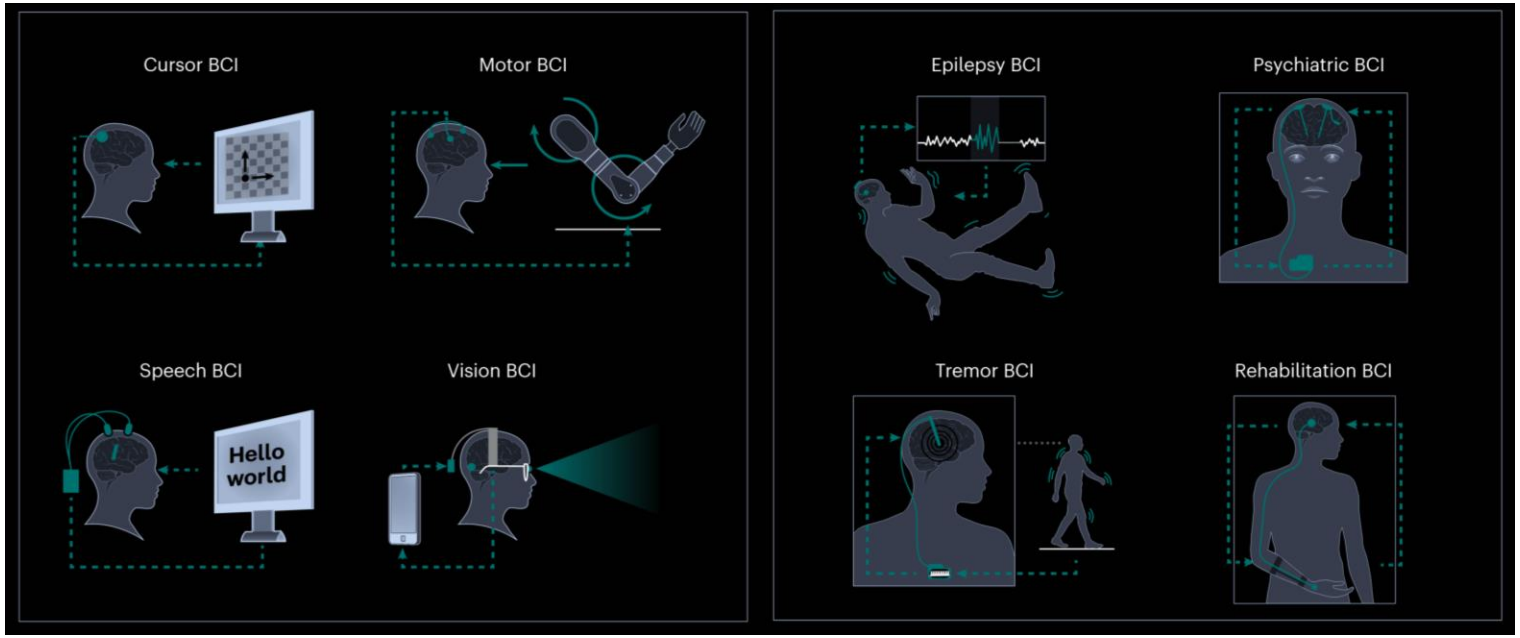
Building a Thriving UK Neurotechnology Ecosystem

Dr Luke Bashford, PhD

What is Neurotechnology



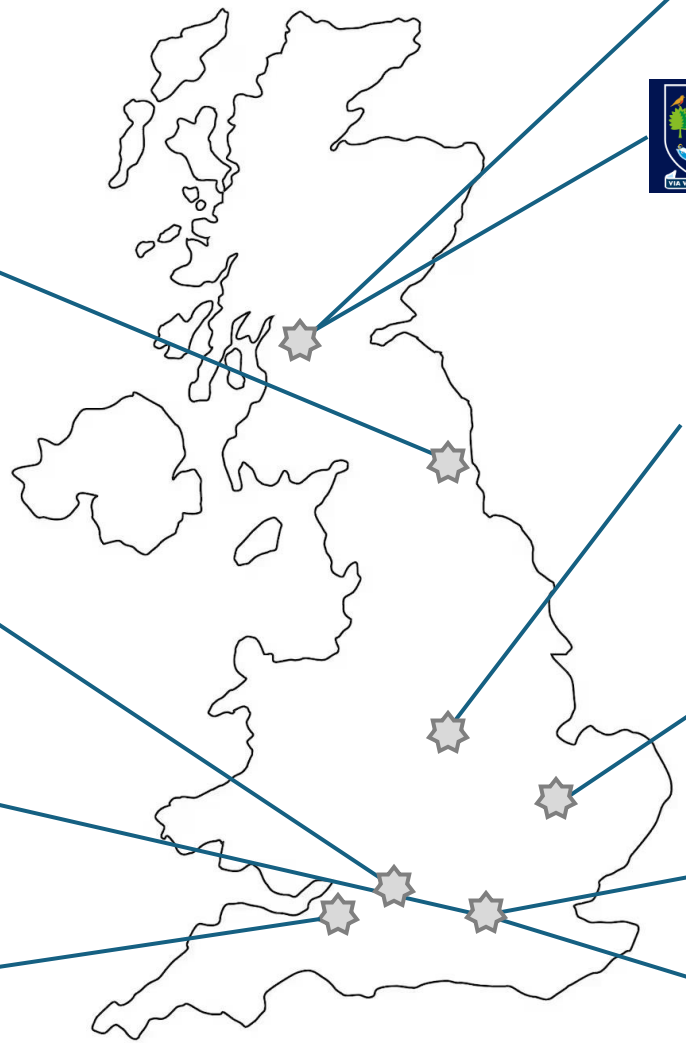
Neurological disorders are now ranked as the leading cause of overall disease burden worldwide.

