

Research and Innovation in Scotland

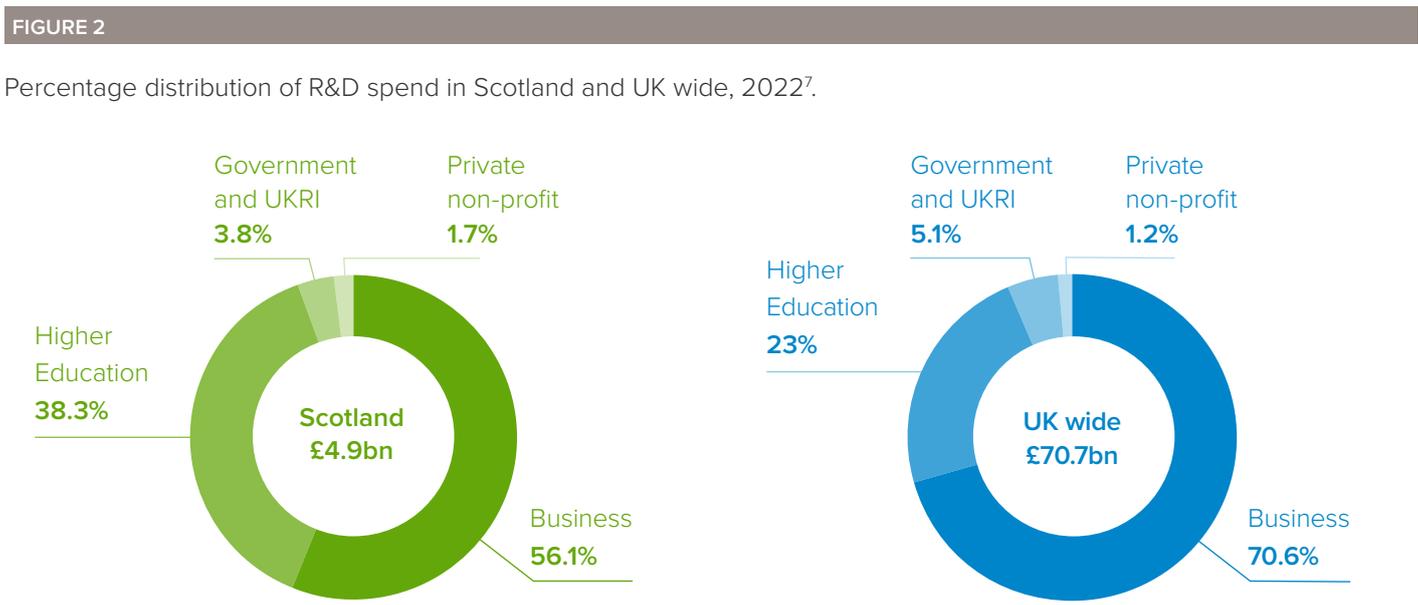
The UK government has recognised the critical role that research and innovation plays in driving long-term economic growth and delivering against the five national missions¹. Similarly, the Scottish government has committed to increase investment in research and innovation activity to support talent and knowledge exchange and drive growth². Alongside this, there is a continued ambition, both in Whitehall and in Holyrood to reduce regional inequality and support growth in cities and regions across the UK^{3,4}.

What do these ambitions to increase investment in UK research and innovation mean for Scotland? This document provides an insight into the current research and innovation landscape in Scotland to inform discussions over how people across the region can contribute to and share the benefits of R&D investment in the UK.

How much is spent on R&D activity in Scotland⁵?



Who performs R&D in Scotland?



Where is R&D concentrated in Scotland?

FIGURE 3

Map of R&D activity in Scotland.

