

Funding Wales's Future

Investing in universities to drive economic growth



Introduction

Research and development (R&D), including medical research, makes a vital contribution to the Welsh economy. A 2022 British Heart Foundation (BHF) Cymru survey found that 82% of people in Wales believe that it is important for Wales to do medical research.¹

Research plays a vital role in Wales's economy and has the potential to drive economic growth.

- Recipients of research funding purchase goods and services in order to undertake their research. This generates activity in their supply chains and across the whole of the Welsh economy.
- R&D can boost output and productivity in an economy with new technologies, medicines, and processes.
- As new methods and technologies are discovered, there are knowledge spill-overs into the public, private and third sectors which boost productivity and economic growth.

However, to achieve external investment and to win competitive funding bids, Welsh universities need infrastructure. To establish infrastructure at universities, governments provide quality related (QR) funding based on the quality of research performed by universities. Unfortunately, Welsh Government spending on QR funding is too low – drastically inhibiting Wales' ability to compete for external funding from charities and other sources.

Wales is not achieving its potential in R&D

A 2022 BHF Cymru survey showed that 34% of people think not enough research is happening in Wales compared to 17% who believe too much is happening. In 2019, total expenditure on R&D in Wales was £794 million, or 1.2% of GVA. Out of the three devolved nations of the UK and each of the 9 regions of England, Wales has the lowest R&D expenditure as a proportion of GVA.

Wales makes up around 5% of the UK population.⁴ However, Wales has just 2% of R&D spend in the UK.⁵ This includes all money spent on R&D in Wales by charities, industry, Welsh Government, and the health service – spending which is less than half of what should be expected of a population Wales' size. Wales also only wins 3% of external competitive funding⁶ – significantly lower than its population share.

^{1.} Figures from YouGov Plc. Total sample size was 1,107 adults. Fieldwork was undertaken between 5th - 7th September 2022. The survey was carried out online. The figures have been weighted and are representative of all adults in Wales (aged 16+).

^{3.} ONS (2019), Gross domestic expenditure on research and development. (website) https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/researchanddevelopmentexpenditure/bulletins/ukgrossdomesticexpenditureonresearchanddevelopment/2019

^{4.} ONS (2020), Population Estimates. (website) https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates 5. ONS (2019), Gross domestic expenditure on research and development. (website) https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/

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Senedd Research Service (2021), Research and Innovation in Wales. (pdf)
 https://research.senedd.wales/media/qrobg4st/21-11-research-and-innovation-in-wales-2021-eng-web.pdf

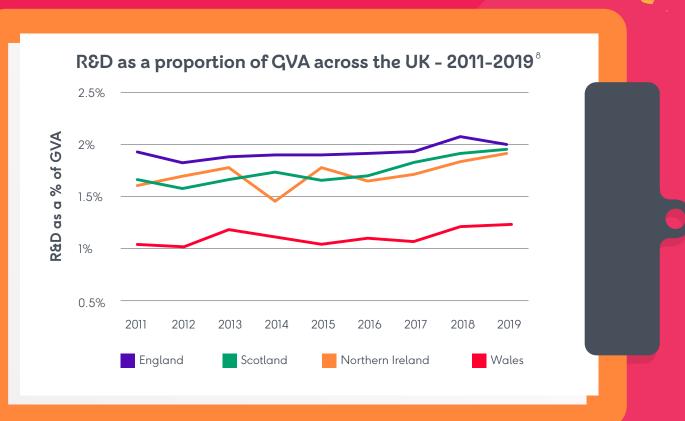
i. Gross value added (GVA) is a measure of the contribution to an economy and is similar to GDP - gross domestic product. GVA is output minus the cost of goods and services used in production.

Low Welsh Government investment limits economic success

The Cross-Party Group (CPG) on Medical Research in the Fifth Senedd found that researchers rely on quality related (QR) funding from Welsh Government to pay for things which other grants don't cover.⁷ Staff, infrastructure and utility bills are examples of things traditionally not covered by research grants. If universities can't pay for these things, then they aren't eligible for many competitive funding streams from both public and private funders.

In 2018, the Reid Review commissioned by Welsh Government placed the highest priority on the role of QR funding in encouraging research and innovation in Wales. Professor Graeme Reid identified that Wale's low levels of unhypothecated funding has been a source of structural weakness for two decades and showed that low QR funding is reducing Wales' ability to win external funding.







