



Claudia Obando, Adebisi Adewusi, Guillermo Larbalestier, Peter Kolarz, Sebastian Berggren



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# Landscape Review of Research and Innovation Fellowship Offers

# **Final Report**

Claudia Obando, Adebisi Adewusi, Guillermo Larbalestier, Peter Kolarz, Sebastian Berggren



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# **Executive Summary**

#### **About this review**

This report presents the findings of a landscape review of fellowship provision in the UK and five comparator countries (Australia, Germany, Netherlands, Sweden, USA). This review was commissioned by UKRI and carried out by Technopolis from March to May 2024.

This is not a detailed investigation of UKRI's own fellowship offer. Instead, this study looks at national research and mobility fellowship provision more generally and its findings may be used to inform current or future work on UKRI's fellowship provision. This study was tasked to review existing fellowship funding in the UK and five other countries to highlight instances where fellowship funding in comparator countries provides support currently unavailable in the UK, and to identify examples of good practice around provision of fellowships.

We define fellowships as person-centred awards to conduct research and/or to facilitate mobility of researchers between different sectors. We note in the table below what kinds of fellowships were within the scope of our review and which ones were excluded (these parameters were agreed in consultation with UKRI at the start of the study). Within these parameters, our research identified 197 fellowship schemes across the six countries.

#### Within the scope of this review (included in total count and data tables)

- Fellowships for research and/or intersectoral mobility
- Fellowships for either of the above that involve international mobility
- Minimum 0.5 FTE and 6 months total length
- The scheme as a whole must offer a significant contribution to the national funding landscape
- Can come from any kind of funder (public, charity, non-profit, private, etc.)
- Can target any career stage (though see point below about PhD support)

Partially within scope (included in count and data tables but only minor consideration in-text)

 UKRI's fellowship offer (included in UK analysis but not a central theme of this study as the broader national landscape is most of interest)

Beyond scope of this review (not included in count and data tables but may be noted in-text where useful)

- Fellowships from supra-national funders (EU1/ Marie Sklodowska, Human Frontier Science Program, etc.)
- Fellowships supporting PhD study
- Fellowships covering less than 0.5 FTE of the awardee's time or shorter than 6 months
- Very small-scale fellowship schemes, e.g. available at one institution only, very small number of awards (benchmark for 'significant contribution to the landscape' may vary depending on each case)

#### **Findings**

For large fellowships covering long periods of time, the **headline intention is often to provide extensive funding for talented people** to develop new ideas and fields. However, almost all fellowships, regardless of size, also seek to **assist some form of transition in or around academia**.

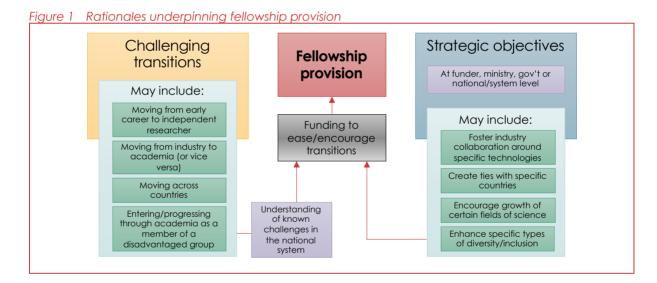
<sup>&</sup>lt;sup>1</sup> IN additional to the general decision to keep internationally available funding out of scope, Horizon Europe funding was also not included as UKRI has understanding of this as a result of UK Research Office activities and as a result of Horizon continuity planning that was previously conducted.



Such transitions may be between career stages, between sectors and/or different types of research, or to enter or progress through academia as a member of a disadvantaged group. Typically, such transitions are considered to be challenging in some form, and so fellowships ensure that more individuals can make the transition and that the transitions are more successful. Defining what is or is not a 'fellowship' has been a challenge in this study, and we find that the notion of transition-assistance has been the most consistently helpful separator between, for instance, fellowships and research grants.

Wider strategic needs and ambitions are a second important driver of fellowship provision. Funders may have an interest to grow some particular aspect of the national research system or to transform it in a particular way. Fellowship provision is therefore ideally a product of, first, an ambition to ease all manner of transitions that occur in and around academia and, second, of strategic objectives that inform which kinds of transitions should be eased in particular to optimally fulfil those objectives.

Fellowships almost always contain some element of **strategic relevance**, though they most often reflect broad and long-term strategic concerns, while fellowships geared towards specific short-term research or technology priorities are rare. This is likely a reflection of most fellowships being long-standing funding tools: it has not been unusual in our search to find fellowship schemes that have been in operation for several decades with minimal alteration.



At the national landscape level, we find **no evidence of comprehensive coordination efforts** resulting in clear 'divisions of labour' where different funders provide fellowships for different things to avoid overlap or duplication. Where coordination exists among funders, it tends to be more akin to tacit mutual understanding rather than explicit coordination exercises.

But our research also highlights that **limited coordination is not necessarily a bad thing**: having multiple similar schemes may encourage a degree of competition among funders, where each funder finetunes and optimises their offer to attract the best candidates. Scheme diversity may also exist at quite subtle levels and excessive efforts at coordination and duplication-avoidance may risk compromising such diversity.

While the UK has an unusually high number of exceptionally long fellowships, the **overall national profiles of fellowship length are broadly similar**. Across all countries, most fellowships are in the 3-5 year bracket with several shorter ones also available (often inter-sector mobility fellowships), plus the occasional scheme that slightly exceeds a five-year duration. There is little



indication whether these figures on award length have been designed purposefully or whether they are most often a matter of convention.

We find **remarkably little deviation in the assessment of fellowship applications** from the standard assessment for research grant funding practiced by most funders around the globe (external review by 2-3 academic peers followed by panel review). We find occasional use of some modifications to this standard process. These include:

- Use of a pre-proposal stage where only a short outline is reviewed and only especially
  promising pre-proposals then have their application moved forward for full review. This may
  limit the burden on peer reviewers and/or help assess relevance of applications early on
- Use of interviews to enhance the focus on the individual applicant. This typically appears only for fellowships of particularly high value and right at the end of assessment processes
- For shorter fellowships with lower overall financial value, there is occasional use of panelonly assessment (i.e. no external peer review)

**Special support measures within awards** are quite rare. This is particularly the case for fellowship-specific grants (i.e. grant schemes to which only holders of specific fellowships are eligible to apply), of which we find very few examples, though networking and mentoring opportunities are also the exception rather than the rule. Among the funders we have covered, UK funders (UKRI FLF DevNet and notably the national academies) stand out as providers of additional support during the lifetime of awards. While not essential, it appears that funders with particular convening power and resources (e.g. through their 'brandname' prestige or through access to especially good event locations) are better able and likelier to provide these types of support.

Many funders have taken steps to **prevent bias against underrepresented groups** in their funding processes. The use of narrative CVs is a part of this, as are efforts to ensure better balance of gender on assessment panels. Many funders also have specific schemes for underrepresented groups. Sometimes these are fully separate stand-alone schemes and in some cases they build on existing schemes.

We find little evidence of special practices in the **monitoring and evaluation** of fellowship schemes. However, fellowships have often existed for long periods of time, so evaluations are therefore almost always of an 'interim' rather than a final summative nature. They also often benefit from being able to assess outcomes over long periods of time (sometimes in the order of 20 years). Given the focus of fellowships on personal transitions and career trajectories, career tracking is an important avenue for evaluation, though national career tracker systems do not yet appear to be suitably mature for major long-term evaluative purposes.

Finally, we note that comprehensive information and signposting portals for fellowship funding opportunities do not appear to exist at national level or if they do, they are incomplete and not well known. **Better and more user-friendly sorting and signposting of funding opportunities** appears to be a major unmet need at present in most countries, leading to disorientation especially for those not deeply familiar with the national funding landscape.

#### Recommendations/ best practice

In the final main section of this report, we set out a small set of **best practices** based on our findings. These include developing a deep understanding of what kinds of career transitions are especially challenging in the national research system so that fellowships can respond to these challenges, building national portals of fellowship offers from all active funders, offering bespoke schemes for researchers from disadvantaged groups, use of narrative CVs, and continuing efforts towards national academic career-tracker systems.



#### 1 Introduction

#### 1.1 Purpose of the Review

In 2022 UKRI announced that it would be transitioning to collective talent funding, bringing together research council talent funding into a single £2 billion budget line for the three-year spending review period from 2022-2025, and commenced a programme of work to simplify and harmonise its investment in talent. UKRI seeks to make it easier for researchers to understand its schemes and reduce the bureaucracy to access funding, improving support in disciplinary and interdisciplinary areas and the flow of people across disciplines and sectors in R&I

With this purpose, UKRI commissioned Technopolis in March 2024 to undertake a landscape review of fellowships offered in the UK (beyond UKRI itself) and in five comparator countries. The review examines the UKRI fellowship provision against the comparators, identifying potential gaps in the domestic provision and opportunities for improvement in the support offered to researchers. This review has three objectives:

- To review existing research and innovation fellowship funding in the UK and other selected countries (aims and objectives of the schemes, budgets,<sup>2</sup> support offered, duration, value, eligibility, financial support, assessment procedures, actions taken to enable a diversity of award holders, M&E practices, reviews, and evaluations)
- Highlight instances where fellowship funding in comparator countries provides support that
  is currently unavailable within the UK Fellowship offer
- Identify examples of good practice in the assessment of fellowship opportunities or the support provided

#### 1.2 What is a fellowship?

In the first instance, we have followed the definition of 'fellowships' stated by UKRI in the terms of reference for this study:

"Prestigious awards which grant the holder freedom to undertake activities which require significant (at least 0.5FTE) time investment to achieve the proposed outcomes. They are designed to enable grant holders (including associated team if applicable) to conduct ambitious research and / or apply their knowledge and skills to other parts of the research and innovation ecosystem and / or support grant holders in developing the right skills and accessing opportunities to enhance their careers".3

In this definition, fellowships have two key purposes: to promote research and to facilitate researchers' mobility and knowledge exchange across sectors. Research fellowships offer financial support to researchers to initiate or expand their research agendas and capacities and enable progress in their careers. Mobility and knowledge exchange fellowships can take the form of secondments, allowing researchers to move between sectors (e.g. academic,

<sup>&</sup>lt;sup>2</sup> Given the focus on international comparators, we have compiled information involving several different currencies. Wherever we provide figures in Pounds Sterling for schemes in countries outside the UK, we have used the May 2024 exchange rate provided by the European Commission (<a href="https://commission.europa.eu/funding-tenders/procedures-guidelines-tenders/information-contractors-and-beneficiaries/exchange-rate-inforeuro">https://commission.europa.eu/funding-tenders/procedures-guidelines-tenders/information-contractors-and-beneficiaries/exchange-rate-inforeuro</a> en)

<sup>&</sup>lt;sup>3</sup> Mini Competition PS24017 – Landscape Review of Research and Innovation Fellowships



industry or policymaking domains), organisations, or disciplines to enhance their skills and gain insights into the other sector's context. In some cases, fellowships can involve international mobility, providing financial assistance for travel and short stays abroad.

We note that fellowships supporting PhD study are not within the scope of this review (in the UK these are often referred to as 'studentships' though terminology varies, as we explain further below). However, we do include schemes open to researchers who do not have a PhD, providing they are for research-related endeavours but not intended to support PhD study itself.

We have also excluded from our main analysis those fellowship schemes that exist at the supranational level (e.g. Marie Sklodowska, Human Frontier Science Program or selected awards available throughout the Nordic countries). While we mention these where relevant as part of the fellowship offer available to individuals, we include in our formal 'count' only those that exist within national boundaries and over which therefore national funders have direct strategic control.

Fellowships have been used as a policy instrument to build research capacity and generate critical mass for research, development, and innovation. Thus, fellowships vary in nature, size, and duration, offering support at different career stages and spanning a variety of activities and outputs. Evaluations commissioned by EPSRC,<sup>4</sup> UKRI,<sup>5</sup> and the British Academy<sup>6</sup> demonstrate the value of fellowship schemes in enabling career development, fostering innovation, and contributing to the knowledge base of the UK.

However, we note that even with these parameters, it has not always been clear in our data collection what counts as a fellowship and what does not. In the first instance, use of the term itself varies across countries (even among the English-speaking ones covered in our review). In some cases, the term 'fellowship' is in common use and more-or-less universally understood in the same way; in others, terms like 'stipend/stipendium' or 'scholarship' may closely match our definition of 'fellowship'.

Additionally, it is not always clear where 'grants' end and 'fellowships' begin. Fellowships are person-centred and typically cover buy-out of the award holder's time in some form. Grants by contrast tend to be more focused on a specific proposed research project and wider team and usually cover costs associated with the research itself (equipment, consumables, etc) rather than time-buyout. But this is a highly imperfect separation: many fellowships we identified also allow for research expenses and team-building and many also involve an explicitly defined research project, while many research grants also cover (part of) the lead investigator's salary.

In short, while our search highlighted many funding schemes that unambiguously fit the above working definition of 'fellowship', there are grey areas where we needed to make judgement calls. In such cases, we have largely taken a use-oriented approach: schemes that are labelled as 'fellowships' but whose characteristics are strongly similar to standard research grants (e.g. closely equivalent to UKRI responsive mode grants) may have been omitted by our search as they are unlikely to add much to this review.