KEY

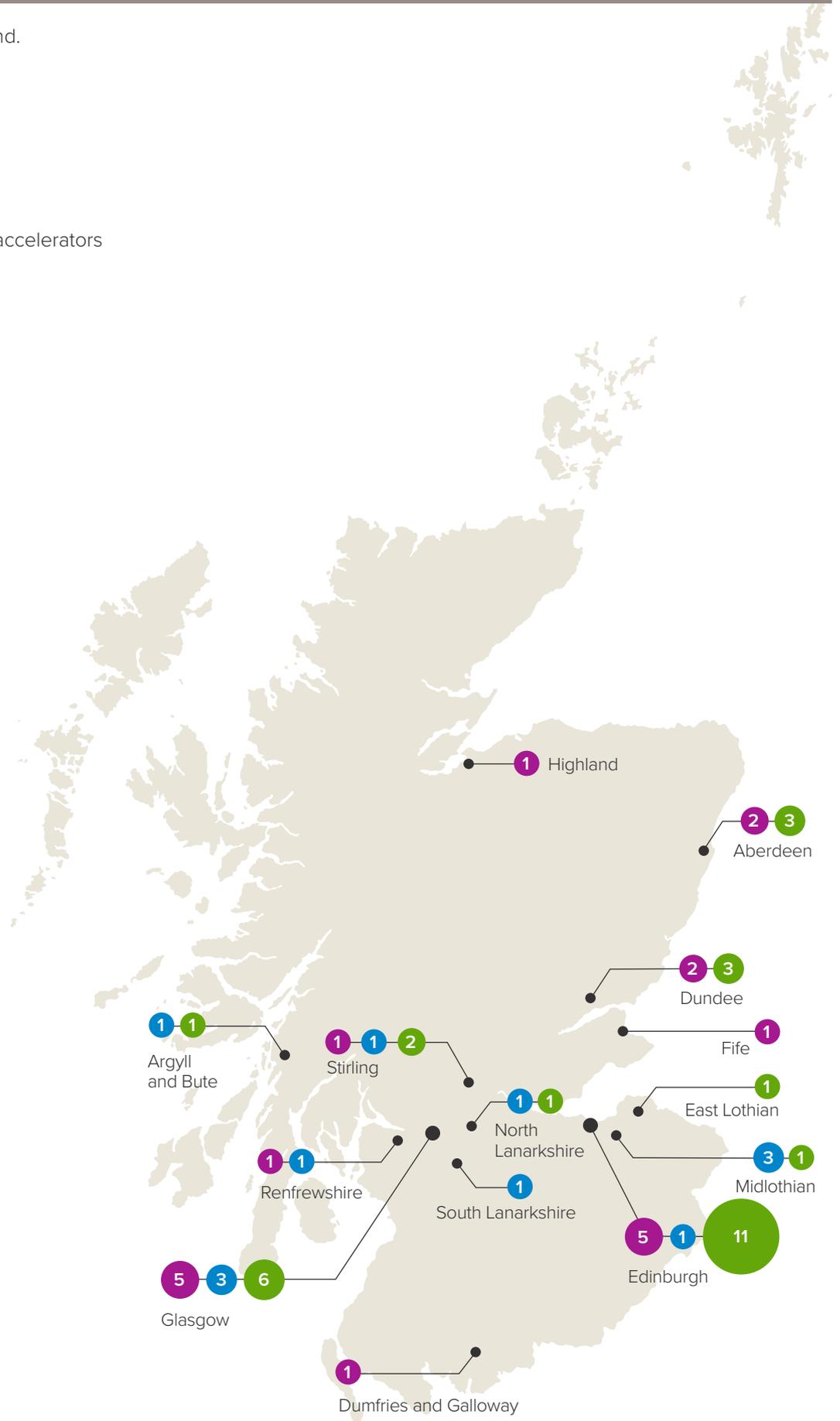
- Universities
- Science parks
- Business incubators and accelerators

24,710 professional, scientific, and technical workplaces⁸

18 universities⁹

12 science parks¹⁰

30 business incubators and accelerators¹¹



Note: The R&D sites listed may not be exhaustive. The list of universities was compiled from HESA data. Higher education institutions without university title have been omitted.

How is R&D in Scotland funded and supported?

R&D is funded and supported in many different ways. This includes direct investment from public, private, charitable and overseas sources, as well as indirect measures that encourage further private investment such as R&D tax credits.

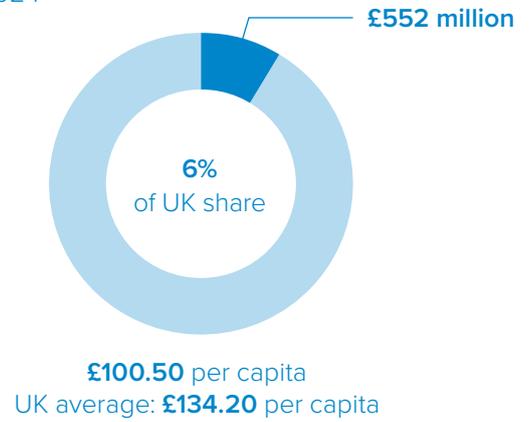
FIGURE 4

Examples of R&D funders in Scotland.

