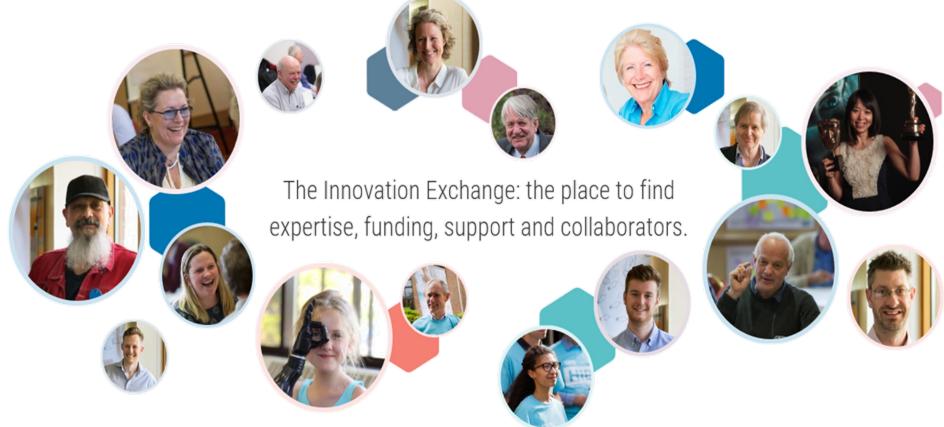


# Research funding pathways









## West of England Academic Health Science Network

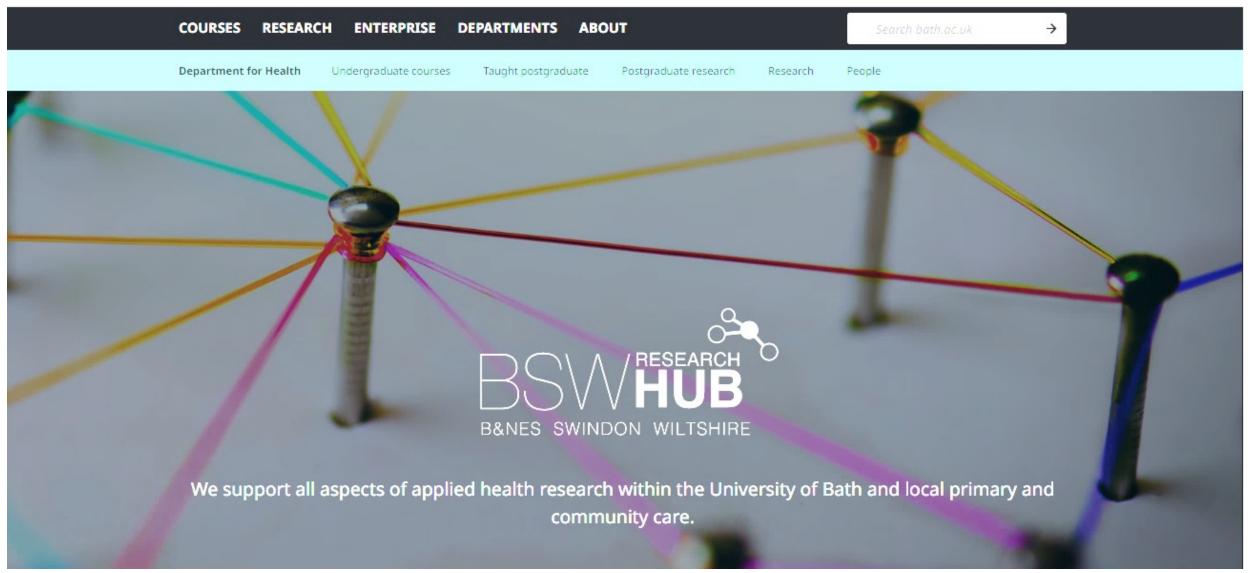
Email: weahsn.innovation@nhs.net

Website: www.innoationexchange.co.uk













Jane Carter, Head of Research Development (RUH)

Email: jane.carter14@nhs.net



BE PART OF RESEARCH



# Service leads and managers

How can you build capacity for research and innovation?

- 1. Tell the story and inspire
- 2. Spot and nurture talent
- 3. Training
- 4. Funding and time
- 5. Mentoring and support