<sup>4</sup> https://www.ukri.org/wp-content/uploads/2022/07/EPSRC-070722-ValueEPSRCFellowshipsFinalReport.pdf

<sup>&</sup>lt;sup>5</sup> https://www.ukri.org/wp-content/uploads/2024/03/UKRI-040324-EvaluationFutureLeadersFellowshipsScheme-ProcessEvaluationReport.pdf

<sup>&</sup>lt;sup>6</sup> https://www.thebritishacademy.ac.uk/documents/3296/Cloud-Chamber-Evaluation-British-Academy-Postdoctoral-Fellowship-Scheme.pdf



Further, there are challenges around defining whether a given scheme is significant enough for inclusion. There are many possible measures here: total number of fellowships, total scheme budget,<sup>7</sup> individual fellowship size, longevity, scheme or funder prestige, to name a few. When deciding on inclusion in our analysis, we have typically opted for a mix of these factors.

For these reasons, inclusion or exclusion of certain schemes may be contestable. This illustrates one of our first findings, namely that 'fellowship' itself can be a slippery term with unclear boundaries. We have however sought to ensure that we included any schemes that have any features of interest to funders looking to optimise their fellowship offers. In some places, we also briefly mention schemes that may not have met our definition for 'fellowship' or 'significance', if they have any hallmarks of interest to this review.

#### 1.3 Methodology

Alongside the UK, our review covers five comparator countries. Three of these were mandated by UKRI. We further recommended an additional two:

- USA, Germany, Netherlands (mandated by UKRI): These countries compare to the UK research and development (R&D) landscape in their levels of R&D expenditure (USA 3.47%, Germany 3.12%, and The Netherlands 2.26% of GDP), varied offer of fellowship funding schemes and mature R&D systems. Germany is also closely comparable in size to the UK, while the Netherlands have a large central public funder (NWO) comparable to UKRI. Like the UK, all are generally considered main countries of destination for highly talented researchers
- **Sweden** (our suggestion): Well-developed R&D system with strong linkages between academia, industry, and government. Sweden invested 3.5% of GDP in R&D in 2020. Sweden has a strong fellowship provision offered by Vinnova, the Swedish Research Council, and the Swedish Foundation for Strategic Research. More broadly, charitable foundations play a significant part in the Swedish landscape, much as they do in the UK
- Australia (our suggestion): Australia's fellowship funding schemes are varied, covering all
  researcher career stages, enabling intersectoral mobility, and supporting challenge-led
  research. More generally, Australia's research landscape has many similarities with the UK
  (including for instance past use of a research assessment exercise comparable to the UK's
  REF). As a highly developed, research-active English-speaking country, it also has
  considerable scope to use fellowships to attract overseas research talent

To capture the variety of fellowship provision in the UK and the comparator countries, our study approach is designed to handle the breadth of research fellowships and mobility and knowledge exchange fellowships. It consists of five main steps, as presented below.

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<sup>&</sup>lt;sup>7</sup> These first two measures also need to be adjusted not just for country size but for specific populations, e.g. population of early career researchers, industrial researchers, etc.



Figure 2 Proposed approach and methods

Country selection and definition of schemes to review

In agreement with **UKRI** we will finalise the selection of countries and definition of schemes to include in the review

2. Search

Evidence v underpineed by a

3. Development of country profiles of fellowship provision

- 3a. Characterisation of the UK and selected countries fellowship provision
- 3b. Validation of main findings and current countries provision with external stakeholders (funders, experts, evaluators)

4. Cross-country analysis

- Comparative analysis of provisions in 5 countries against the UK offer
   Identify differences and similarities and potential
- Identify differences and similarities and potential gaps in the support offered in the UK

5. Synthesis and reporting

 Synthesis of findings from the cross-country analysis, challenges and best practices identified across countries and what works for this type of interventions
 Reporting

We proceeded to identify the most prominent fellowships that form the provision for each selected country using four sources of information, including national funders' websites, international / non-governmental organisations' websites, ad-hoc web searches using key terms of the search criteria, and Technopolis internal repository of evaluations, which holds many recent fellowship programme evaluations and studies.

This has been an iterative process to obtain detailed information for each scheme identified. We prioritised major national public funders, as they concentrate a significant proportion of national fellowships offered and could also present a relatively close comparison with the UKRI provision. Every fellowship found on the funders' website has been complemented with adhoc searchers and non-governmental organisations information to gather all relevant information on the policy instrument. Our four-point search strategy is presented below.

Figure 3 Main search sources of fellowships

- Main national funders' websites, notably National Science Foundation NSF, Department of Energy US, European Commission, DFG, German Resarch, Dutch Research Council NWO, Australian Research Council
- Websites of inter/nongovernmental organisations listing funding opportunities in specific countries, general R&I information and funding (e.g. Euraxess, OECD STIP Compass database)
- Ad hoc searches in Google following key terms using criteria outlined above to identify private fellowship funding offer that complements provision of public funders, such as Learned societies and Academies, Foundations, private funding, amongst others
- Technopolis internal repository of evaluations includes recent evaluations like: the Value of EPSRC fellowships, Evaluation of the Lerverhulme Trust Senior Research Fellowship scheme, Report to the Royal Society, Newton Advanced Fellowships evaluation and the characterisation of international researcher career intersectoral mobility schemes for the NCUB.

To structure the search, we defined and agreed with UKRI a set of information categories, which are presented below. Every scheme identified was logged in a characterisation template that collects the main features of each fellowship found and allowed us to synthesise the country provision.

Table 1 Main categories of analysis to cover per fellowship scheme

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Rationale for the intervention	Objectives of the scheme or support provided	Budget (overall at the programme level)	
Type of support (financial, mentoring, training, networking)	Call frequency	Number of beneficiaries per round/over time	
Remit	Actions taken to ensure diversify of beneficiaries	Support offered to beneficiaries during the lifetime of awards	
Individual award value (range if applicable) and duration	Eligibility criteria	Researchers' career stage targeted	
Required/expected support from organisations hosting fellows	Assessment process (evaluation criteria, selection process)	What is covered by the award (e.g. salaries, research expenses, team, travel costs, any important conditions of the award)	



Evaluations available (evidence on impact and good practices at the scheme level)

We sought to cover all categories for each scheme and in most cases, we have been able to build a complete description of the instrument consisting of the rationale of the intervention and its main characteristics of the award (size of awards, remit, duration, eligibility criteria, requirements for the host organisation, career stage targeted and what can be funded with the award). Information on the number of beneficiaries per round, award support and overall budget at the programme or scheme level as well as evaluations may not always be available. In a few cases, funding information is not public.8

Following this desk-based review of the fellowship landscape in the six countries, we completed our research through a programme of interviews, aiming for a minimum of three interviews per country. Interviewees are mostly programme or departmental leaders at key funding organisations, as well as selected other experts who could shed some light on fellowship provision in their respective country.

The first aim of these interviews was to ensure search completeness, in other words: could interviewees think of any significant fellowship schemes we had not yet captured in our desk review? Secondly, we discussed wider aspects such as gaps in fellowship provision, strategic rationales, points of comparison and perceived opportunities for improvement. We note that although interviews have been conducted and provided substantial additional depth and validation to our findings, they of course have involved a limited range of people and therefore cannot be taken as representative of community views.

With this input, we proceeded to conduct a cross-country analysis to provide a comparative perspective of the UK provision against the five countries and identify key themes, commonalities, differences and good practice, which serve as a basis for recommendations in the final main section of this report.

#### 1.4 Search results at a glance

The results of our initial search are presented below. We have found and analysed a total of 197 fellowship schemes. There are substantially more research fellowships than mobility fellowships. However, we note that those schemes funding international mobility as part of the research are kept within the group of research fellowships and not in the mobility set. Thus, mobility has been understood and used as intersectoral mobility supporting knowledge exchange between different sectors and enabling the movement of researchers between academia, industry, and policy.

Table 2 Total numbers of fellowship schemes captured by our search

Country	Research Fellowships	Mobility and Knowledge Exchange Fellowships
UK	40	9
Germany	18	2
Netherlands	8	0

<sup>8</sup> For example, in the Rosalind Franklin Fellowship Award in The Netherlands, as it appears to depend on the experience of the researcher and how that matches the structure of academic positions at the University of Groningen. More generally, detailed awards information is often unavailable in the case of private/charitable funders.



Sweden	30	3
Australia	20	5
USA	59	3
Total	175	22

# 2 Fellowships provision: an appraisal of rationales

Overall, our review has found a highly diverse picture of different landscapes and practices in the six countries. There are few commonalities across all countries and many context-dependent facets in each country-case. We can nevertheless make some observations on several individual questions set for this review, including on issues ranging from assessment processes to EDI aspects.

These issue-by-issue findings will form the substance of the next section of this report. But to contextualise these more detailed findings, we first set out our wider observations gained across our data collection. Without such a wider discussion, the more granular findings will lack context, and it is in fact these wider observations which may be of the greatest help for UKRI and other funders to evolve and optimise their own fellowship offers.

Our headline observation is that **fellowships almost always seek to assist some form of transition** in or around academia. Typically, such transitions are considered to be challenging in some form, and so fellowships ensure that more individuals can make the transition and that the transitions are more successful. Transitions supported by fellowships include (but are not limited to):

- Transitioning from early career to being an independent (i.e. not formally supervised) researcher
- Transitioning from abroad into the funder-country's research system or transitioning into another country's research system for a fixed period of time
- Transitioning either into academia or from junior to more senior positions as a member of a disadvantaged group (e.g. women, ethnic minorities, indigenous communities)
- Transitioning from industry/practice into academia or vice versa
- Transitioning from mid-career research into positions of high-level research leadership
- Transitioning back into academia after a career break

This theme of transition applies to almost all schemes captured by our review. For longer-term fellowships especially for later career stages, the emphasis of transition is not always as evident. Here, the provision of extensive funding for talented people to develop new ideas and fields tends to be the headline intention. However, even at this level, there is usually also a focus on

<sup>&</sup>lt;sup>9</sup> In fact, we suggest that the notion of transition, either to a new career stage or a new country, for a new 'kind' of researcher, into a new sector or into a new type of research, may be a helpful way of definitively marking out fellowships as distinct from research grants, which, as noted in the introduction, has been a challenge in our study.



the fellowship holder and their development as an individual over the course of the funded period (e.g. having the time and space to transition into a position of leadership).<sup>10</sup>

In terms of defining fellowship objectives and formulating national or funder-level fellowship strategies, this observation is instructive: to optimise fellowship provision, it is important to have intelligence on what kinds of transitions (between sectors, career stages, etc.) are particularly challenging.

We note that even on this fundamental point there are substantial variations. For example, our research suggests that in the USA, the boundaries between industry and academia are quite porous (especially in engineering and related subjects) compared with many other countries. We therefore find little in the way of industry exchange fellowships in the US, while there are several industry exchange fellowships for instance in the UK. Put simply, where structural hurdles elsewhere might mean that industry exchange fellowships are necessary to bridge such a career transition, in the USA it may more often be a much simpler matter of 'changing jobs'.

Many other such factors are at play in various countries, resulting in easier or harder transitions of various kinds, and therefore heightening or lessening the need for various fellowship types. It is critical therefore to understand the national context, from culture to institutional resources, distribution of research funds, societal inequalities, inter-sectoral push and pull factors and a host of other elements, and to optimise and formulate fellowship provision in response to these.

A second important driver of fellowship provision comes in the form of wider strategic needs and ambitions. Funders may have an interest to grow some particular aspect of the national research system or to transform it in a particular way. This might include:

- Fostering a greater number of high-quality researchers in particular disciplines (often an implicit rationale with funders who only fund within specific disciplines)
- Ensuring greater industry-academia exchange around key technologies (e.g. where these
  may be especially conducive to economic impact or to addressing major societal,
  ecological or health challenges)
- Ensuring close ties with specific countries through academic exchange ('science diplomacy')
- Increasing diversity and inclusion may itself be a strategic objective set at funder or even ministerial/governmental level (this may even relate to very specific situations, e.g. inclusion of Aboriginal and Torres Strait Islander communities in Australia)

The extent of influence of such strategic rationales varies, and in some cases it may be more explicitly stated than in others. Even a generalist early career fellowship may have strategic relevance because supporting a strong pipeline of early-to-mid career academics is an important part of ensuring a sustainable and healthy national science system.

In summary, fellowship provision is ideally a product of, first, an ambition to ease all manner of transitions that occur in and around academia and, second, of strategic objectives that inform which kinds of transitions should be eased in particular to optimally fulfil those objectives.

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<sup>&</sup>lt;sup>10</sup> We note also that the idea of long-term, well-funded fellowships as a vehicle to create and foster highly innovative research ideas has recently come into question: Veugelers, R., Wang, J., & Stephan, P. (2022) 'Do funding agencies select and enable risky research: Evidence from ERC using novelty as a proxy of risk taking' (No. w30320). National Bureau of Economic Research; Luukkonen, T. (2012) 'Conservatism and risk-taking in peer review: Emerging ERC practices.' Research Evaluation, 21(1): 48–60.



We illustrate these considerations below. However, we also note that we describe an ideal scenario here. As we detail in the next main section, the extent of strategic coordination around national fellowship offers is always imperfect and partial at best. In fact, our findings include many legacy-fellowships that have existed for several decades, and so their original rationale may no longer have much salience.<sup>11</sup>

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Other schemes have evolved their rationale. For instance, though not included in this review, the Human Frontier Science Program (HFSP), which includes a fellowship scheme, was created in the early 1990s largely due to a perceived lack of international collaboration in biological sciences. Its rationale has since been superseded by an ambition to foster novel interdisciplinary and highly transformative collaborations. This 'evolution' of purpose is noted across much of its recent publications.