R&D tax credits¹²
2022 – 2023



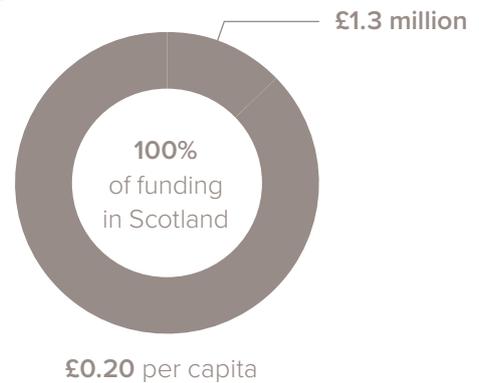
UK Research and Innovation¹³
2023 – 2024



The Royal Society*¹⁴
2023 – 2024



The Royal Society of Edinburgh¹⁵
2023 – 2024

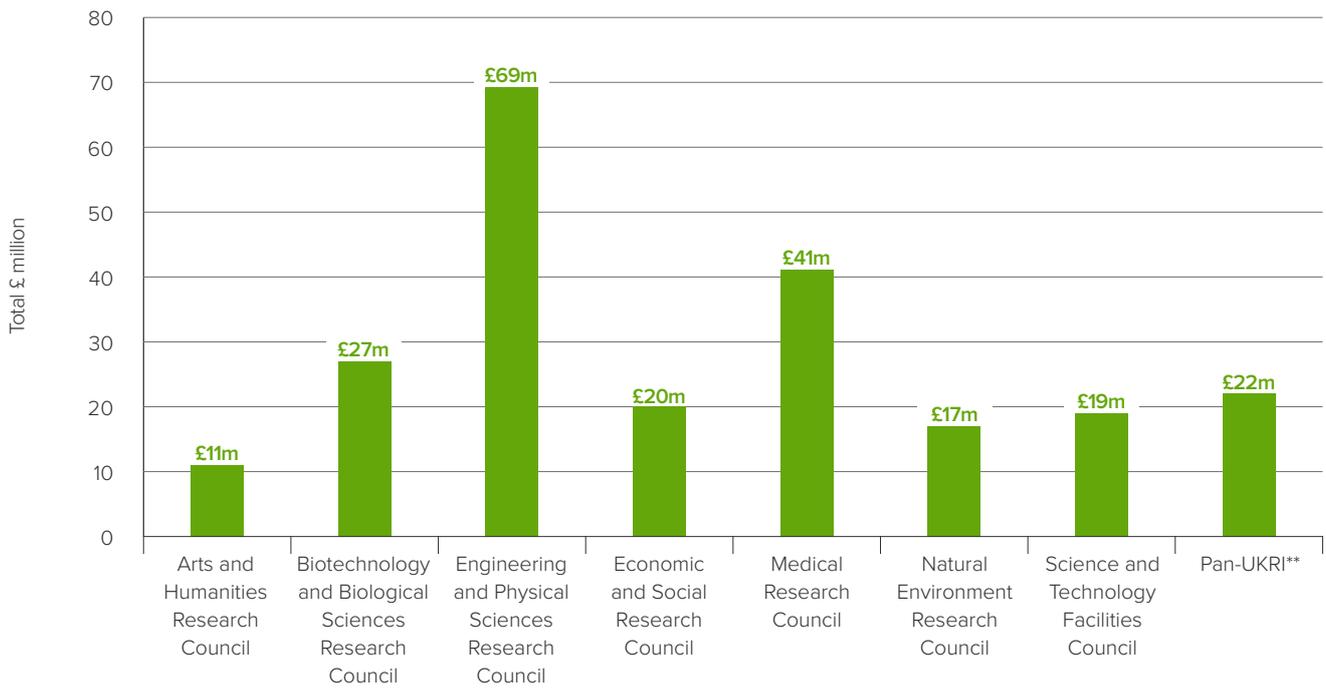


* These figures are indicative estimates of the Royal Society's regional grants expenditure in 2023/2024, based on payments made through the Society's grant management system. They have not been audited. The region is based on the postcode of the head office of the payee, not necessarily where R&D is performed.

