



Research
England



OUTPUTS AND OUTCOMES



EMBL-EBI



CATAPULT
Medicines Discovery



PREPARED BY

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overview of the project

BACKGROUND

UK SPINE was set up to build a knowledge exchange network, focussed on the mission of improving healthspan for patients with multiple age-related conditions. It aims to accelerate the discovery, development and testing of new drugs by better understanding the underlying biology driving these conditions.

The novel approach we have implemented is based on a collaborative network of six core research partners, all focused on a common goal. This structure means that multidisciplinary teams bring together diverse capabilities and resources across the drug discovery and development pipeline. This is implemented through a flexible collaboration model established over four years of formal partnership.

Since 2018 UK SPINE, with the help of almost £6.5m of funding from Research England, has worked to fulfil the following objectives:

- to build a KE network with rapid information flows across it
- to capitalise on the UK's leadership in 'open innovation' and translation
- to build a multi-stakeholder movement working together towards the development of novel therapeutics.



**£6.5M***funding from Research
England***4 YEARS****40 PROJECTS**

During this time the network has funded over 40 projects. Outputs include: 7 academic papers so far, 6 projects resulted in new datasets, 5 projects led to new methods, over 10 targets have undergone in depth interrogation, 5 of these have progressed into compound identification, 4 projects produced new compounds, and 2 human trials are underway.

A critical focus of UK SPINE has been knowledge exchange which contributed to a number of these projects delivering new, or strengthening existing, collaborations. Many of these collaborative projects have spanned disciplines and sectors. These relationships have been formed and fostered through the extensive events and communications that have been run through UK SPINE.

Over 20 events have been run throughout the 4 years of work, ranging from specialist expert roundtables, to annual conferences and online webinars. A communications strategy has also buoyed the network activities through social media and a central website.

KNOWLEDGE EXCHANGE



20 events

- 4 annual conferences
- 2 Academic Industry Meeting
- Online webinars
- In person symposia
- Workshops

Communications

- Central website
- Over 80 news items
- Twitter - >450 followers
- Newsletter/email update



Public and patient involvement

- Engaged PPI group
- Focus groups and surveys
- Patient involvement and engagement at events

Public and policy engagement

- Creation of a public guide on ageing research
- Ageing research presented to No.10
- Researcher event in Westminster



Collaboration and interaction

- Regular Proof of concept project meetings
- Monthly multicentre management meetings
- Quarterly Joint Steering committee meetings

The number of organisations the network has interacted with has greatly increased in scale during the time of funding. Analysis has shown that during the first 3 years of the project the network has increased more than 4-fold from 69 participants to 292. In just the last year, UK SPINE has had meaningful interactions with over 40 organisations across sectors ranging from industry to patient groups, associations and funders to government departments and policy makers.