# 3 Cross-country analysis – further insights

In this section we highlight our findings on the individual aspects of fellowship provision studied for this review. As per the previous section, we note that much of the observed variation between different countries' practices is down to differing national contexts. In the final section of this report, we do highlight what we judge to be good practice but for the most part, 'different' does not mean either 'better' or 'worse'.

### 3.1 Strategy and coordination

Fellowship schemes almost always contain some element of strategic relevance. However, fellowships identified by this review most often reflect broad and long-term strategic concerns, rather than specific priorities. For instance, while the science strategies of several countries identify specific technologies or fields as national priorities, we find little evidence of fellowship schemes directly and explicitly aimed at such priorities. <sup>12</sup> Instead, fellowship schemes tend to reflect more long-term and general strategic concerns like internationalisation, university-industry collaboration, or expanding and sustaining research talent in a field-specific funder's areas of interest.

This is likely a reflection of the fact most fellowships are long-standing funding tools: it has not been unusual in our search to find fellowship schemes that have been in operation for several decades with minimal change to award parameters and objectives (e.g. the Royal Society's URFs or the American Fulbright awards). Strategic elements of fellowship provision tend therefore to be more about long-term transitions and/or sustainability rather than short-term boosts for highly specific priorities.

While this focus on long-term strategic concerns tends to be the norm, we find no overt barriers to the potential of having fellowship schemes with specific calls focused on particular technological priorities. It is simply not commonly done. One of very few examples is the German DAAD scholarship 'ERA Fellowships – Green Hydrogen' programme, which supports German and international Postdoctoral researchers (as well as Masters and PhD students) in any topics related to Green Hydrogen.<sup>13</sup>

Aside from strategic dimensions within each individual fellowship scheme, there is also the issue of strategic coordination: especially where multiple major funders exist (as they do in most countries), who is responsible for what?

There is generally a low level of cross-funder coordination. We find no evidence of comprehensive coordination efforts resulting in clear 'divisions of labour' where different funders provide fellowships for different things to avoid overlap or duplication. Where coordination exists among funders, it tends to be on specific elements of the fellowship landscapes, and rather more akin to tacit mutual understanding rather than explicit coordination exercises. For instance, for international mobility fellowships in Germany, our interviews suggest there is something of a 'cultural' understanding the DAAD covers early

<sup>&</sup>lt;sup>12</sup> By contrast, individual grant funding calls for priority fields and technologies are nothing unusual in any of the countries studied. We note that there are a small number of fellowships around specific science and technology priorities, notably in Australia.

<sup>&</sup>lt;sup>13</sup> The Australian ARC's Future Fellowships note on the scheme page that the scheme encourages applications from researchers working in areas of national priority. However, there appears to be no obligation for applicants to work in those specific areas. We judge this to be a mild signalling function rather than a scheme actively pivoting towards national technology priorities.



career researchers while the Alexander von Humboldt Foundation covers fellowships for more senior researchers. In a similar vein, the Fulbright scholarships have become such a long-term household name in the US that they have become a default for international exchange fellowships (both into and out of the country).

The Netherlands are something of an exception here, as they have the most monolithic funding landscape with NWO being by far the most significant provider of fellowships in the country. NWO's offer is very clearly coordinated with different fellowships for different career stages, including pathways from one to the next where needed. Because there are so few other major funders, the result is a strong extent of national coordination.

This exception aside, our research suggests that limited coordination is not necessarily a bad thing. Several interviewees suggest that having multiple similar schemes may be useful. On one hand, it encourages a degree of competition among funders, where each funder finetunes and optimises their offer to attract the best candidates. On the other, several interviewees noted that different funders have different cultures and constituencies, leading to subtle differences even among similar-looking schemes. For instance, the UK's Royal Society and Royal Academy of Engineering both have industry exchange fellowships. However, the Royal Society is generally seen as a 'home' for basic, exploratory research in the natural sciences while RAEng is perceived in the wider research community to be more closely aligned with applied science. This in turn influences which of the two schemes a researcher may apply to and in turn, what kind of industry-relevant research is then conducted under each of the schemes. The different types of German research and technology institutes (Fraunhofer, Leibnitz, Helmholtz, Max Planck) similarly have different cultures and therefore attract different kinds of endeavours even if they have similar schemes.

In short, diversity may exist at quite subtle levels and excessive efforts at coordination and duplication-avoidance may risk compromising such diversity. While not stated as such by any of our interviewees, we suggest that scheme application and success rates might be better measures of whether any areas are especially over or under-served, compared with number of different schemes.

#### 3.2 Fellowship sizes and duration

Making meaningful comparative statements about fellowship sizes has been a particular challenge for this review. In the first instance, financial value is always a compound of funds per year and duration in years. However, additional factors include the differing costs of living in the countries covered; the eligible expenses contained in the fellowship; the level of full economic cost covered by the fellowship (80% is typical in the UK but this varies considerably elsewhere), and the varying levels of institutional funding and the kinds of resources institutions typically provide.

All these factors make it impossible to provide a robust comparative view of the value of different fellowships in absolute terms. Claiming that fellowships in one country have a higher financial value than in another country would essentially be misleading in light of the many variables noted above.<sup>14</sup>

Regarding the length of fellowships, countries exhibit a high variety. However, we find that the UK appears generally to have the longest durations with the Wellcome Trust Fellowship (up to

<sup>&</sup>lt;sup>14</sup> For readers especially interested in fellowship size, we have compiled information per fellowship (including details beyond the absolute value where relevant) and this information is all contained in the data tables of Appendix H.



10 years), the Royal Society's Faraday fellowships (up to 10 years) and the Future Leaders Fellowship scheme by UKRI (up to seven years). Fellowships of such long duration are very rare in the other countries we studied. Among the few comparable cases are the Volkswagen Foundation's Freigeist Fellowship with 6 years (and extendable for two more) and the Swedish Research Council's Distinguished Professor grant (8 years).

Across countries, research fellowship schemes supporting well-established researchers tend to have a maximum of five years of support and those aimed at mid-career researchers most often span three to five years. There is much higher variability among schemes supporting early career researchers, i.e. many research fellowships may be shorter. There is also a tendency for mobility fellowships to have shorter durations than research fellowships with many in the range of six months to two years. However, this is not absolute. We also find several mobility fellowships in the 3-5 year range and research fellowships of much shorter durations, but both tend to be the exception rather than the rule.

While the UK has an unusually high number of exceptionally long fellowships, the overall national profiles of fellowship length are broadly similar. Across all countries, most fellowships are in the 3-5 year bracket with several shorter ones also available (often mobility fellowships), plus the occasional scheme that slightly exceeds a five-year duration.

There is little indication whether these figures on award length have been designed purposefully or whether they are most often a matter of 'convention'. We note that in most countries, academic jobs have become more precarious, with the idea of 'tenure' being less widespread than in the past. This in turn may necessitate awards that can provide additional long-term stability. However, it is beyond the scope of this study to fully assess these systemic transitions in relation to the historical development of fellowship-length. We simply note that it is possible that the need for longer fellowship durations may have increased as the parameters of academic employment have transformed.

Application success rates vary substantially among the schemes we have reviewed (some below 10%, some closer to 50%). There are clearly always context-dependent choices to be made around available budget, award size and demand fulfilment.

#### 3.3 Assessment processes

We find remarkably little deviation in the assessment of fellowship applications from the standard assessment for research grant funding practiced by most funders around the globe.

A typical funding process for research grants usually involves:

- Submission of the application via the funders' online portal
- Eligibility and compliance checks by funder's administrative staff
- External review of the application by 2-3 academic experts (peer review), assessing elements such as quality and feasibility of research plan and qualifications and track record of the applicant(s)
- Panel review, where a group of around 10-30 experts rank submitted applications from best to worst based on the external reviews and their own judgement
- Final decision by high-level representatives of the funding organisation (typically those rated best by the panel review are funded as far as the available budget permits, but strategic concerns may have an influence on the final decision)

Most of the fellowship schemes we identify approximate closely to this generic and widely used process. Recent work conducted by Technopolis for UKRI highlights a wide range of modifications that research funding organisation may make to the 'standard' process outlined



above (not just for fellowships but for all manner of awards). 15 Among the fellowships captured by our review, we see occasional use of several modifications to the standard funding process. The following are most common, though we stress that none are in highly frequent use:

- Use of a pre-proposal stage (sometimes also known as 'expression of interest', 'outline proposal' or 'letter of intent'). Rather than external review of full applications, only a short outline is reviewed (often by an expert panel rather than external reviewers). Only candidates with especially promising pre-proposals then have their application moved forward for full review. This technique is not specific to fellowship schemes but is simply a way to limit the burden on peer reviewers. 16 It can also be used to assess relevance of applications early on
- Use of interviews: this is a technique that tends to be used for fellowships rather than grants, given the person-centred nature of fellowships. They tend to be conducted by the review panel also in charge of written applications. If used, interviews typically appear only for fellowships of particularly high value (i.e. high financial value and/or long duration). This is likely because the burden of organising in-person interviews can be more easily justified when such large awards are at stake. Interviews also tend to occur right at the end of assessment processes (i.e. after peer/panel review of written applications, not before)
- For shorter fellowships with lower overall financial value, there is occasional use of panelonly assessment. In other words, there is no external peer review and instead a standing panel reviews applications and puts forward a ranking and funding recommendation

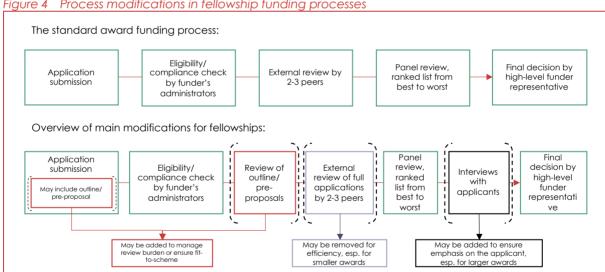


Figure 4 Process modifications in fellowship funding processes

While not strictly a process-modification, we note that some fellowship application assessment processes make use of narrative CVs (Formas in Sweden for example are moving in this direction, as are UKRI and many others). There is a growing body of research and advocacy work highlighting the benefits of narrative CVs, especially in terms of reducing disadvantage

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<sup>15</sup> Kolarz P, Vingre A, Vinnik A, Neto A, Vergara C, Obando Rodrigues C, Nielsen K & Sutinen L (2023) Review of peer review. UKRI: <a href="https://www.ukri.org/publications/review-of-peer-review/">https://www.ukri.org/publications/review-of-peer-review/</a>

<sup>&</sup>lt;sup>16</sup> To achieve similar aims, a few schemes also use demand management, whereby application number per institution are limited. However, this approach has been noted to shift selection burden to institutions rather than limit it altogether (see report referenced in footnote above)



for individuals from non-traditional research career paths. They also help avoid use of inappropriate metrics as indicators of personal performance and track record.<sup>17</sup> In light of the heightened focus on the applicant themselves (as opposed to the project), use of narrative CVs appears to be an especially pertinent approach for fellowship awards.

#### 3.4 In-award support

Special support measures within awards are somewhat rare. This is particularly the case for fellowship-specific grants. An exception here are the Royal Society's University Research and Dorothy Hodgkin fellowships, where fellows have access to a specific funding scheme to provide equipment and consumables grants to fellows – the scheme is not open to anyone other than URF/DHF fellows. We do find one additional noteworthy case in the shape of Australia's Kathleen Fitzpatrick and Georgina Sweet fellowships, which are possible 'add-ons' to Laureate Fellows. This however is a special measure aimed at EDI so we cover it in the next section.

Among the funders we have covered across the six countries, the UK in fact stand out as providers of additional support during the lifetime of awards. This includes UKRI (e.g. through the FLF Development Networks), and notably the UK's national academies. The Royal Society provides several networking opportunities including annual scientific conferences, regional network meetings, and various forms of mentoring and opportunities for public engagement. The Volkswagen Foundation also organises regular networking events and conferences. We note that Volkswagen and the Royal Society both have substantial convening power, including in physical terms (The Royal Society through its central London premises, Volkswagen through its castle, Schloss Herrenhausen). While not essential, it appears that funders with such historical convening power and resources are better able and likelier to provide these types of support.

Related to this, another form of in-award (and post-award) support observed in a handful of fellowships schemes is in the form of alumni networks. Such networks ensure that fellows retain access to a community of accomplished peers that can continue to provide support and career advice, as well as foster collaboration opportunities between past and present beneficiaries. This is the case, for example, of the Humboldt Network of the Alexander von Humboldt Foundation in Germany.

#### 3.5 Diversity and inclusion

Equity, diversity and inclusion (EDI) are key themes that appear across our research. This owes in large part to the fact that women and various minorities remain under-represented in most countries' research systems. All research funders show at least some awareness of this and most understand themselves as needing to play a role is addressing these inequalities.