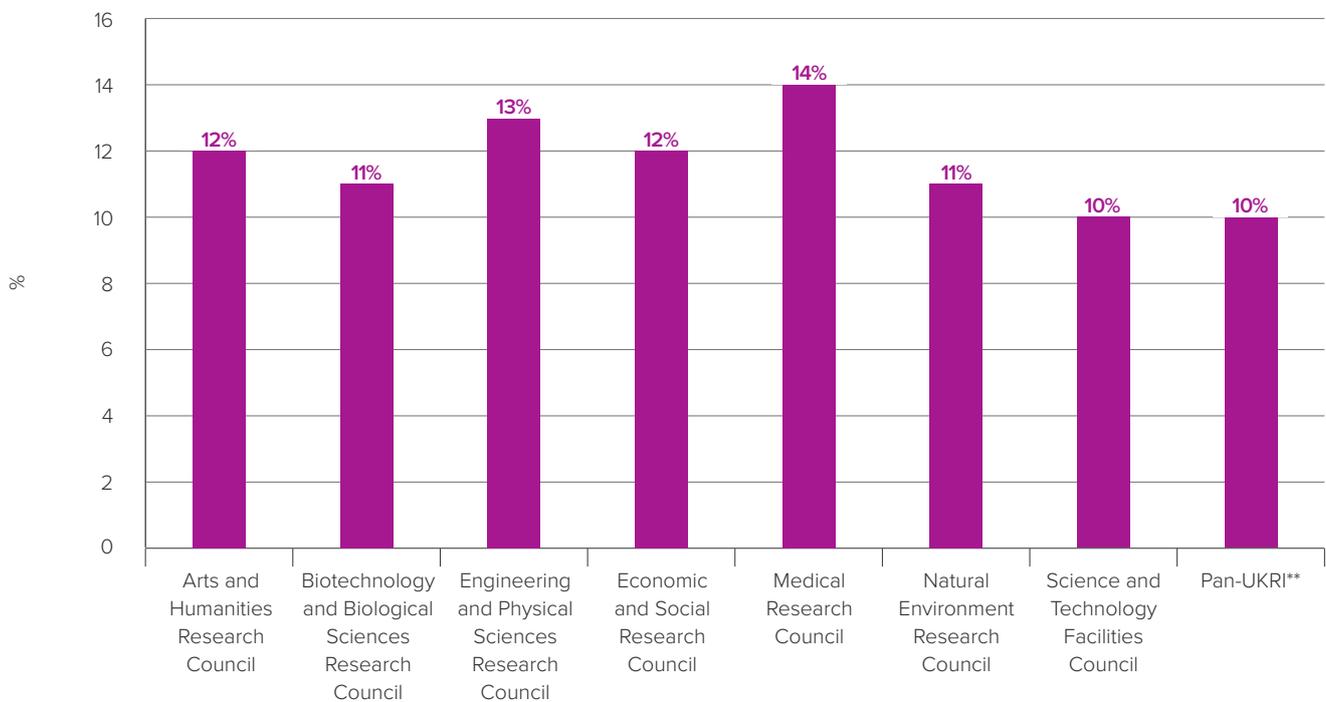
Note: Per capita figures calculated using ONS mid-2023 populations.

FIGURE 5

Total value of grants awarded to Scotland from each research council in 2022 – 2023¹⁶.



Percentage of funding awarded to Scotland from each research council in 2022 – 2023¹⁷.



**Pan-UKRI includes COVID-19 related research funding, Fund for International Collaboration (FIC), Future Leaders Fellowships (FLF), Global Challenges Research Fund (GCRF), Industrial Strategy Challenge Fund (ISCF), Newton Fund, Strategic Priorities Fund (SPF) and Strength in Places Fund (SIPF).

Note: The data included in Figure 5 excludes non-competitive grants, such as funding for UKRI institutes.

There is no R&D without people

A thriving R&D environment in Scotland requires a talented workforce to perform research and young people in the pipeline who are equipped with the skills they will need in the future economy.

