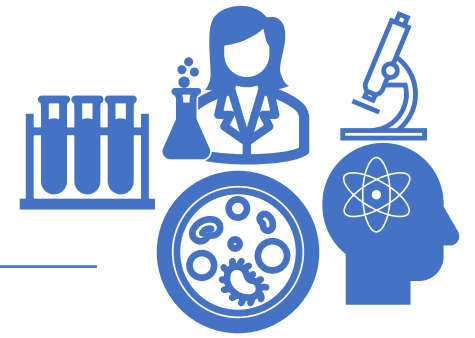


Health & Life Sciences A Focus Sector for the National Innovation Strategy

Foundation for Science and Technology event on the Scottish Innovation Strategy
7 November 2022

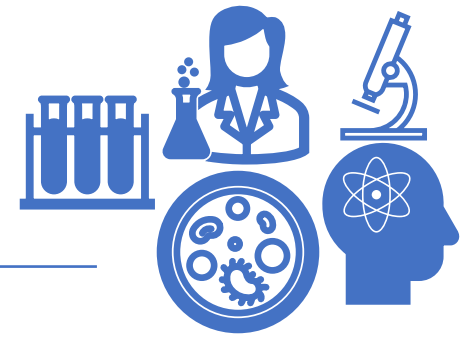
Dr Deborah O'Neil OBE FRSE

Life Sciences

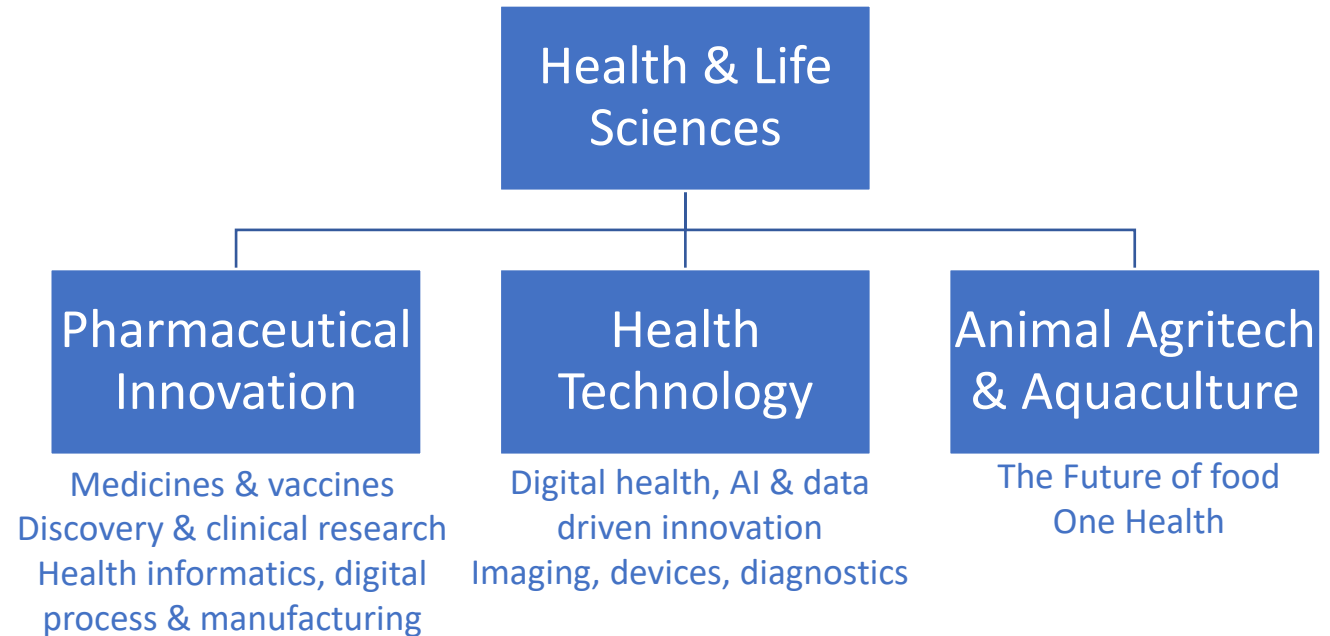


1. Definition & landscape
2. Health & Life Sciences as a focus for the National Innovation Strategy
3. Sector strengths as firm foundations to build on for the next decade
4. How the Innovation Strategy can impact the sector