In most individual schemes, EDI aspects play only a very minor role. Scheme notes may state that applications from all types of applicants are encouraged. Likewise, many funders have taken steps to prevent bias against underrepresented groups in its general funding processes. The use of narrative CVs is a part of this, as are efforts to ensure better balance of gender on

<sup>&</sup>lt;sup>17</sup> See e.g. <a href="https://sfdora.org/resource/using-narrative-cvs-process-optimization-and-bias-mitigation/">https://sfdora.org/resource/using-narrative-cvs-process-optimization-and-bias-mitigation/</a>



assessment panels.<sup>18</sup> But many funders also have specific schemes for underrepresented groups. Sometimes these are fully separate stand-alone schemes and in some cases they build on existing schemes:

- The Dutch NWO's Veni fellowship for early career researchers has a top-up consisting of an additional £1.1m per round to improve gender balance in specific engineering and science domains. Female applicants whose application has been rated at least 'very good' but did not get funded from the regular budget will be awarded from this top-up sum until it is exhausted
- At the next career stage, the NWO has the Aspasia Fellowship, which is associated with the
  Vidi Talent programme. Female applicants who are rated 'very good' or 'excellent' after
  interviews but have not been awarded a Vidi grant are eligible for the Aspasia Fellowship.
  Eligible applicants do not need to apply for this award as they will be approached by NWO
  if they are eligible
- The Netherlands Institute for Advanced Study in the Humanities and Social Sciences' (NIAS)
   Individual Fellowships aim for age and gender balance and regional diversity. In terms of
   regional diversity, each year, the NIAS aims to have a cohort that is comprised of one third
   of scholars with affiliations from Asia, Africa, the Middle East, the Caribbean and Latin
   America
- In a similar vein, Australia's NHMRC Investigator award uses structural priority funding for women at the Emerging Leadership levels of the scheme to the extent necessary to achieve gender equity targets. It aims for equal numbers of awards by gender for the Leadership category of the scheme. In addition, the NHMRC Investigator grant includes non-binary researchers alongside women in their gender equality interventions
- The Australian ARC's Discovery Indigenous scheme aims to increase the representation and participation of First Nations people in research, notably through the Discovery Australian and Torres Strait Island Awards (DAATSIAs) fellowship, which provide support specifically for Aboriginal and or Torres Strait researchers
- The Australian Laureate Fellowship notably offers the Kathleen Fitzpatrick fellowship to female researchers from humanities, arts and social science disciplines and Georgina Sweet fellowship to female researchers from science and technology disciplines. Both are awarded to women Australian Laureate Fellows and provide additional funding to support and promote women in research as well as mentor early career women researchers
- Some fellowship schemes by the US NSF target pre-tenured faculty from groups that have been historically excluded and underrepresented to help launch their careers (e.g., the LEAPS-MPS Program), or specifically lack access to adequate organisations resources (e.g., the Computer and Information Science and Engineering (CISE) Research Initiation Initiative)

A notable special case is the Royal Society's Dorothy Hodgkin Fellowship. Unlike the schemes mentioned above, it does not provide funding explicitly or exclusively to individuals with protected characteristics. However, its stated aim is to support early career scientists "...who require a flexible working pattern due to personal circumstances, such as caring responsibilities and/or health-related conditions." While not specifically geared towards women researchers,

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<sup>&</sup>lt;sup>18</sup> A recent review of the Human Frontier Science Program (HFSP) for instance notes substantial efforts on the part of programme management to improve the gender balance of HFSP assessment panels, including for its fellowships. While gender outcomes have also improved, it is unclear whether there is a direct causal link: <a href="https://www.hfsp.org/node/74873#book/">https://www.hfsp.org/node/74873#book/</a>



women form a much greater proportion of applicants and awardees on this scheme compared with other Royal Society funding schemes. There is a similar picture for the Daphne Jackson Fellowships, which offer researchers the opportunity to return to a research career after a break of two or more years for a family, health or caring reason.

We also note the recently initiated Career Development Fellowship (CDF), provided by the Royal Society. It was developed following cross-sector roundtables, reports looking at trends across 11 years of Higher Education Statistics Authority data, and through benchmarking the Royal Society's early career fellowships against the eligible applicant pool. This process identified a need for interventions to support researchers from Black or Mixed Black African, Black Caribbean or other Black heritage backgrounds, particularly researchers making the transition from postgraduate to early postdoctoral stages. The scheme is currently run as a pilot, targeting researchers from Black heritage, and may be broadened to researchers from other underrepresented groups, if successful. While this scheme is only at pilot stage, the underpinning research into representation among early career awardees is notable here, as it highlights a key effort to first understand difficulties in the research landscape and then design a fellowship offer accordingly.<sup>19</sup>

#### 3.6 Monitoring and evaluation

We find little evidence of special practices in the monitoring and evaluation of fellowship schemes. Typically, fellowship awards involve similar annual reporting as other research awards and usually go through the same reporting systems. Standards around periodic evaluation of schemes also apply in the same way they do to other funding tools.

The great majority of fellowships have been around for long periods of time as fellowships tend not to be created for short-term purposes, 20 so evaluations of fellowship schemes are almost always of an 'interim' rather than a final summative nature. They are concerned with outcomes but also with process and relevance questions, ensuring that a fellowship's aim and offer is still appropriate and whether processes or substantive elements of the fellowship may need to be amended.

Longevity of fellowships also means that evaluations often benefit from being able to assess outcomes over long periods of time. For other grant schemes (especially relatively short-lived strategic endeavours), evaluations may have only one or a small number of quite recent calls to cover, where medium and long-term benefits may be yet to materialise. By contrast, the 2017 evaluation of the Alexander von Humboldt professorships covered eight years of funded awards, while a recent review of the HFSP considered over 20 years' worth of awards data. It is quite typical for evaluations of major fellowship schemes to be able to work on this scale in terms of timeline covered.

Given the focus of fellowships on personal transitions and career trajectories, a critical element in their monitoring and evaluation are the long-term effects on the award holders' careers. To this end, several funders in the UK are working on career tracker systems and we are aware of some funders abroad engaged in similar developments (e.g. the Swiss SNSF). However, our review has at this stage not found evaluations that were able to make direct use of national career tracker systems to assess long-term fellowship scheme outcomes. This may however be

<sup>19</sup> https://royalsociety.org/grants/career-development-fellowship/ See also https://royalsociety.org/news-resources/publications/2021/trends-ethnic-minorities-stem/

<sup>&</sup>lt;sup>20</sup> With some notable exceptions, e.g. Volkswagen's special scheme launched in 2022 to help integrate Ukrainian academics fleeing from the war into the German research system.



the future shape of fellowship evaluations (at least for the 'outcomes' components of evaluations, likely not for process questions), once such tracker systems have been fully established and in operation for suitable lengths of time. Capturing fellowship holders' subsequent career trajectories in some form – and ideally comparing with a control group, e.g. of marginally unsuccessful applicants – is nevertheless practiced in many current evaluations. This might be done through surveys, publications data or other bespoke approaches not dependent on existing career tracker systems.

#### 3.7 Coherence and accessibility

Before concluding with some observations around good practice and showcasing the fellowship landscapes in each of the six countries studied in the annex, we finally note that coherence of the national fellowship landscape is a point of at least some concern in almost all countries we considered.

The Netherlands are an exception here, as the NWO is by a large margin the major provider of fellowships and is therefore able to effectively coordinate and harmonise most of the national fellowship landscape. However, in all other countries, there are many different fellowship providers, both public and private/non-profit. Many interviewees noted that while a pluralistic landscape (even with plenty of overlap and duplication) is no bad thing, it can be bewildering for potential applicants, especially if they come from another country or from non-traditional academic career paths.

Comprehensive information and signposting portals for all or almost all funding opportunities do not appear to exist at national level or if they do, they are incomplete and not well known. Individual research performing institutions tend to have such information pages but again, these are not necessarily comprehensive or up to date. Better and more user-friendly sorting and signposting of funding opportunities appears to be a major unmet need at present in most countries.

This is compounded by use of many different conventions around fellowships even within countries, including around eligibility. The main example encountered consistently in our research has been around definition of career stages (i.e. what counts as 'early career', /'mid career', etc). We find that even within the same country, different funders have different definitions for this. The EU has a suggested comprehensive definition (with defined metrics from 'R1: First Stage Researcher up to the point of PhD' to 'R4: Leading Researchers who have led research teams and developed international reputation in their field due to their world-class research), but not all schemes we found in EU countries necessarily conform to these definitions.

To somewhat counteract the disorientation of potential applicants (especially of those not deeply familiar with the national funding system), harmonisation efforts of schemes under programmes appears to be a characteristic in several countries, including Germany, The Netherlands and Australia. This may include simplified/harmonised application processes and definitions and offer a clearer perspective of policy instruments and their use as mechanisms to support applicants' career progression.



# 4 Summary, best practices and recommendations

As noted at several points in this report, each country has its own context so what is right and necessary in one may not be so in another. However, our research does allow us to note some general points of good practice of fellowship provision that are more-or-less applicable in all cases.

- Fellowship provision should be informed by a deep understanding of the country's research
  and innovation system. In particular, this should include a clear sense of what kinds of
  career transitions are especially challenging so that fellowships can respond to these
  challenges. A funder's strategic priorities and ambitions also need to play a role in deciding
  which transitions should especially be aided through fellowship provision
- Because there are few widely applicable principles guiding 'ideal' size, length and eligible costs of fellowships, there likely needs to be wide stakeholder consultation to ascertain what these basic characteristics need to be for each individual scheme
- There is a need in most countries for better signposting of fellowship offers. Central national
  portals of fellowship offers from all active funders (public and private/non-profit) will likely
  be of help especially for researchers from abroad or from non-traditional academic career
  paths who may not be familiar with the national funding landscape
- While a degree of harmonisation and consolidation of fellowship schemes may be useful
  for similar reasons, too much coordination and duplication-avoidance risks erasing subtle
  differences between similar-looking schemes. Preserving a diverse fellowship landscape is
  important, especially so that all different types of researchers remain catered for
- Bespoke schemes for researchers from disadvantaged groups (or top-up budgets to existing wider schemes for high-quality applicants from such groups) are commonly practiced ways to help address structural inequalities in the research system
- To further tackle inequalities, use of narrative CVs should be further mainstreamed, especially for fellowships, given the person-centred nature of these awards
- To effectively evaluate fellowship schemes, efforts towards national academic careertracker systems should continue



# Appendix A Fellowship Provision overview: UK

- Large plurality of funders: UKRI, the national academies, NIHR, foundations/charities and private funders
- The UK has a broad range of scheme durations as well as size of annual awards
- Strong focus on early career stages
- The majority of fellowships (30) are offered outside of the UKRI. However, a large number of these also offer substantially lower annual funding to individuals

#### A.1. National context

The UK's funding landscape of research and innovation fellowships is largely shaped by UKRI and its research councils as well as six other main funders, including the national academies and charitable funders. These are the Royal Society, the British Academy, the Royal Academy of Engineering, the Wellcome Trust, the Leverhulme Trust, The Royal Commission for the Exhibition of 1851 and the British Heart Foundation. In total, 30 non-UKRI schemes have been identified, which, along with the 17 schemes shared by UKRI, constitutes an offer of 47 fellowships in the UK matching our definition. Outside of these are also funders providing schemes that are related to this review's definition of fellowships, but do not fully adhere to it. There are also complementary schemes, such as the Academy of Medical Sciences Professorship Scheme which is intended to support research assistance, research costs or equipment but may not be used to contribute to the cost of salary.

Since this study was commissioned by UKRI, we focus here for the most part on non-UKRI fellowship provision, though we note UKRI's role and specific UKRI funding instruments where relevant to context.

#### A.2. Fellowship provision at a glance

The number of fellowships found is not exhaustive but gives a sense of the total national provision. Overall, these fellowships account for the most renowned instruments and funders in the landscape.

In general terms, the UK's fellowship provision has a strong focus on research, although we do find more fellowships for intersectoral mobility than in any of our comparator countries.

Compared to other countries considered by this review, fellowships in the UK have quite long durations. The Wellcome Trust and the Royal Society have pioneered this, seeking to improve the working conditions of researchers in Higher Education Institutions and facilitating long-term research. Recently, the Future Leaders Fellowship has continued this trend, extending the duration of fellowships up to a maximum of seven years – with four initial years and the possibility to extend it up to three more years.

Mobility fellowships have also gained prominence. Seven schemes in the UK are highlighted in the intersectoral mobility task force report produced by the National Centre of Universities and Business (NCUB). Among them are Innovation Fellowships (British Academy), Industrial Fellowships (Royal Academy of Engineering), Innovation Scholars (UKRI), and Industry Fellowships and Entrepreneur in Residence (Royal Society). From the evidence gathered, schemes fostering mobility have shorter durations, from six months up to three years – the longest durations for these types of fellowship appear to be characteristic of medical sciences.

Fellowship provision has a strong emphasis on STEM and health sciences. In contrast, research in social sciences and arts is promoted through fewer funding instruments, mostly provided by



the British Academy. Some schemes, notably the Future Leaders Fellowship, is open to all disciplines.

Fellowships enable career development in several ways, for example, by allowing researchers to free up time to undertake high-quality research to generate the necessary outputs and competencies to support permanent appointments in HEIs. They can enhance researchers' skill sets, such as the leadership skills required to head research teams. They are also used to enable explorative and high-risk research. The information collected provides evidence of coverage across all career stages, with a significant number of schemes concentrated on supporting postdoctoral researchers and those at mid-career stages. UKRI schemes fund predominantly early and mid-career researchers, but four UKRI schemes are open to all career stages and three schemes are directed at both mid-career and senior researchers. Complementarities between UKRI and non-UKRI schemes are visible between the early career and mid-career stages. The non-UKRI funders also provide two schemes specifically aimed at senior researchers. The total distribution across the identified schemes in the UK are presented below. It is worth noting that this only represents number of schemes provided, not total funding available nor number of beneficiaries. The limited availability of data on beneficiaries and scheme budgets makes potential comparisons uncertain and potentially misleading.