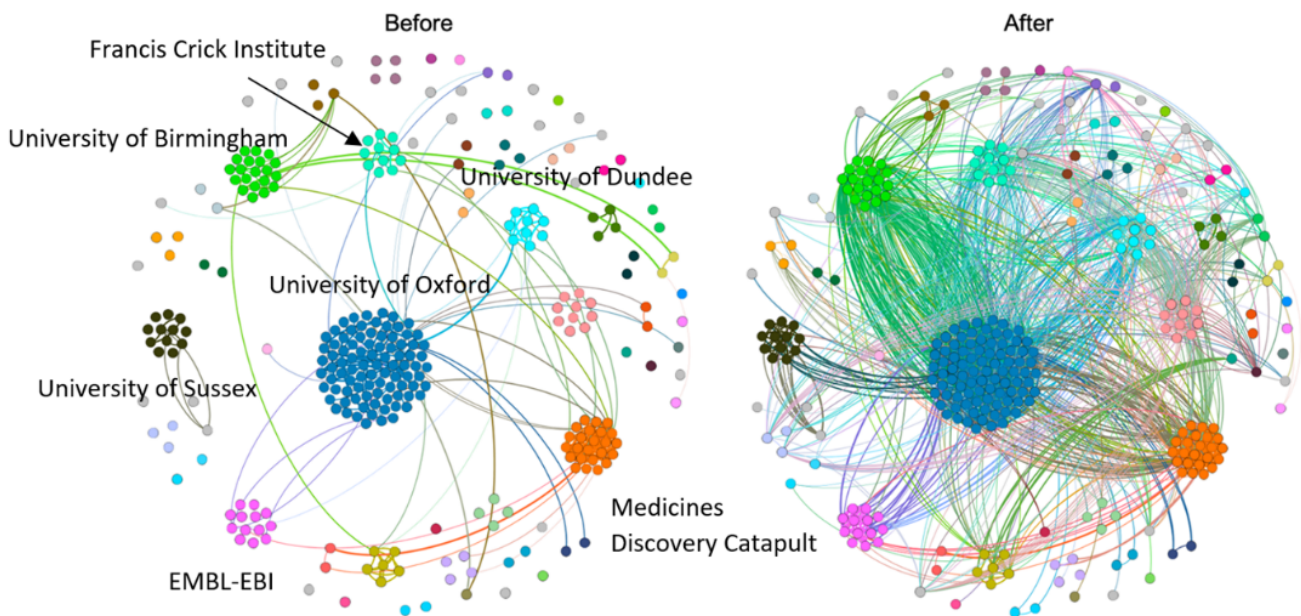
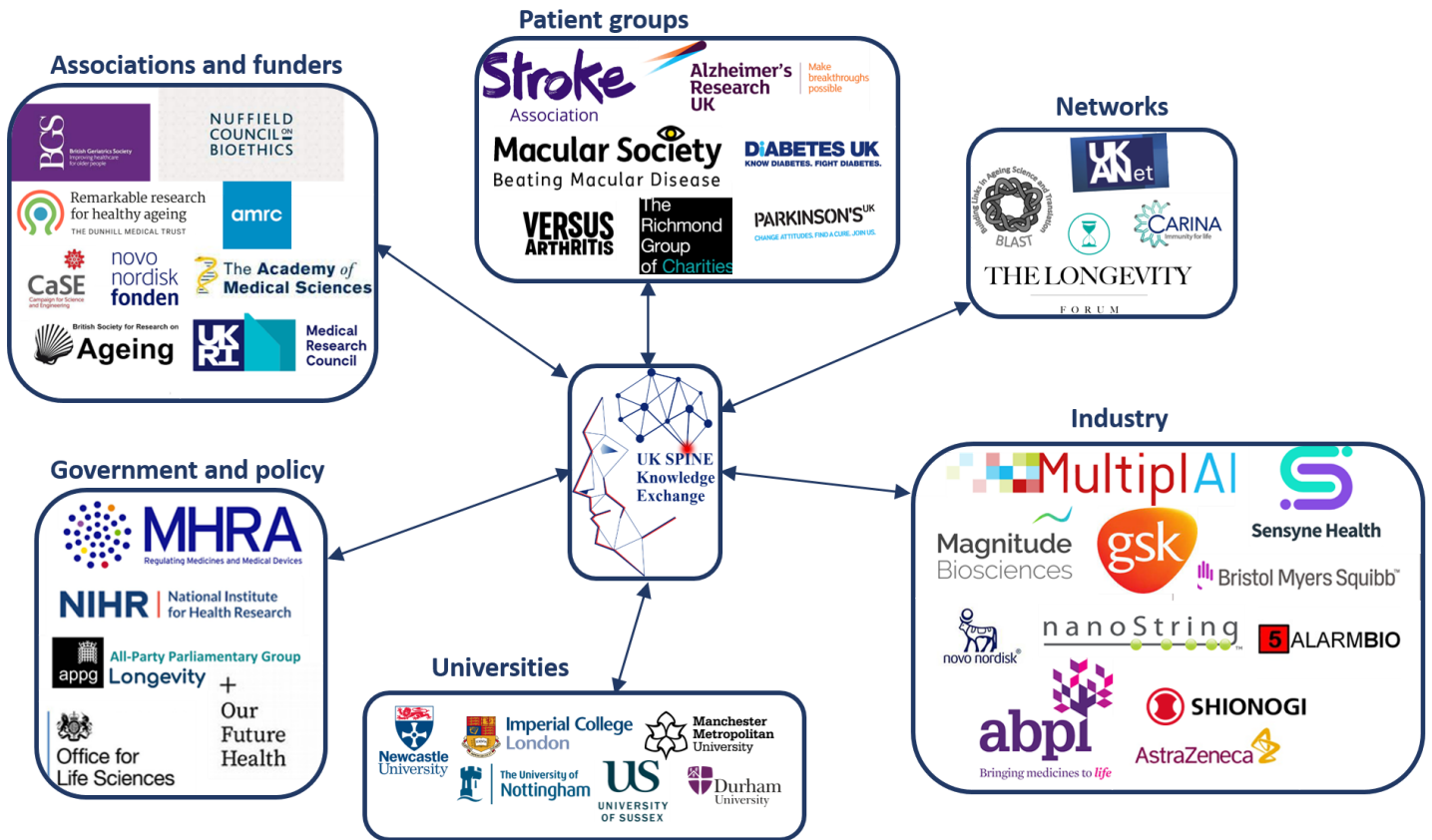


Figure showing the network interactions between individuals in different organisations before and after phase one of UK SPINE. Diagram produced as part of project led by Professor Michael Hopkins (University of Sussex), implementing the Diversity Approach to Research Evaluation.

These interactions have provided a platform linking external stakeholders with parts of the core network. They have contributed new expertise while benefiting from the outputs of UK SPINE. They have also provided avenues for engagement and lobbying of ageing research, thereby raising the profile of geroscience and its potential, creating a 'movement'.



Additional work has contributed to building and maintaining this movement. During Evidence Week, the field was taken to Parliament to inform MPs, ministers and policy makers and a call made for increased funding, coordination, regulatory reform and equitable access to the medicines developed. This coincided with Longevity Week, where UK SPINE collaborated with Longevity Forum on a Science Summit event in Oxford. This interest highlights the growing importance of ageing research and the effort being made to bring together the lines of research to contribute towards improving healthspan.

UK SPINE

Accerating drug discovery to
improve healthspan

**6 PARTNERS
OVER 4 YEARS
£6.5M IN FUNDING
SUPPORTED OVER 40 PROJECTS
CONNECTED WITH OVER 400 INDIVIDUALS**

**DRUG TARGETS
INTERROGATED IN DEPTH **10****

****7** ACADEMIC PAPERS PUBLISHED
OR IN PRESS SO FAR**

**PROJECTS LEADING TO NEW
DATASETS **6****

****5** PROJECTS LEADING TO
NOVEL METHODS**

**DRUG TARGETS TAKEN TO
COMPOUND ID **5****

****4** PROJECTS LEADING TO
COMPOUNDS**

HUMAN TRIALS UNDERWAY **2**