1. Health & Life Sciences



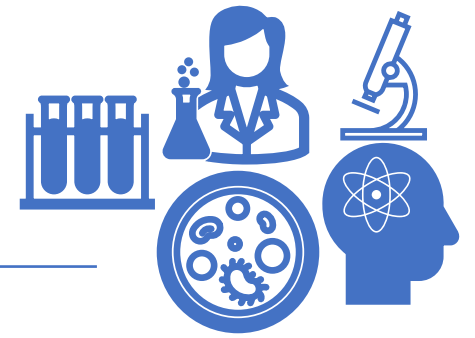
- Employs over 40,000 people across 750 organisations
- World class Universities, biotech & medtech SMEs, pharma, CROs, manufacturing
- Total turnover generated by Scottish Life Sciences companies grew from £4.5bn in 2014 to £6.6bn in 2018
- The pharma & manufacturing components of the sector alone support a total of £2.5bn & £2.1bn in Scottish output; respectively and,
- Supports GVA worth £1.8bn & £1.5bn
- Scotland is home to 15% of the UK's HealthTech, Pharmatech and Wellbeing companies, 10% of biopharma, therapeutics and vaccines companies and 31% of cleanbio, agritech and industrial biotechnology companies.



Innovation is at the very core of the sector

Driven by a constant & evolving need for more & better products & services for the health & wellbeing of the global population

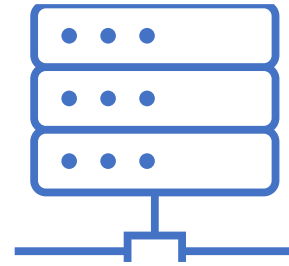
2. Health & Life Science as a Focus



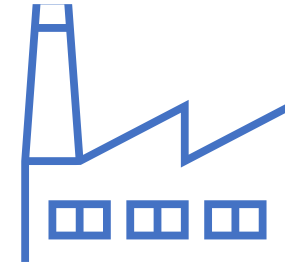
Energy & low
carbon



Health & Life
Sciences



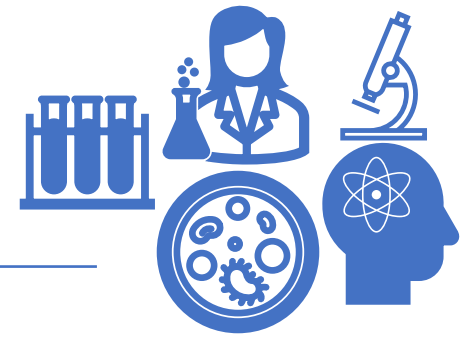
Data & Digital



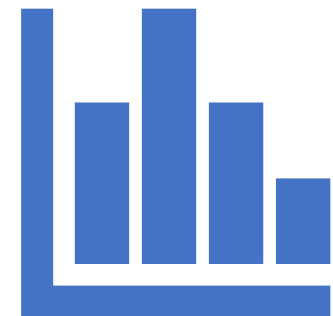
Advanced
Manufacturing

- Health & Life Sciences is one of the four pillars of Scotlands' economic strength
- Innovation is at the heart of the success of Health & Life Sciences & critical for its sustained success & growth over the next decade
- Already a significant sector for the Scottish economy, but;
- The sector, and specifically a number of high growth potential 'sub sectors' within, has significant potential to contribute more