Table 3 Distribution of schemes across career stages

Career stages* targeted	Number of schemes UKRI (share)	Number of schemes non-UKRI (share)	Total number of schemes (share)
Open to all career stages	4 (24%)	3 (9%)	6 (13%)
Early career	8 (47%)	12 (38%)	20 (43%)
Early- to mid-career	1 (6%)	5 (16%)	5 (11%)
Mid-career	1 (6%)	4 (13%)	5 (11%)
Mid-career to senior	3 (18%)	6 (19%)	9 (19%)
Senior career	0 (0%)	2 (6%)	2 (4%)
Total	17	32	49

As mentioned several times throughout this report, there is substantial variation in how career stages are defined, so the categories we present here are approximations intended to capture the general picture as well as possible. The categories above accommodate schemes mentioning a specific year-range (e.g. years beyond PhD completion) and schemes that provide general indication of career stage without specific numbers.

We note that there is little consistency is the definition of career stages across funders and even between schemes within the same organisation. This may be the result of different definitions and thresholds being applicable to different disciplines. For example, the British Academy's postdoctoral fellowship is aimed at early career researchers within the three years after their PhD viva examination, while the Wellcome Trust's Early Career Awards define it as having completed a PhD or having up to four years of research experience if the applicant does not hold a PhD degree.

Having too rigid and universal thresholds may impede definitions being bespoke to the scheme aims and rationales, so some flexibility is both expected and warranted. Further, some major funders (notably UKRI) are moving away from time-bound criteria to be more open and accessible to applicants from diverse career routes.



The duration of fellowships varies from one year up to 10 years. The longer awards (above 5 years) almost exclusively target early to mid-career researchers with the exception of Intermediate Basic Science Research Fellowship provided by the British Heart Foundation.

The annual size of awards provided to the recipient also varies to a large degree between schemes. From smaller ones such as the Leverhulme Trust International Fellowships as £25k per year to the Wellcome Discovery Awards offering up to £1m per year. The size also reflects what the funding can be used for. For example, the Wellcome Discovery Award can be used to set up research teams as well as funding individuals. It is worth noting that the Wellcome Discovery Award offers up to £8m over 8 years the average size of a Discovery Award is £3.5m and applications over £5m are subjected to additional due diligence.

There are also fellowships that are announced but has yet to start. These are not included within this review, as too little data is available. One example is the Green Future Fellowships Programme which will be provided by the Royal Academy of Engineering. The scheme is designed to support engineering and scientific researchers from multiple disciplines working on novel, pioneering solutions. The scheme will be open for applications from summer 2024.

#### A.3. Rationales and strategies

As noted, the durations of fellowships in the UK are comparatively long. This is in line with the main purpose of the fellowship provision: to provide researchers with a long-term funding opportunity that frees them up to conduct explorative research, without having to adjust their focus to topics of specific calls and allowing them to focus on the research rather than on finding follow-on funding for research projects.

The rationale underpinning the provision of fellowships is shared across career stages, with some nuances. Fellowships targeting early-career researchers often have a focus on development of skills and research programme. Some examples are supporting them in developing their independence as researchers, facilitating access to their first grant to develop their own research programme and direction, deepen their networks, position themselves in the field, and/or gain international recognition. This purpose is consistent across the UKRI and non-UKRI fellowships.

The mid-career support rationales vary and usually aim to achieve at least one but often more of the following: To help researchers develop leadership skills, deepen their links with other sectors, such as industry and policy, and foster internationalisation. As part of strengthening their skill set, one of the objectives present in many of the schemes is to enable researchers to form and manage research teams. At this stage, some schemes also seek to attract highly talented researchers from abroad. This is commonly observed in schemes aimed at well-established researchers.

In fellowships aimed at mid-career and well-established researchers attracting and retaining talent appears as a more prominent objective than at the early career stage. These schemes seek to make it easier for excellent international researchers to remain in the UK or relocate to the UK. This is supported through various incentives, such as relocation and family cost allowances.

Amongst the schemes targeting all career stages, there is often an aspect of mobility included in the rationale. Such as the NERC Knowledge Exchange Fellowships and Innovation scholars provided by UKRI, and the Royal Society's Industry Fellowships. Also, the Career Re-entry Research Fellowship provided by the British Heart Foundation is open to all with a PhD and has had an academic career break of one or more years.



There is some coordination between different funders in the UK landscape. However, this does not appear to involve formal written strategies or specific coordination, but is instead based on open and informal dialogue. Interviewees also expressed hat there is merit to the plurality of funding sources in the UK, where different approaches, roles and remits make up for a diverse range of schemes and opportunities. The occasional sectoral duplication of schemes may be desirable due to other aspects of the scheme making it relevant to different recipients and career paths.

#### A.4. Further details

The additional support provided alongside the award varies between funders and schemes. Many of the funders provide networks, both networks of current recipients and alumni networks. These act as both a way of building and strengthening the connections within the researchers' own team, as well as providing arenas for cross-disciplinary exchanges and potential collaborations.

Some of the funders also provide mentoring through past fellows or current fellows to provide guidance through the fellowship.

There are also examples of training provided alongside the fellowship. These may focus on topics such as leadership training, entrepreneurship, media and communication. For example, the Royal Society provides its fellows with:

- Networking opportunities, such as induction days, annual scientific conferences and regional network meetings
- Access to the career development programme
- Mentoring
- Schemes and training to deepen understanding of UK policy landscape
- Opportunities to take part in public engagement<sup>21</sup>

Another example is Future Leaders Fellows Development Network provided to Future Leader Fellows by UKRI. Among it's offers are mentoring, coaching and training.

Most support structures are provided across individual funders' schemes, but there is also more scheme-specific examples. One is the Dorothy Hodgkin Fellowship, provided by the Royal Society, which is specifically designed to support ECRs who require a flexible working environment due to personal circumstances. The flexibility provided by the scheme is accommodated by, for example, provision for maternity, paternity, shared parental leave, adoptive or extended sick leave as well as financial support for childcare costs that arise from attending conferences, research visits or invited talks.

Most of the schemes assess applicants through a process consisting of panel review of applications akin to that for most research funding. However, several funders also conduct interviews of the candidates that proceed past the application assessment. For example, Wellcome and the Royal Society both use interviews as part of their assessments.

To make the assessment more focused on the upcoming work and the individual, some of the funders have moved towards narrative CVs rather than focusing on publications. Narrative CVs are intended to enable evidencing a wider variety of skills and experiences, subsequently providing a fuller image of the person. This helps identifying the most suitable people and best

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<sup>&</sup>lt;sup>21</sup> https://royalsociety.org/grants/training-networking-opportunities/



ideas. Hence, a suitable tool when assessing applications for grants directed at individuals rather than projects.

The practice of evaluation and monitoring of fellowships vary quite a bit between the different funders in the UK. However, a common trait is the intention to lessen the interference and strain as much as possible. To have a fairly light-touch and proportionate monitoring process that affects the researcher and research as little as possible, while still ensuring governance and grant assurance. The funders usually conduct evaluations on scheme-level as well and some provide career trackers to visualise and track the outcomes in term of subsequent academic endeavours.

The measures and activities addressing equality, diversity, and inclusion vary between funders and schemes. Multiple funders work with general tactics for inclusion, such as special support, narrative CVs, providing interpreters if needed. There are only a few cases where a fellowship scheme is directly targeting a specific group. One of these is the Career Development Fellowship (CDF), provided by the Royal Society. The CDF is targeting early career scientists from underrepresented backgrounds and was developed following cross-sector roundtables, reports looking at trends across 11 years of Higher Education Statistics Authority data, and benchmarking the Royal Society's early career fellowships (PDF) against the eligible applicant pool. The process identified a need for interventions to support researchers from Black or Mixed Black African, Black Caribbean or other Black heritage backgrounds, particularly researchers making the transition from postgraduate to early postdoctoral stages. The scheme is currently run as a pilot, targeting researchers from Black heritage, and may be broadened to researchers from other underrepresented groups, if successful.<sup>22</sup>

Another scheme that is focusing on inclusion is the Dorothy Hodgkin Fellowship, provided by the Royal Society. The scheme focuses on flexibility and is targeting early career scientists who require flexible working pattern due to circumstances such as caring responsibilities and/or health-related issues. The scheme was introduced in 1995 and many of the flexibility measures have been incorporated in other fellowship schemes, such as provision for parental leave.

	Research Fellowships	Mobility and Knowledge Exchange Fellowships
Number of fellowships found	40	9
Main fellowship providers	UKRI The British Academy The Royal Society Wellcome The British Heart Foundation Leverhulme Trust The Royal Commission for the Exhibition of 1851 Royal Academy of Engineering NIHR	<ul> <li>UKRI</li> <li>The British Academy</li> <li>The British Heart Foundation</li> <li>The Royal Society</li> </ul>
Average annual award value of awards identified	• £250,570 <sup>23</sup>	• £114,867 <sup>24</sup>

<sup>&</sup>lt;sup>22</sup> https://royalsociety.org/grants/career-development-fellowship/

<sup>&</sup>lt;sup>23</sup> Figure on annual budget not available for 10 research fellowships

 $<sup>^{\</sup>rm 24}$  Figure on annual budget not available for 4 mobility fellowships



Average annual award value variability	The annual budget for research fellowships varies between £25,000 to £1,000,000. However, the majority lies between £100,000 and £400,000.	The annual budget for mobility fellowships varies between £100,000 and £133,333.
Fellowship durations	<ul><li>6-12 months (including 12 months!): 3 (8%)</li><li>13 months-3 years: 13 (34%)</li><li>Over 3 years: 22 (58%)</li></ul>	<ul><li>6-12 months (including 12 months!): 3 (33%)</li><li>13 months-3 years: 5 (56%)</li><li>Over 3 years: 1 (11%)</li></ul>
Scheme sizes	Some of the schemes with the most beneficiaries are the Leverhulme trust Early Career Fellowships (offering 145 fellowships 2024), Leverhulme Trust Research Fellowships (offering around 100 fellowships each year) and the Future Leaders Fellowship provided by UKRI (83 beneficiaries last round).	We don't have access to enough data on beneficiaries
Distinctions between early, mid, and established researchers' career stages  Career stage definition(s):  Nearly all adhere to the overarching definitions that can be used comparatively Ear career researcher and senior researcher. However, what is contained in the definitio experience) are not standardised country-wide, and the definitions can even vary w organisation. Definitions of when a researcher is considered advancing between sta disciplines.		at is contained in the definitions (such as years of ne definitions can even vary within a funding
	of fellowships available to each career stage and in pocatering to the career stage:  Early career researcher: 33 (20)  Mid-career researcher: 27 (5)  Senior researcher: 18 (2)  Most of the mobility schemes are available to multiple career stages, 5 to early and mid-career researchers and stages.	e career stages, with a third (3) being available to c
Main strategic drivers of fellowship provision	<ul> <li>One of the main drivers seem to be to provide a basis for free and explorative research</li> <li>Another driver is to retain and attract talented researchers</li> </ul>	
Main gaps identified in the country provision	<ul> <li>Comparatively small provision of fellowships targeting specifically mid-career researchers</li> <li>Provided the diversity of funders and schemes, there is a low focus on EDI</li> </ul>	
Main elements of good practice highlighted by our research and evaluations identified	<ul> <li>Plurality of funders, with different approaches and focuses</li> <li>Incorporated flexibility in schemes</li> <li>Comparatively large provision of support from funders during the fellowship. Both through training and facilitation of networks</li> </ul>	
Main challenges highlighted by our research and evaluations identified	Stock-taking and communication of the nation-wide offer would facilitate talent retention and attraction	
Links to recent evaluations	Future leaders fellowships process evaluation, 2024: fellowships-process-evaluation-report/      Value of EPSRC fellowships, 2020: https://www.ukri.cyalueEPSRCFellowshipsFinalReport.pdf      Executive Summary - Evaluation of the Mid-Career Inttps://www.thebritishacademy.ac.uk/documents/Mid-Career-Fellowship-Scheme.pdf      Executive Summary Evaluation of the Postdoctoral Inttps://thebritishacademy.ac.uk/documents/3296/integration-scheme.pdf  Postdoctoral-Fellowship-Scheme.pdf	Fellowship Scheme, 2019: 3295/Cloud-Chamber-Evaluation-British-Academy- Fellowship Scheme, 2019:



# Appendix B Fellowship Provision overview: Australia

- Funding for fellowships is provided mainly by the Australian Research Council (ARC),
  National Health and Medical Research (NHMRC) and Medical Research Future Fund
  (MRFF). The fellowships offered by the ARC and the NHMRC are both prestigious and
  competitive. Other fellowships exist to enable researchers gain research experience and
  apply for more competitive fellowships
- Fellowship funding in Australia cuts across disciplines and some of them are aimed at priorities in key areas of research interest to the fellowship funder. Sometimes these intersect with national priorities
- Specific ARC Fellowships provide support for women, Aboriginal and Torres Strait Islander researchers

#### B.1. National context

Australia's key funding organisations include the Department of Education, the Department for Industry, Innovation and Science, Australian Research Council (ARC) and the National Health and Medical Research Council (NHMRC). The Australian government supports research through a range of funding mechanisms including competitive grants and research block grants for individual research projects, industry linked research, collaborative centres and research fellowships.