FIGURE 6

A snapshot of Highers being taken in Scotland, 2024¹⁸.

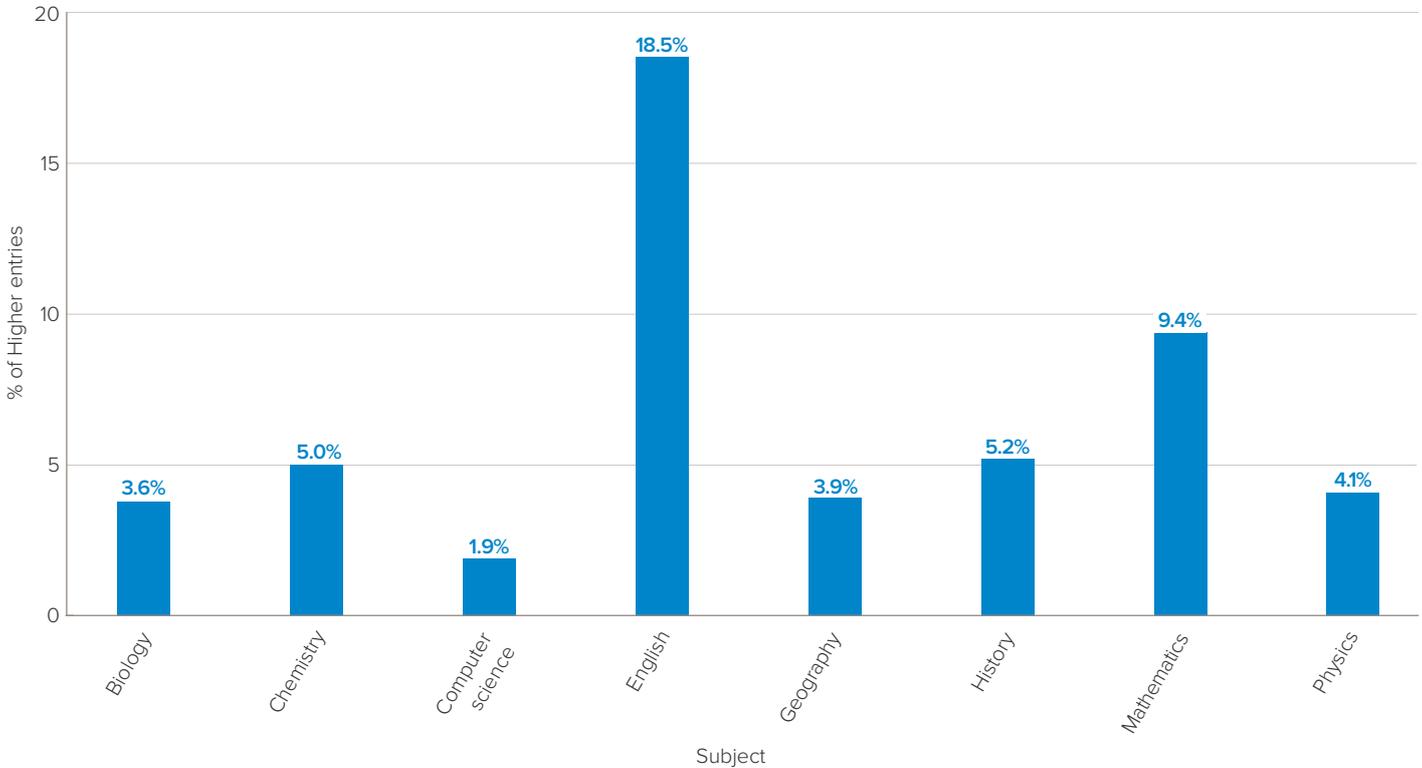
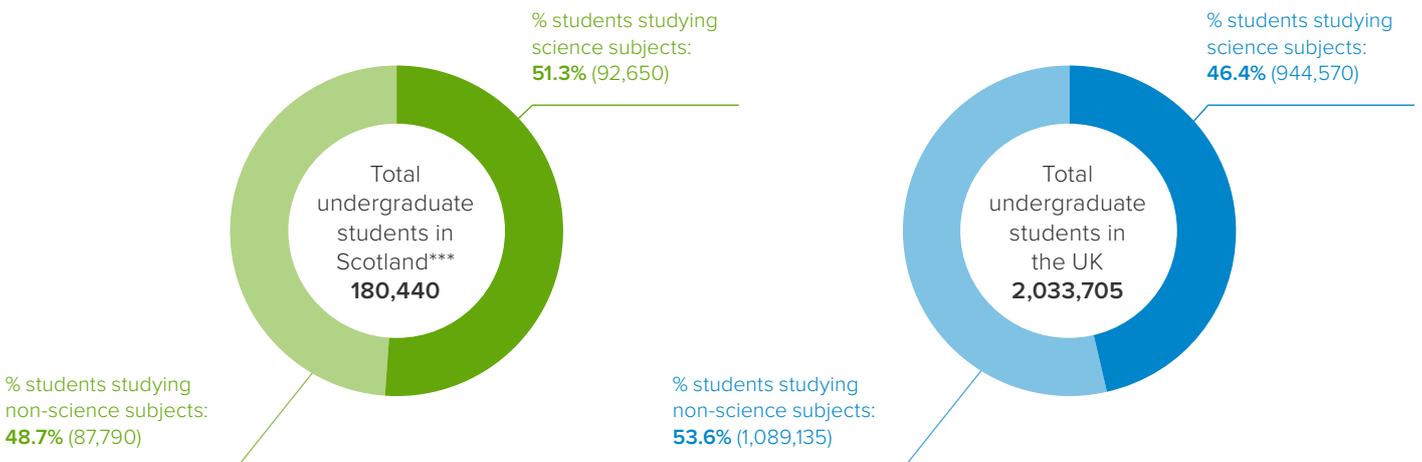


