

A performance-based assessment of the Welsh research base (2010–2018)



Wales accounts for 0.05% of the world's R&D funding, and 0.1% of the world's researchers but provides almost 0.3% of the world's research articles, 0.5% of global citations and 0.5% of the most highly cited articles.

The Welsh research system is highly efficient



Between 2010 and 2018, Welsh researchers accounted for 4% of all UK publications and 0.3% of global scholarly output

Despite a small researcher base, Wales is the most efficient of all comparators in output per expenditure

Wales's share of business funding rose to 62% of total expenditure on R&D

Welsh researchers are highly productive

Wales has the 2nd highest output per researcher of all comparators

On a global scale, Wales is the only comparator nation with more than 8.5 publications per €m spent



Welsh research is highly impactful



Wales's citation impact rose to 1.8—80% above the global average and 13% above UK average

Wales's share of top 5% most highly cited publications is twice the global average

Wales has a high share of the most highly cited publications across all subject areas—above the global average and UK average

Welsh researchers are collaborative

More than 50% of Wales's research output was produced in international collaboration

The impact of Wales's international research publications is highest of all UK nations



Academic–corporate collaboration is impactful



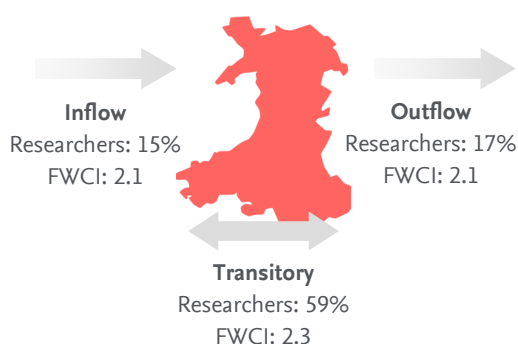
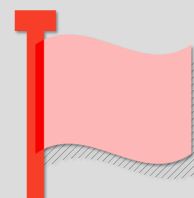
Wales's academic–corporate collaboration grew by 20% between 2010 and 2018

Wales's citation impact for academic–corporate collaboration was the highest of all UK nations

Welsh research is deeply embedded in the UK system

Wales has 3.4% of all UK researchers, and they produced 4% of all UK output

~20% of Wales's research output was produced in collaboration with other UK nations only, which is twice the share of Scotland or Northern Ireland for this collaboration type



Welsh researchers are the most mobile among all UK nations

More than 90% of all active researchers have published at least one publication outside Wales

Almost 60% have had a transitory migration (less than two years in or outside of Wales), and this group shows the highest impact of all groups