The 2015 National Science and Research Priorities and 2017 National Science Statement set out Australia's science policy framework. In 2015, the Australian Government launched the National Science and Research Priorities strategy, which highlights areas of immediate and critical importance to Australia. The document sets out nine science and research priorities and associated practical research challenges (food, soil and water, transport, cybersecurity, energy resources, health, advanced manufacturing and environmental change).

The ARC supports high-quality fundamental and applied research and research training across all disciplines including those not related to the priority areas. The 2017 National Science Statement sets a long-term approach to achieve a strong science system and provides guidance for government investment and decision making. It is important to note that a review of the 2017 National Science Statement and National Science and Research Priorities is being conducted to develop a framework that meets Australia's current and future needs.

#### B.2. Fellowship provision at a glance

A total of 25 fellowship schemes have been identified in the study providing an overall perspective of fellowship provision in Australia. Amongst the main funders are the Australian Research Council (ARC), National Health and Medical Research (NHMRC), the Medical Research Future Fund (MRFF), and state-level funds such as The Western Australian Future Health Research & Innovation Fund. Alongside these are foundations and charities, like the Cancer Council, the Heart Foundation, and two other related Foundations, the Sidney Myer Fund and the Myer Foundation.<sup>25</sup>

<sup>&</sup>lt;sup>25</sup> The Sidney Myer Fund and the Myer Foundation are two separate philanthropic entities. They have distinct authorising environments but complementary philanthropic activities and are both managed by the same team



Research fellowships are prominent in the country provision: of the schemes we identified, 20 focus on research while the other 5 schemes focus on enabling knowledge exchange and intersectoral mobility.

Fellowships may cut across various sectors and disciplines and aim for instance to fund translational research or research with commercial potential, thereby supporting capacity building. For more advanced career stages, fellowships aim to retain outstanding academics and support industry collaboration and translational research in the areas of national and international benefit to Australia such as health, transport, and climate change. Fellowships targeting well-established researchers are aimed at attracting and retaining outstanding talent and building capacity to advance priority sectors in Australia.

The link between fellowship provision and strategic priorities indicated by the funders is evident. For instance, the ARC Discovery and Linkage fellowships are linked to areas to Australia's science and research priorities and applicants for both fellowships are required to indicate whether their research proposal are related to the priority areas. While the fellowships funded by the Western Australian Government are linked to the state's areas of strategic priority. We note that these direct ties between specific science priorities and specific fellowship schemes are more common in Australia than in the other countries covered by this review.

Across career stages, a distinctive element is the specific support for women, Aboriginal or Torres Strait Islander researchers. This enhances inclusion in the country's provision. For instance, the ARC Discovery Indigenous scheme aims to increase the representation and participation of First Nations people in research and through the Discovery Australian and Torres Strait Island Awards (DAATSIAs) fellowship, provides support for Aboriginal and or Torres Strait researchers.

In terms of gender diversity, the Australian Laureate Fellowship offers the Kathleen Fitzpatrick fellowship to female researchers from humanities, arts and social science disciplines and Georgina Sweet fellowship to female researchers from science and technology disciplines. Both fellowships are awarded to women Australian Laureate Fellows and provide additional funding to support and promote women in research as well as mentor female early career researchers. The NHMRC Investigator grant uses structural priority funding for women at the Emerging Leadership levels of the scheme to the extent necessary to achieve gender equity target and targets equal number of grants by gender for the Leadership category of the scheme. In addition, the NHMRC Investigator grant includes non-binary researchers alongside women in their gender equality interventions.

The duration of awards spans from one to five years for postdoctoral fellowships, while fellowships targeting later stages tend to offer awards covering between three to five years. Some schemes promoting international mobility present shorter durations, which is consistent with what has been observed in other countries.

#### B.3. Rationales and strategies

Generally, the rationale for fellowships provided by the Australian and state governments is to drive research and innovation in key areas of strategic interest and capacity building. The Discovery and the Linkage Programmes are the two main funding programmes administered by the ARC through the National Competitive Grants Programme. The rationale for the Discovery programme is to support 'blue sky' fundamental research to build new knowledge, ideas, create jobs, economic growth and enhance the quality of life in Australia. The Discovery programme aims to build Australia's research capacity by supporting excellent internationally competitive research, training and career opportunities for Australian and international researchers, international collaborations and research in priority areas. The fellowships in the Discovery programme are the Discovery Early Career Research Award, the Australian Laureate



Fellowships and the Future Fellowships. These fellowships support for researchers across all academic career stages to conduct research.

The rationale for the Linkage Programme is to create links between universities, industry and other partners to strengthen Australia's innovation system. It aims to build Australia's research capacity by supporting excellent international competitive research projects, fellowships and centres of excellence that involve collaboration among researchers within and beyond the research sector. The Linkage programme comprises of three fellowships: Early Career Industry Fellowships, Mid-Career Industry Fellowships, and the Industry Laureate Fellowships. These fellowships provide support for early career researchers, mid-career researchers and established researchers. Overall, the fellowships provided are geared towards supporting researcher fellows to conduct curiosity driven research and achieve career stability.

Fellowships offered by the Western Australian Future Health Research and Innovation Fund are aimed at improving health outcomes in Western Australia and elevating the state's research excellence through capacity building. The fellowships contribute to this aim by providing opportunities for researchers and innovators to build their careers, achieve sustained excellence and improve exchange to identify new research and innovation opportunities.

Other rationales for the provision of fellowships in Australia include solving grand challenges, advancing cancer research and supporting early career researchers.

While the fellowship provision in Australia is not so varied in terms of funders, there seems to be little coordination in the provision of fellowships in Australia. However, the ARC is focused on funding non-health research and the NMHRC is responsible for funding health and medical research.

#### B.4. Further details

Assessment and selection processes for fellowships in Australia follow standard grant application process and mostly involve the use of review panels and expert committees. For example, ARC fellowships use selection advisory committees that make recommendations to the ARC on applications to be funded. However, the structure and size of the committees vary depending on the nature of the fellowship and the number of applications.

Some fellowships such as the ARC fellowship have mechanisms to evaluate and monitor the benefits of the schemes. These include the submission of reports by fellowship recipients to inform evaluations. Key challenges highlighted in the evaluation and monitoring of fellowships in Australia include the burden of conducting evaluations resting on academics and the time required for the impact from research to materialise. In terms of gaps, the Australian landscape lacks fellowships that cater to recent PhD holders who have not gained enough experience to be considered for competitive fellowships.

	Research Fellowships	Mobility and Knowledge Exchange Fellowships
Number of fellowships found	20	5
Main fellowship providers	National Health and Medical Research Council     Medical Research Future Fund     Australian Research Council     Western Australian Government     The Science and Industry Endowment Fund     The Sidney Myer Fund and The Myer Foundation	Medical Research Future Fund     Australian Research Council



Average annual award value of awards identified	• \$227k (£118k) <sup>26</sup>	• \$169k (£88k). <sup>27</sup>
Average annual award value variability	Fellowships range from \$25k (£13k) to \$56k (£29k) per year. Large budgets are offered by the ARC, Western Australian Council and NHMRC. Budgets cluster around the \$100k-200k (£52k-£104k) with larger budgets being between \$500k -\$656k (£261k-£343k).	Fellowships range from \$109k to \$250k per year. Large budgets are offered by the MRFF \$250k (£130k) and ARC \$199k (£104k)
Fellowship durations	<ul><li>6-12 months: 3</li><li>13 months-3 years: 9</li><li>Over 3 years: 8</li></ul>	<ul><li>6-12 months: 1</li><li>13 months-3 years: 1</li><li>Over 3 years: 3</li></ul>
Scheme sizes	ARC Discovery fellowships offer 217 awards and the NHMRC offers Investigator grant offers 274 awards.	The ARC Linkage fellowships are the most important offering 83 awards per year.
Distinctions between early, mid, and established researchers' career stages	Career stage definition(s):  No evident definitions.  Fellowships cater to early, mid and established researchers  Fellowships are split across early (6), mid (11) and established research career stages (2) across both research and mobility fellowships. <sup>28</sup> Research fellowships are split across early (8), mid (6) and established (1) research career stages. Mobility fellowships are split across early (3), mid (1) and established (1) research career stages.  Early and mid career stages receive more individual awards (571) <sup>29</sup> and have an award size of \$6m (£3.1m) per year compared to established career researchers.  Mid career stages receive 435 awards and an annual award size of \$5m (£2.6m) <sup>30</sup> Established career stages have a smaller number of individual awards (25) and an annual award size of \$810k (£424k).	
Main strategic drivers of fellowship provision	<ul> <li>Australian Science and research priorities.</li> <li>ARC funds non-health related research and NMHRC funds medical and health research</li> <li>Fellowships are mainly aimed at building capacity and retaining talent in Australia</li> </ul>	
Main gaps identified in the country provision	<ul> <li>Few fellowship provisions in Australia</li> <li>Few fellowships are aimed at early career researchers especially recent PhD holders</li> <li>Few fellowships aimed at humanities, arts and social sciences</li> <li>A need for smaller grant options</li> <li>There appears to be a limited number of mobility fellowships</li> </ul>	
Main elements of good practice highlighted by our research and evaluations identified	<ul> <li>Selection and assessment of proposals are based on the capabilities of researchers and quality of proposals</li> <li>Some fellowship schemes promote equality diversity and inclusion in research by providing support for women and Aboriginal and Torres Strait Islander researchers</li> </ul>	

<sup>&</sup>lt;sup>26</sup> Financial data for 8 research fellowships are not publicly available.

<sup>&</sup>lt;sup>27</sup> Financial data for one mobility is not publicly available.

<sup>&</sup>lt;sup>28</sup> This includes fellowships that cater to both early and mid career researchers such as the NHMRC Investigator Grant

<sup>&</sup>lt;sup>29</sup> This includes fellowships that cater to both early and mid career researchers such as the NHMRC Investigator Grant

 $<sup>^{\</sup>rm 30}$  This includes fellowships that cater to both early and mid career researchers



Main challenges highlighted by our research and evaluations identified	<ul> <li>The burden of conducting the monitoring and evaluation of fellowships</li> <li>Difficulty tracking the outcomes and impact of the funded research</li> <li>Disparity between funding requested and funding awarded under the Discovery Projects</li> <li>Not enough funding for fellowships</li> <li>Not enough support to encourage international collaborations</li> </ul>
Links to recent evaluations	<ul> <li>Evaluation of the implementation of the continuous Linkage Project process. May 2019.         https://www.arc.gov.au/sites/default/files/continuous lp evaluation report.pdf?token=MSBJkTaS     </li> <li>Evaluation of the Discovery Projects scheme. November 2020.         https://www.arc.gov.au/sites/default/files/2022-06/Evaluation%20of%20the%20Discovery%20Projects%20scheme%20%28PDF%29.pdf.     </li> </ul>



# Appendix C Fellowship Provision overview: Germany

- Research grants and fellowship programmes in Germany play two roles: firstly, they provide
  individuals with the financial support needed to develop or advance their research
  independently; secondly, they provide individuals with the opportunity to fulfil the
  requirements for an appointment in a permanent position as a university professor
- A key feature of the fellowship provision in Germany is that fellowships are often designed
  as modular programmes, which provide individuals with flexibility in their applications to
  accommodate the funding requested to their personal circumstances and specificities of
  their proposed projects. The modular design also allows funders to adapt fellowship
  programmes in response to changing needs and/or political events
- International mobility is a prominent feature in the fellowship landscape in Germany. There
  are several organisations and schemes that are devoted to internationalising Germany's
  research landscape through foreign exchange programmes

#### C.1. National context

Germany spent a total of €121b (approx. £103b) on research and development in 2022, equivalent to 3.13% of GDP.<sup>31</sup> Responsibility for driving the national agenda on research lies on the Federal Ministry of Education and Research (BMBF, Bundesministerium für Bildung und Forschung), as seen by the 'Future Research and Innovation Strategy' published in 2023, which consolidates targets and activities, priorities and milestones, and the objectives of German research and innovation policy for the coming years.<sup>32</sup>

The BMBF also promotes Germany as a top destination for researchers making the case that the country offers access to innovative research infrastructure and resources, free and creative development opportunities, fosters international and interdisciplinary networks, prioritises social and ecological responsibility, and provides a variety of public and long-term funding programmes.<sup>33</sup>

There are numerous organisations and institutions involved in funding research. Notably, the public sector provides approximately 30 per cent of all spending on R&D in Germany through its funding of higher education and non-university research organisations that are especially involved in fostering research talent. Funding from industry, other private foundations and the EU make up the remaining sources of R&D expenditure in Germany.

#### C.2. Fellowship provision at a glance

Fellowship funding in Germany is strongly driven by public organisations and other private (non-profit) foundations. Generally, researchers look for individual funding opportunities and bring them to their institutions of choice, which can either be a university or a publicly funded non-academic research institution. In some cases, the research-performing institutions are also the funders (e.g., Fraunhofer). These funding opportunities cut across career stages and create opportunities for career development at various stages. Moreover, some of the schemes aim

<sup>31</sup> German Federal Statistical Office, Research and Development; Link

<sup>32</sup> Federal Ministry of Education and Research, Future Research and Innovation Strategy; Link

<sup>33</sup> Federal Ministry of Education and Research, Research Landscape: Why Germany? Link



to foster knowledge exchange with industry and seek to enhance researchers' international linkages.