FIGURE 7

What are undergraduates studying at universities in Scotland, 2022 – 2023¹⁹?

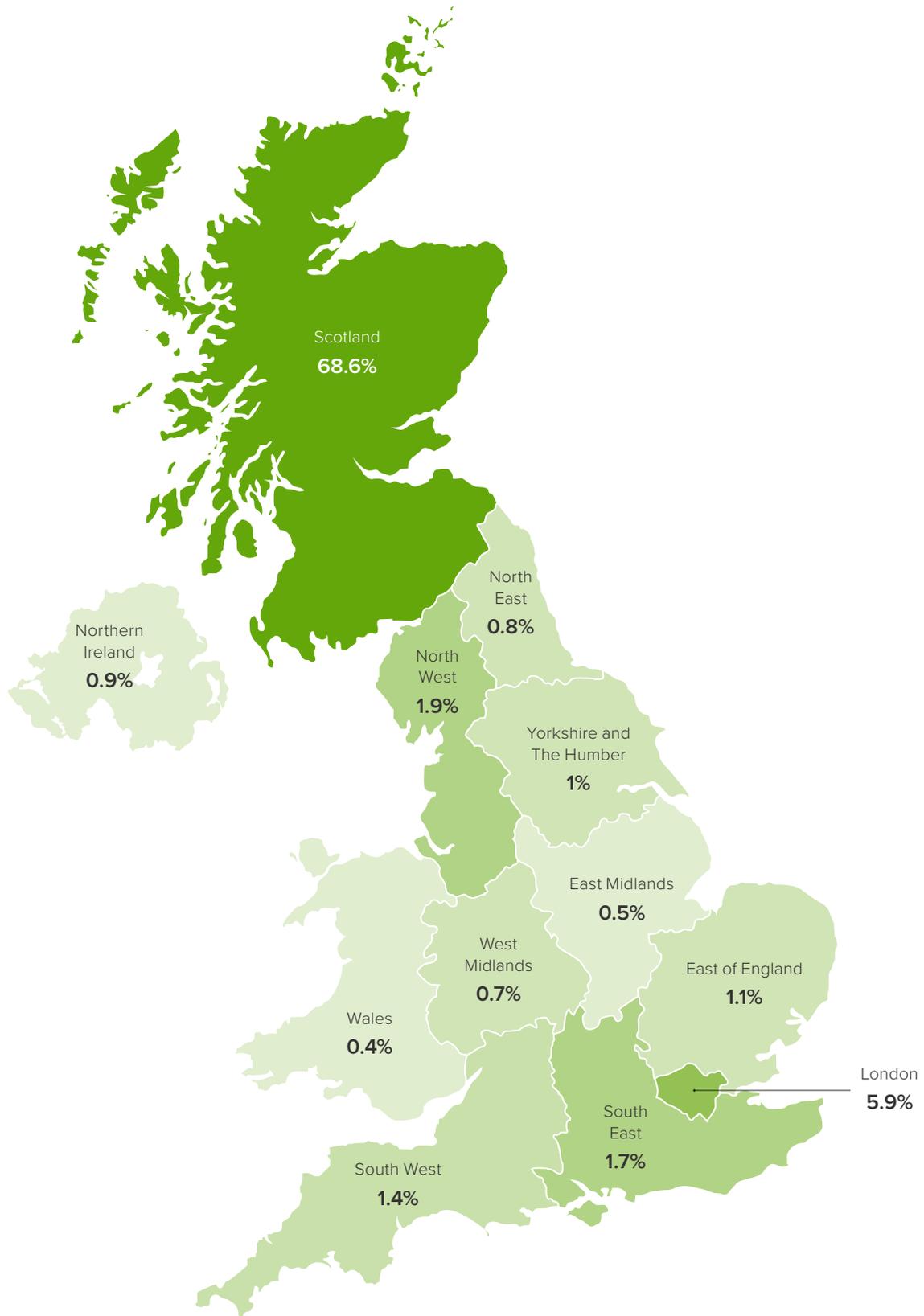


*** Total undergraduates in Scotland does not include students studying at the Open University who are based in Scotland.

Note: The HESA science grouping includes subjects like medicine, nursing, and agriculture which may not be included in other definitions of STEM (science, technology, engineering, and maths). Includes CAH Level 1 01-11, 13 and 26.

FIGURE 8

Proportion of Scotland graduates working in the different regions and nations of the UK, 2020 – 2021²⁰.



Note: sample only includes surveyed graduates who remained in the UK for work after graduation. Proportion may not add up to 100% due to rounding.

How many people are employed in R&D in Scotland?

35,000
staff employed in R&D at
Scottish companies in 2022.
5.4% of the UK total²¹.

27,830
academic staff employed at
Scottish universities in 2023/24.
11.3% of the UK total²².

Note: Academic staff refers to academic staff with roles in both teaching and research or in research only. Both full-time and part-time research staff are included in the figure. All figures are rounded to the nearest 1,000.

Find out more

Investing in UK R&D

Explore research and innovation in other areas of the UK and read the Royal Society's briefings on R&D investment in the UK produced together with the other UK National Academies. Find out more on royalsociety.org/uk-research-and-innovation

Industry programme

The Royal Society's Science and Industry programme connects industry with the Society and promotes the value of science to the economy by bringing together industry, academia, and government. Find out more on royalsociety.org/industry

Promoting excellence in science

The Royal Society promotes excellence in science and supports international collaborations by funding research in the life and physical sciences, including engineering, in the UK and internationally. Find out more about the Royal Society's grants programmes on royalsociety.org/grants

Promoting research excellence

The Royal Society of Edinburgh's Research Awards Programme, running twice a year, supports excellent research in all academic disciplines. While sponsoring Scottish research and innovation is key, the awards also aim to nurture promising talent and to promote international collaboration. Find out more on rse.org.uk/about-our-funding-programmes

Contributing to Scottish and UK R&D Policy

Drawing on the expertise of its diverse fellowship, the Royal Society of Edinburgh provides independent and authoritative evidence on different topics of relevance, including on research and development policy. Find out more on rse.org.uk/expert-advice