- 7. Fifth Senedd Cross-Party Group on Medical Research (2021), The Next Steps for Wales to Achieve its Potential in Medical Research. (website) https://www.bhf.org.uk/what-we-do/in-your-area/wales/campaigning-and-influencing/the-cross-party-group-on-medical-research
- 8. ONS (2019), Gross domestic expenditure on research and development. (website) https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/researchanddevelopmentexpenditure/bulletins/ukgrossdomesticexpenditureonresearchanddevelopment/2019

Research in Wales has historically relied on EU funding, and with UK Government funding not set to match EU funds, Wales' funding future remains uncertain. Professor Reid points out that the historic dependence on EU funding can be replaced with Welsh Government money, which will support success in UK-wide funding competitions, and by attracting higher levels of business investment.9

This shortfall means that Welsh universities do not have the vital infrastructure they need and are simply unable to compete with other universities across the UK for funding. This dramatically reduces the number of grants coming into Wales, limiting the potential benefits to the Welsh economy from research and development, including medical research.

Higher Education Funding Council Wales (HEFCW) administers QR funding to universities. HEFCW's QR budget for 2022/23 is £81.7 million.¹⁰ Research England has announced £1.789 billion for QR funding for 2022/23.11 If Welsh universities were supported to compete with England, pro rata QR funding in Wales should be around £100 million.¹² Welsh universities are therefore suffering from a shortfall of £18 million in funding for vital infrastructure.



- 9. Professor Graeme Reid (2018), Review of Government Funded Research and Innovation in Wales. (pdf) https://gov.wales/sites/default/files/publications/2019-04/review-of-government-funded-research-and-innovationreid-review.pdf
- 10. HEFCW (2022), Funding allocations for academic year 2022/23. (pdf) https://www.hefcw.ac.uk/wp-content/ uploads/2022/07/W22-27HE-HEFCWs-Funding-Allocations-for-Academic-Year-2022_23-English.pdf
- 11. Research England (2022), Funding budgets for 2022-23 to 2024-25. (pdf) https://www.ukri.org/wp-content/ uploads/2022/07/RE-140722-FundingBudgets-2022-25.pdf
- 12. BHF Estimates based on ONS population data mid-2020. (website) https://www.ons.gov.uk/ peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/ annualmidyearpopulationestimates/mid2020

Case Study: Charity funded medical research supports the Welsh economy

As well as providing a host of benefits to patients, medical research, including charity-funded medical research, is vital for the Welsh economy. Modelling commissioned by the British Heart Foundation (BHF) suggests that charity-funded medical research plays a vital role in Wale's economy and has the potential to drive economic growth. Research by the Fraser of Allander Institute (FAI) at the University of Strathclyde estimated that charity funding makes up 35% of all third sector and public funding of medical research in Wales, with active research funding of £21 million in 2018. FAI found that in 2019, medical research funding by charities supported £86 million output and £55 million gross value added (GVA).

FAI also found that every £1 million spent on medical research by charities likely has significantly larger benefits for the economy than the average investment in Wales. Each £1 million spent on medical research funding in Wales by charities supports £2.3 million output and £1.47 million GVA.

These figures, according to FAI, mean that the multipliers of medical research funding in Wales by charities are likely to be comparable to sectors with some of the highest GVA multipliers in Wales – making investment in attracting charity-funded medical research to Wales excellent value for money.

Increases in government and third sector funded research can also increase private sector funding. Burridge et al. found that increasing expenditure in the public sector and third sector by 1% creates nearly the same increase in private sector expenditure within a year.¹⁴

Charity-funded medical research supports jobs in skilled sectors such as education, research and development, health and social work, and many other sectors.¹⁵



^{13.} Fraser of Allander Institute (2022), The contribution of medical research by charities to the Welsh economy. (website) https://fraserofallander.org/publications/the-contribution-of-medical-research-by-charities-to-the-welsh-economy/

^{14.} Burridge et al. Quantifying the economic impact of government and charity funding of medical research on private research and development funding in the United Kingdom. (website) https://bmcmedicine.biomedcentral.com/articles/10.1186/s12916-016-0564-z#citeas

^{15.} Fraser of Allander Institute (2022), The contribution of medical research by charities to the Welsh economy. (website) https://fraserofallander.org/publications/the-contribution-of-medical-research-by-charities-to-the-welsh-economy/

ii. Output is the value of all goods and services produced

Recommendation: Welsh Government should commit to uplift QR funding by £18 million by the end of the Sixth Senedd.

In his 2018 report, Professor Graeme Reid recommended that Welsh Government should commit to winning at least its population share of external competitive funding (5%), including charity funding. But to do this, Welsh Government needs to increase its own investment.



Wales (should have) at least parity in the levels of un-hypothecated research and innovation funding compared to the rest of the UK.¹⁶ - Professor Graeme Reid

Welsh universities desperately need to see an uplift to QR funding provided by Welsh Government. Without the same support as the rest of the UK, Welsh universities and Welsh researchers will be unable to compete for UK-wide funding. Welsh Government must address these funding inequalities to allow research in Wales to drive a thriving economy.



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