Our synthesis of the fellowship landscape in Germany is based on the information available for 20 research and mobility fellowship schemes in Germany offered by key funding organisations, which include the German Research Foundation (DFG, Deutsche Forschungsgemeinschaft) and the German Academic Exchange Service (DAAD, Deutscher Akademischer Austauschdienst), as well as other foundations, namely the Alexander von Humboldt Foundation, Volkswagen Foundation, Helmholtz Association, Fritz Thyssen Foundation, Fraunhofer Society, and the Max Planck Society. Where relevant, our understanding of these schemes was complemented through interviews with representatives from major funding institutions in Germany.

There is a significant amount of funding for researchers in the form of individual research grants. These are abundant and flexible in terms of remit, duration financial support provided, but usually require, at a minimum, a doctoral degree. These types of grants generally place more emphasis on the academic quality of the project proposal, as opposed to the individual making the application, and act as a stepping-stone for young researchers to kick-start their independent research careers. This is the case of the 'Individual Research Grants' offered by the DFG, 'Research Grants' by the DAAD, and 'Support of Projects' by the Fritz Thyssen Foundation. The duration of these types of awards vary according to the needs of the project (generally up to 3 years) and amount to monthly payments of €1,000-€1,500 (approx. £850-£1,300), alongside other allowances (e.g., family allowances, travel allowances, etc.). However, it is worth noting that these kinds of grants may not always fall within the scope of our definition of a fellowship as they are primarily aimed at funding direct project costs and project staff without necessarily imposing FTE conditions. They are, nevertheless, a primary source for research funding in Germany.

There are also more structured fellowship programmes in Germany that match our definition more closely. Generally, these programmes appear to be more important for career development, tend to be longer in duration and are associated with a more generous financial offer. Applicants to these types of schemes are evaluated on capabilities to lead large investigator groups and/or potential to reach professorial status at an academic institution. In this sense, we find the Walter Benjamin Programme, Emmy Noether Programme, and Heisenberg Programme by the DFG, which target early-career, mid-career, and established researcher, respectively. Researchers across all disciplines are eligible to apply to these programmes. Outside the DFG, the Attract Programme by Fraunhofer, the Freigeist Fellowship by the Volkswagen Foundation, and the Helmholtz Investigator Groups by the Helmholtz Association all have a similar purpose to the DFG's main fellowship programmes.

A notable feature of the funding provision in Germany is that most schemes encountered in our search are designed as modular programmes, offering flexibility and autonomy to the applicant in terms of the budget requested and research plan. The existence of these modular approaches may be a main reason why we find a relatively low absolute number of different schemes in Germany compared with the other countries included in this review.

The research grants and fellowship programmes are generally made up of a 'basic module' through which applicants are awarded the basic monthly instalment of the fellowship offer based on their research proposal. Basic monthly stipends for these types of programmes increase in accordance with the applicants' career stage and, overall, appear to be the in the range of €1,000-€4,450 (approx. £850-£3,800). On top of this, applicants make the case for funding for direct project costs, project-specific staff and/or equipment by applying for relevant modules. Likewise, requests for additional allowances to cover family, travel,



relocation and/or public relations expenses, as well as replacements where a project requires the researcher to be released from teaching or administrative duties, is also done by through modules. Thus, the exact monetary amounts awarded by fellowship beneficiaries are conditional on the career stage of the applicant and personal circumstances. Evidence gathered through interviews suggest that individuals are allowed to apply for different modules available to the programmes throughout the duration of the funding.

Lastly, definitions of career stages appear somewhat uniform across funders compared with other countries. Generally, early career researchers are those who, at the time of application, remain within the four years after receiving their degree, while mid-career researchers are referred to as those with up to twelve years of receiving their doctorate. Interestingly, the Helmholtz Association uses the term "academic age" – calculated as years after receiving the doctoral degree and deducting times due to unavoidable downtime in the applicants' scientific career (e.g., maternity/paternity leave, long-term illness, or other personal hardships) – in their eligibility criteria to account for breaks in individuals' careers. Holding a professorship or a permanent position at a university draws the line between mid- and senior career.

## C.3. Rationales and strategies

Fellowship schemes and research grants in Germany play two roles: first, they provide individuals with the financial support needed to develop or advance their research; second, they provide individuals with the opportunity to fulfil the requirements for an appointment in a permanent position as a university professor. On top of this, several schemes aim to bridge gaps between research and industry; as well as a handful that incentivise international mobility by providing national researchers with the tools and guidance necessary to carry out research abroad or attract international researchers to relocate their activities in Germany.

The mission of the DFG is to promote knowledge-driven research across the entire spectrum of academic disciplines and across all phases of the research process. The organisation designs its funding instruments in response to current needs in specific research fields, further helping to shape the conditions and standards of academic research. In 2022, the DFG had an annual budget of €3.9b (approx. £3.3b) provided primarily by the German federal government. Thirty percent of the budget was awarded across several funding programmes for individuals. These included, among others, 3,661 individual research grants amounting to €992m (£848m), 350 beneficiaries of the Walter Benjamin Programme amounting to €34m (£29m), 67 beneficiaries of the Emmy Noether Programme amounting to €110m (£94 million), and 79 beneficiaries of the Heisenberg Programme amounting to €51m (£44m).<sup>34</sup>

The individual research grants offered by the DFG are predominantly aimed at early career researchers to advance their careers as independent researchers, while the three Programmes also provide highly qualified researchers the opportunity to lead an independent by leading a junior research group alongside relevant teaching duties as they fulfil the prerequisites for appointment as a university professor. It is worth noting that the Emmy Noether Programme, identified as one of the more prestigious fellowships, has an added objective to attract outstanding early career researchers back to Germany from abroad.

To a certain extent, the Freigeist Fellowship offered by the Volkswagen Foundation also tried to emulate much of the design of the Emmy Noether Programme by offering funding to junior researchers to set up groups to conduct exceptional, high-risk research between established

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<sup>&</sup>lt;sup>34</sup> German Research Foundation (DFG), Annual Report 2022; <u>Link</u>



fields of research. In another example, the Fraunhofer Society's Attract fellowship also plays a similar role in that it helps junior and senior researchers set up investigator groups, but it is specifically designed to develop innovative ideas to application in collaboration with industry. Moreover, beneficiaries of the Attract Programme are required to carry out their research in one of Fraunhofer Institutes (as opposed to an academic institution or another non-academic research institution), thus practically becoming a Fraunhofer employee.

The DAAD, on the other hand, is committed to internationalising the academic and scientific research system by offering funding opportunities to international researchers in Germany, as well as for German nationals seeking to do research abroad. The DAAD's research grants play a similar function to the DFG's individual research grants as they are mainly offered to early career researchers and open to all disciplines. Monthly stipends vary according to the career stage of the applicant and can include payments towards insurance cover, travel and family allowances, as well as preparatory language courses to facilitate international relocations. There are also special fellowship programmes designed by the DAAD, which respond to emerging local and global challenges. Such is the case of the 'ERA Fellowships – Green Hydrogen' designed to fund study, research or internships for German and international graduate, PhDs, and postdoctoral students in any topics related to green hydrogen as means to develop future skills and capabilities to confront a clean energy transition.

In terms of international mobility, the Alexander von Humboldt (AvH) Foundation is somewhat coordinated with the DAAD as it primarily targets researchers from abroad that are more advanced in their careers. The Humboldt Research Fellowship for Postdocs and Humboldt Research Fellowship for Experienced Researchers allow researchers from abroad (or German nationals who have been located abroad for at least five years) to spend an extended period in Germany and then return to their home countries. The Georg Forster Research Fellowship is equivalent to the Humboldt Research Fellowships, except it is granted to researchers from developing countries. A point worth noting about the AvH Foundation's fellowships is that they place emphasis on providing a positive experience for applicants in their visits by appealing to them by facilitating their relocation with additional allowances and other help (e.g., language courses). In another example, the Philipp Schwartz Initiative for Researchers at Risk allows researchers who are subject to significant and continuous personal threat in their country of origin to continue their work at German universities and research institutions. Beyond the programmes, an important element of the fellowship offer by the AvH Foundation is that fellows become part of an alumni network after completion, which grants them invitations to conferences and other events organised by the Foundation to foster further collaboration.

Most of these programmes are designed modularly, which gives the funding organisations and foundations a certain degree of flexibility in their design. It allows them to introduce modules to existing fellowships to address global events such as recent years' refugee crises. Related to this example, the Volkswagen Foundation designed a fellowship specifically to provide funding for refugee scholars and scientists from Ukraine to support them in temporarily continuing their scientific work in Germany following Russia's invasion of Ukraine in February 2022.

#### C.4. Further details

The selection processes for fellowships in Germany do not vary greatly from those typically applied elsewhere. Generally, applications are evaluated by independent panels against the excellence of the individual demonstrated by motivation statements, CVs, academic qualifications, publication records, letters of recommendation or support, and applicants' future potential and prospects for academic development. On the project idea, applications are judged against the quality and ambition of the proposal, as well as the originality and innovation potential of the suggested research outline. Candidates are also evaluated against



their leadership and management skills where the purpose of the fellowship is to allow the recipient to set up and lead a research group (e.g., Walter Benjamin Programme by the DFG or the Attract Programme by Fraunhofer).

The emphasis on either element varies. For instance, research grants offered by the DFG seem to be more focused on the project side, while those offered by the AvH Foundation have a clearer ambition to identify ambitious individuals over project ideas. Others, like the Attract Programme, specifically state that they place equal consideration to both sides. The organisations and foundations are clear that reviewers are chosen based on their expertise in the relevant disciplines. Where fellowships are aimed at researchers from specific countries or regions, reviewers are required to have some knowledge of the applicants' country of origin to determine the extent to which relocation to Germany would indeed be beneficial for them.

All in all, this process tends to be fully 'paper-based' for all fellowships we considered in our search. We found an exception in the case of the Freigeist Fellowship, where applicants' proposals go through several appraisal stages before a handful of them are invited to provide short presentations to a selection panel. This was in large part motivated by the nature of the fellowship (seeking high-risk, interdisciplinary research) that required views from an interdisciplinary panel of reviewers. There were a series of social activities for the review panel in order to create a sense of familiarity among reviewers and encourage more open and fair discussions about the proposals.

Many of the organisations have an integrated monitoring and evaluation concept to capture and assess the impacts of activities that take place at the level of individual projects, as well as the entire programmes. These evaluations are done against objectives and indicators and often reviewed by external evaluators to then improve processes and programmes. We have found dedicated pages to monitoring and evaluation for the DAAD, DFG and Volkswagen Foundations and specific evaluations for the Fraunhofer's Attract Programme (though somewhat outdated), and for the Humboldt Research Fellowships and Philipp Schwartz Initiative. For the AvH Foundation, the formal evaluation concept is relatively new. The Foundation itself exists since 1953, but the external evaluation board has only existed since 2006. The Humboldt Research Fellowships were first evaluated in 2011 and are done so in 10year cycles. The latest round of evaluations aimed to assess the extent to which the Research Fellowships are achieving the aims of the programme, appeals to academic researchers and scholars with above-average qualifications, and facilitates research collaborations between the fellows and researchers in Germany, among others. The evaluation found that the fellowship programme is very successful in achieving its goals and that Alumni make use of the Humboldt Collaboration Network – a key feature of the AvH Foundation.

	Research Fellowships	Mobility and Knowledge Exchange Fellowships
Number of fellowships found	18	2
Main fellowship providers	German Research Foundation     German Academic Exchange Service     Fraunhofer Society     Max Planck Society     Helmholtz Association     Volkswagen Foundation     Alexander von Humboldt Foundation	<ul><li>Fraunhofer Society</li><li>Volkswagen Foundation</li></ul>
Average annual award value of awards identified	• €81,629 (£69,787)*	• €430,000 (£367,620)