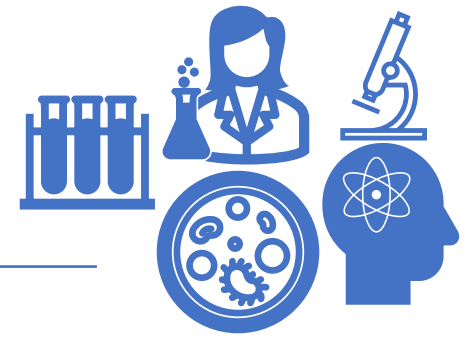
3. Sector Strengths



- Concentrated infrastructure of life sciences hubs, world leading universities & healthcare systems.
- Ecosystem of talent & bespoke facilities deliberately located at the heart of academic & health clusters that connect industry to world leading research & health professionals
- Each cluster is unique & complementary within the wider Scottish Health & Life Sciences ecosystem
 - Compete only for resource (funding, scientific talent, management etc.)
 - Connected & collaborative
- Measurable metrics of innovation across the Sector - peer reviewed publications & patents based on population & funding
- Scotland Outperforms much of the ROW in terms of Health & Life Science intellectual capital generated
- The number one location in Europe for research impact in biomedical and health sciences is Dundee



4. Potential Impact of the Strategy



- A framework to;
- Enable more Health & Life Science innovation that should & can be, to be spun out of our academic institutions
- Ensure that these spin-outs scale & transition from R&D to commercial entities
 - BioCity 2019 Life Sciences Start-Up Report 2019 - 50% growth in Scottish life sciences start-ups created between 2014 and 2018 - fate?
- Funding, talent/development, infrastructure, etc. required for this to happen
 - Bioentrepreneurs...
- Retain companies & talent within Scotland, attract companies & talent into the life science ecosystem
- Build on the sectors' already strong foundation so it can be sustained & grow over the next decade



£40m



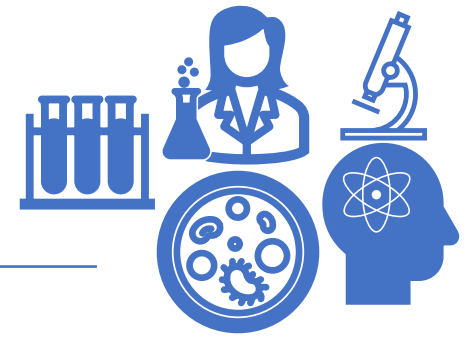
£65m



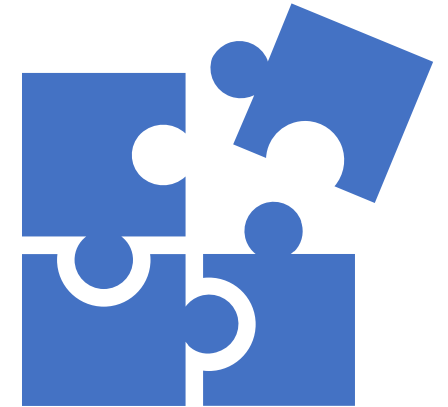
£25m

Deliver on realising the full potential impact of the sector on the Scottish economy - >£8bn turnover

In Summary



- Innovation is the ‘life blood’ of the Health & Life Sciences sector
- Health & Life Sciences is a key sector for the Scottish economy & already punches above its weight in terms of innovation metrics, but can & MUST do even more
 - National Innovation strategy
- Outputs beyond creating intellectual assets - & ROI from innovation - from priority areas or ‘subsectors’ within the sector can increase
 - commercialisation of products & services resulting from those assets, inward investment secured & jobs created
- The current innovation ecosystem for Health & Life Sciences must be protected & sustained but also can be enhanced further to achieve those outputs & drive even more impact nationally & internationally
- This is essential if the Life Science Sector is to reach its £8 Bn turnover target by 2025, continue to grow over the next decade and;
- Be a leading contributor to meeting the constant & evolving need for more & better products & services for the health & wellbeing of the global population



Health & Life Sciences

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