References

1. HM Treasury (2024). Autumn Budget 2024. <https://www.gov.uk/government/publications/autumn-budget-2024/autumn-budget-2024.html> (accessed 22 May 2025)
2. Scottish Government (2025) Programme for Government 2025 to 2026. <https://www.gov.scot/publications/programme-government-2025-26/documents/> (accessed 22 May 2025)
3. HM Treasury (2024). Autumn Budget 2024. <https://www.gov.uk/government/publications/autumn-budget-2024/autumn-budget-2024.html> (accessed 22 May 2025)
4. DBT (2024). Invest 2035: the UK's modern industrial strategy. <https://www.gov.uk/government/consultations/invest-2035-the-uks-modern-industrial-strategy/invest-2035-the-uks-modern-industrial-strategy> (accessed 22 May 2025)
5. ONS (2024). UK gross domestic expenditure on research and development (designated as official statistics), 2022. <https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/researchanddevelopmentexpenditure/datasets/ukgrossdomesticexpenditureonresearchanddevelopment2021designatedasofficialstatistics> (accessed 22 May 2025)
6. ONS (2024). Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland, mid-2023. <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationestimatesforukenglandandwalesscotlandandnorthernireland> (accessed 22 May 2025)
7. ONS (2024). UK gross domestic expenditure on research and development (designated as official statistics), 2022. <https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/researchanddevelopmentexpenditure/datasets/ukgrossdomesticexpenditureonresearchanddevelopment2021designatedasofficialstatistics> (accessed 22 May 2025)
8. ONS (2024). UK business; activity, size and location: 2024. <https://www.ons.gov.uk/businessindustryandtrade/business/activitysizeandlocation/datasets/ukbusinessactivitysizeandlocation> (accessed 22 May 2025)
9. HESA (2025). Where do HE students study? <https://www.hesa.ac.uk/data-and-analysis/students/where-study> (accessed 22 May 2025)
10. UK Science Park Association (n.d.). Our members. <https://www.ukspa.org.uk/our-members> (accessed 22 May 2025)
11. SAIL (n.d.). UK startup support ecosystem. Startup Accelerators and Incubator List Database. <https://sail.carrd.co/> (accessed 22 May 2025)
12. UK Government (2024). Corporate tax: Research and Development Tax Credits. <https://www.gov.uk/government/statistics/corporate-tax-research-and-development-tax-credit> (accessed 22 May 2025)
13. UKRI (2025). 2022 to 2023 and 2023 to 2024 geographical distribution of funding. <https://www.ukri.org/publications/2022-to-2023-and-2023-to-2024-geographical-distribution-of-funding/> (accessed 22 May 2025)
14. Royal Society funding streams to UK research institutions in the 2023/24 financial year.
15. Royal Society of Edinburgh (n.d.) Research Awards 2023 – 2024. <https://rse.org.uk/programme/research/> (accessed 22 May 2025)
16. UKRI (2023). Competitive Funding Decisions Dashboard, 2022 – 2023. <https://public.tableau.com/app/profile/uk.research.and.innovation.ukri/viz/UKRICompetitiveFundingDecisions2022-23/CompetitiveFundingDecisions> (accessed 22 May 2025)
17. UKRI (2023). Competitive Funding Decisions Dashboard, 2022 – 2023. <https://public.tableau.com/app/profile/uk.research.and.innovation.ukri/viz/UKRICompetitiveFundingDecisions2022-23/CompetitiveFundingDecisions> (accessed 22 May 2025)
18. Scottish Qualifications Authority (2024). Attainment Statistics 2024. <https://www.sqa.org.uk/sqa/105123.html> (accessed 22 May 2025)
19. Higher Education Statistics Agency (n.d.) HESA Student FPE by subject 2022 – 2023 via HeidiPlus. <https://heidiplus.hesa.ac.uk> (accessed 22 May 2025)
20. Higher Education Statistics Agency (n.d.). Graduate outcomes data. UK domiciled graduates entering work in the UK by region of domicile, region of provider and region of work. <https://www.hesa.ac.uk/data-and-analysis> (accessed 22 May 2025)
21. ONS (2024). Business enterprise research and development, UK (designated as official statistics) 2022. <https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/researchanddevelopmentexpenditure/datasets/businessenterpriseresearchanddevelopmentukdesignatedasofficialstatistics> (accessed 22 May 2025)
22. Higher Education Statistics Agency (n.d.) HE staff by HE provider and activity standard occupational classification. <https://www.hesa.ac.uk/data-and-analysis> (accessed 22 May 2025)

The figures in this document are drawn from the most recent data available at the time of publishing. As a result, the dates vary across the data sources included and have been explicitly stated throughout the document. The text of this work is licensed under the terms of the Creative Commons Attribution License which permits unrestricted use, provided the original author and source are credited. The license is available at: creativecommons.org/licenses/by/4.0.

© The Royal Society. Issued: June 2025 DES9105_2