Abbott
Boston Scientific
Medtronic
AMBER THERAPEUTICS
mintneuro
Blackrock Neurotech
CorTec
ABILITY
INBRAIN NEUROELECTRONICS
NEURALINK
merge labs
MOTIF

UK Strengths

- Strong research and innovation in engineering and basic neuroscience.
- A significant cluster of specialist institutes
- The NHS to be world leading infrastructure for research and development in neurotechnology.
- Highly engaged regulatory body.

UK Strengths



Strathclyde Neurotechnology Centre

University of Glasgow

Centre for Neurotechnology

NHS
National Centre for Neurotechnology and Neurorestoration
Part of Newcastle upon Tyne Hospitals

Newcastle University

The University of Nottingham
Centre for Neurotechnology, Neuromodulation and Neurotherapeutics (N3)

UKRI MRC Centre of Research Excellence in Restorative Neural Dynamics

University of Oxford

CAMBRIDGE neuroworks
POWERED BY ARIA

IMPERIAL
Centre for Neurotechnology

King's College London

Manufacture of Active Implants & Surgical Instruments

IAH Bath Institute for the Augmented Human

King's College London

MNT Maudsley Neurotechnology

UK Weaknesses

- Clinical translation to commercialisation infrastructure
- Limited public funding for long-term device research
- Perceived and actual complexity in regulatory processes, especially at research/first-in-human stages

The opportunity

The UK is positioned as a global leader in the development and deployment of neurotechnology

- From building experimental research in clinical settings to broader societal use
  - Transformative clinical benefit
  - Significant economic benefit
  - Global partnerships

Critical leadership areas:

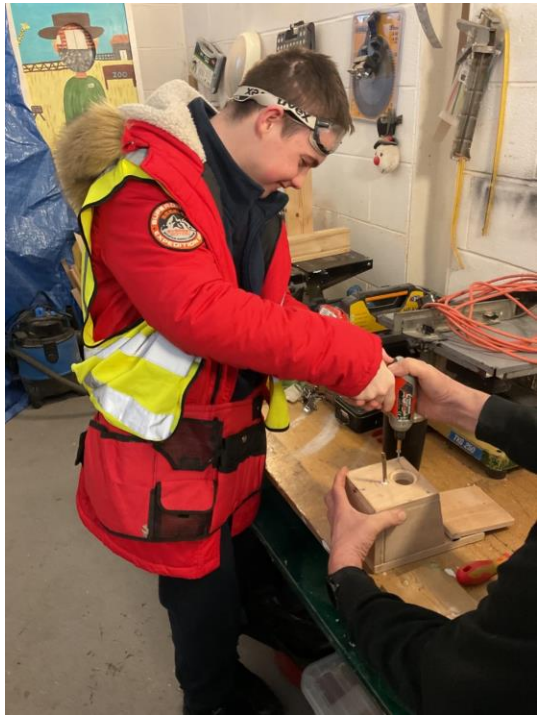
- The NHS as a global platform for the research and development of neurotechnologies and a living laboratory throughout peoples' lifetimes.
- Development of neural data privacy, ownership, ethical adoption and governance structures.

Dr. Galen Buckwalter

Justine Knowlson

OFFICIAL
TRAIN
SPOTTER

Celebration Award Winner
Oran Knowlson
Birnback
Independence Award - Upper School
SWIMMING
AWARD
ORAN



THE FLYING SCOTSMAN
60103

Bucket time
Tanglewood

Thank you