	*Note that this also includes some short-term research grants that may be skewing the average.		
Average annual award value variability	Approx. €15,000*-€440,000 (£12,824-£376,169). Calculations done based on monthly awards and multiplied for the year.  *This low end represents a small Max Planck fellowship for pre-doctoral students. While very small in value, it meets the inclusion criteria for our review	Approx. €360,000 - €500,000 (£307,775-£427,465). for every year of the fellowships. It is worth noting that award is for setting up investigator groups in collaboration for industry.	
Fellowship durations	<ul><li>6-12 months: 3</li><li>13 months-3 years: 10</li><li>Over 3 years: 4</li></ul>	<ul><li>6-12 months: 0</li><li>13 months-3 years: 0</li><li>Over 3 years: 2</li></ul>	
Scheme sizes	The German National Research Foundation and the German Academic Exchange Service are the largest providers of fellowships and research grants, making over 3,000 grants every year.	The offer by the Fraunhofer society is slightly larger than the one offered by the Volkswagen Foundation. There are no indications on the number of beneficiaries each year.	
Distinctions between early, mid, and established researchers' career stages	Career stage definition(s):  Career stage, as referred to in the eligibility criteria of t post-doctorate status. Some schemes refer to research others refer to 'tenure-tracks' or 'junior professors' as madvanced in their careers. They often refer to the year distinctions between career stages. In some cases, ear their doctorate no more than four years, others as no remove the fellowships cater to early-career research.	ners that are in an 'early' or 'mid' stage in their careers; neans of describing researchers that are more s since completing doctorate degrees to make rly-career researchers as those who have completed more than eight years.	
	fellowship provision in Germany, which is to allow you.  One of the mobility fellowships identified targets easince doctoral degree was awarded); the other is to	oung researchers to transition to independent research irly-career researchers (specifically, at least two years argeted at mid-career and established researchers generally higher for researchers at later career stages ing investigator groups are more generous in their	
Main strategic drivers of fellowship provision	<ul> <li>The Federal Ministry of Education and Research (BMBF) is a key player in shaping the national research landscape in Germany by driving R&amp;I strategies and providing funding for research across a multitude of organisations and foundations with the aim to keep Germany at the forefront of R&amp;I globally</li> <li>The objectives of the fellowship provision in Germany are twofold: firstly, they allow researchers at the beginning of their career to transition into becoming independent researchers; secondly, it allows researchers to fulfil the necessary conditions to become professors</li> <li>There are organisations dedicated to internationalising the research landscape in Germany, and some of this is done through generous allowances (e.g., family, travel, language courses, etc.)</li> </ul>		
Main gaps identified in the country provision	There appears to be a limited offer of mobility fellowships for the purpose of knowledge exchange between academia and industry, though no further concrete indication for this was found		
Main elements of good practice highlighted by our research and evaluations identified	<ul> <li>Fellowship schemes designed as modular programmes provide applicants flexibility to accommodate their proposals to project needs and personal circumstances; they also allow funders to adapt existing schemes rapidly to emerging challenges by introducing or removing modules from the programmes</li> <li>Support provided by the funders in the form of allowances during the award beyond financing of direct project costs are an attractive feature of the fellowship design in Germany. This includes allowances for family, travel, disseminating outputs, language course, public relations, and replacements, among othe</li> <li>The creation of a fellows' network, such as Humboldt Network of the AvH Foundation, can foster further research engagements, collaboration and mentoring opportunities amongst past and present beneficiaries of fellowships beyond the conclusion of the fellowships</li> </ul>		
Main challenges highlighted by our research and evaluations identified	<ul> <li>More public funding needed to support the fellowship provision</li> <li>Difficulty for new funders or schemes to compete against more established schemes and programmes</li> </ul>		
Links to recent evaluations	DFG: https://www.dfg.de/en/news/facts-figures/ev     DAAD: https://www.daad.de/en/the-daad/who-w     Volkswagen Foundation: https://www.volkswagensmonitoring-and-evaluation	e-are/monitoring-evaluation/	
	Alexander von Humboldt Foundation: <a href="https://www.statistics/evaluation">https://www.statistics/evaluation</a>	.humboldt-foundation.de/en/explore/figures-and-	



# Appendix D Fellowship Provision overview: Netherlands

- There is a relatively low diversity of fellowship funders in Netherlands
- The Dutch Research Council (NWO) is the main research funder in the Netherlands
- NWO is an influential actor in the research landscape and offer fellowships aimed at curiosity driven research

#### D.1. National context

In the Netherlands, responsibility for science policy lies with the Ministry of Education, Culture and Science while innovation policy lies with the Ministry of Economic Affairs and Climate. In 2011, a Dutch Top Sectors approach was introduced as an industrial policy covering research, higher education and innovation in nine key economic areas. The Top Sectors are agriculture, horticulture, logistics, high tech systems and materials, life sciences and health, chemicals, creative industry, energy and water. Since 2018, Dutch Top Sectors aims to achieve five missions in four societal challenge areas: Energy Transition and sustainability; Agriculture, Water and Food; Health and care; and Security. The Dutch Government and NWO are the main research funders in the Netherlands. However, the NWO is central to the research landscape acting as a connecting agent between academia, public institutions and private organisations. Similarly, universities play a dual role, both funding and conducting research. Research is also conducted in research institutes such as the National Aerospace Laboratory and companies in the private sector.

#### D.2. Fellowship provision at a glance

The Netherlands' funding landscape for research and mobility fellowships is limited and characterised by public funders, such as the Netherlands Organisation for Scientific Research (NWO) and the Ministry of Education, Culture and Science (OCW). The Royal Netherlands Academy of Arts and Sciences (KNAW) is the principal non-profit funder identified. Universities offer fellowships funded with their own resources, government funding or jointly with NWO. We identified two such schemes, one by the University of Groningen and another by Maastricht University.

A total of eight schemes have been analysed, supporting researchers across all career stages, with a strong focus on research. Although no scheme focuses in intersectoral mobility research, one scheme is dedicated to promoting international mobility. Out of the eight research schemes, five are under the Talent Programme and Open Competition funded by NWO. The Talent Programme aims to enable researchers to conduct research of their choice and develop their own research and talent. The Talent Programme consists of three programmes, Veni, Vidi, and Vici, which target researchers at varying stages of their careers. To bridge the gap between finishing a PhD and becoming eligible for the Talent Programme, the NWO offers the Rubicon Programme, which supports new postdoctoral researchers over up to two years.<sup>35</sup> The Open Competition comprises fellowships that fund curiosity-driven large scale research lead by experienced researchers. These include fellowships such as the Open Competition L and Open Competition XL. The Open Competition L funds curiosity-driven ground-breaking research in social science and humanities research, while the Open Competition XL funds a

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<sup>35</sup> Available to postdoctoral researchers having finished their PhD within the next 12 months by the time of application



consortium of science researchers to conduct curiosity driven and fundamental large scale research.

From the 2022-2023 data gathered, the Talent programme has an annual budget of £148m (split between Veni, Vidi and Vici awards) and £2 million for the Rubicon fellowship, which has significantly smaller award sizes. Data for 2022 provided by NWO shows 270 beneficiaries for the Talent programme and 46 for the Rubicon fellowship.

The support offered by schemes targeting early career researchers, such as Rubicon and NIAS fellowship, normally spans between 6 months and 2 years. Those aimed at mid-career and well-established researchers have longer durations, between three (Veni and Open Competition M) to six years (Vici and Open Competition L and Open Competition XL).

The Netherlands' provision has two main features we find to be noteworthy: the simplicity of the schemes, and clear articulation between them to support career progress. Schemes cut across disciplines, and welcome applications globally, making it easier for applicants to understand what scheme to apply for. Four domains are defined within the Talent Programme: Science (ENW), Social Sciences and Humanities (SSH), Applied and Engineering Sciences (AES) and Medical Sciences (ZonMw), and each applicant needs to identify the most suitable domain for their experience. Each domain has a Domain Board and Domain Office responsible for developing polices, taking decisions regarding the award of funding and project and programme management. The bases for the division for the NWO fellowships into domains is historical. Despite its advantage, the division of fellowship schemes across domains may pose a challenge for interdisciplinary research required to solve scientific and societal challenges.

The Veni, Vidi and Veni fellowships have a dedicated budget for each domain. Data from the NWO for the 2023 Veni fellowship indicates a budget of  $\in 13.4$ m (£11.4m) for Science (ENW), Social Sciences and Humanities (SSH) is  $\in 22.2$ m (£19 million), Applied and Engineering Sciences (AES)  $\in 7$ m (£6m) and the budget for Medical Sciences is  $\in 8$ m (£6m). For the Vidi fellowship, the budget for Science (ENW) is  $\in 22.9$ m (£19.6m), Applied and Engineering Sciences (AES) is  $\in 8.5$ m (£7.2m) and the budget for Medical Sciences (ZonMw) is  $\in 12.7$ m (£10.9m).

Award sizes vary depending on the career stage and do not exhibit major differences across disciplines. Rubicon is defined as a "basic" grant, which awards €70k(£59k) to researchers per year, covering researchers' basic living expenses. Following this is Veni with €320k (£273k) over 3 years (£91k per year), Vidi with €850k (£726k, £242k per year) and Vici with €1.5m (£1.2 million, £240k per year).

In terms of equality, diversity and inclusion, some fellowships in the Netherlands cater to particular target groups. For example, for the Veni fellowship scheme there is an additional €1.4m (£1.1 m) in funding to improve the gender balance in the research fields of Applied and Engineering Sciences and Science domains. Within these domains, applications from female researchers which have received at least 'very good' in interviews but that cannot be funded from the regular budget are awarded from the £1.1m until it is exhausted.

Another example is the NWO Aspasia Fellowship which was introduced as an instrument to accelerate the advancement of women scientists to the level of associate professor as well as increase the participation of women in academia. The Aspasia Fellowship is associated with the Vidi Talent programme. Female applicants who are rated 'very good' or 'excellent' after interviews but have not been awarded a Vidi grant are eligible for the Aspasia Fellowship. Eligible applicants do not need to apply for this award as they will be approached by NWO if they are eligible. Another scheme that targets women researchers only, is the Rosalind Franklin



Fellowship, offered by the University of Groningen. Similarly, the Netherland Institute for Advanced Study in the Humanities and Social Sciences (NIAS) Individual Fellowships aims for age, gender balance and regional diversity. In terms of regional diversity, each year, the NIAS aims to have a cohort that is comprised of one third of scholars with affiliations from Asia, Africa, the Middle East, the Caribbean and Latin America. Approaches adopted include partnering with international institutions and the use of peer reviewers from the Global South.

In terms of equity, diversity and inclusion, stakeholders in note that efforts at attracting international researchers and increasing regional diversity have been challenging due to political anti- internationalisation sentiments regarding higher education in the Netherlands.<sup>36</sup>

In some cases, universities offer small fellowships that can be combined with other grants at an early career stage. The Kootstra Talent Fellowship offered by Maastricht University is an example. Those fellowships are aimed to help researchers develop their own research ideas and subsequently prepare to apply for the Talent Programme. Like other European countries, The Netherlands also relies on Marie Skłodowska-Curie Actions (MSCA) as part of the national fellowship offer.

## D.3. Rationales and strategies

NWO is the main research funder and is influential in the Dutch fellowship landscape. The NWO offers research funding and connects various stakeholders such as universities and government research organisations as well as public and private parties in the Dutch scientific system. NWO fellowships are prestigious and highly sought after as they have historically determined the career progression of academics. The NWO employs a strategy that focuses on excellent researchers in various stages of their careers via the Talent Programme and Open competition. These fellowships offered by the NWO are influential in the career progression of academic researchers.

The Talent Programme and Open competition tie into the Dutch Government's policies and strategies but do not appear to be driven by particular policy principles beyond being aligned to government priorities as would be expected for a public research funding body.

The Talent Programme and Open competition are NWO's two main instruments for curiosity-driven research and they are crucial in terms of providing funding opportunities for academics at various stages as well as determining academic careers. For the NWO, the main driver behind the provision of fellowships is to support curiosity driven research among researchers at various career stages across four groups of scientific disciplines. The division between disciplines is historical and efforts are being made to encourage inter-disciplinary research.

#### D.4. Further details

Fellowships offered by the NWO do not offer additional forms of support during the award. Specifically, while additional support during the fellowship is not included in NWOs mission, as

<sup>&</sup>lt;sup>36</sup> The issue of internationalisation in Dutch higher education has been an active area of discussion in the Netherlands. An online consultation has been launched on proposed legislation concerning internationalisation of higher education. <a href="https://www.government.nl/latest/news/2023/07/14/online-consultation-starts-on-proposed-legislation-concerning-internationalisation-of-higher-education">https://www.government.nl/latest/news/2023/07/14/online-consultation-starts-on-proposed-legislation-concerning-internationalisation-of-higher-education</a>

 $<sup>\</sup>underline{\text{https://www.government.nl/documents/letters/2023/06/26/letter-on-managing-the-influx-of-international-students-in-higher-education}$ 



part of the criteria for the Talent programme and Open competition, universities are required to provide evidence that they have procedures and processes to support fellowship winners during the award. In contrast, the NIAS Individual Fellowship provides additional support such as office spaces and subsidized accommodation for the duration of the fellowship.

In general, the assessment and selection process used in Netherlands are similar to what exists in the global research landscape. Review of proposals are done by peer-review committees and applications are ranked on the basis of selected criteria. Interestingly, the Assessment and selection process for the Open competition differs from NWO standard procedures. Researchers who submit research proposals in the Open competitions act as assessors for other research proposals submitted. This was designed to assess research proposals for limited duration projects involving a smaller budget. Also, NWO does not require fellowship applicants to indicate a thematic research area in their applications.

In terms what works well, NWO can not only provide financial funding but also connect scientific institutions with public and private parties. From the perspective of NWO, the provision of fellowships is well coordinated. However, it is important to note that coordination may not be an issue due to the centrality of the NWO and limited number of players in the Dutch research landscape. Other fellowship funders in the Netherlands hold an alternative view, stating that there is no coordination in the provision of fellowships in the Netherlands.

In terms of what can be improved, the NWO's approach to fellowships schemes and structure is traditional and not suitable for the kind of impact within the academic system that they hope to achieve. But efforts are being made to make fellowship offerings fit for purpose. In addition, the fellowship landscape in the Netherlands lacks financing for small research projects especially in social sciences and humanities that will enable early career researchers gain the experience required to apply for larger fellowships and ultimately build their academic careers. Furthermore, fellowships offered by the NWO are domain specific and not interdisciplinary. This limits the cross-pollination of ideas required to conduct outstanding research. The NIAS attempts to fill this gap in the Netherlands through the Individual Fellowship which provides funding to both national and international researchers from various disciplines including humanities, social sciences and natural sciences. the Individual Fellowship is aimed at collaborative research to develop new research questions or solve relevant research questions.

	Research Fellowships	Mobility and Knowledge Exchange Fellowships
Number of fellowships found	8	0
Main fellowship providers	NWO     Netherlands Institute for Advanced Study in Humanities and Sciences     University of Groningen	
Average annual award value of awards identified	• €207k (£176k)	
Average annual award value variability	The budget for the fellowship schemes within €25k-500k (£21k - £427k). The smaller fellowships range from €25k - 35k (£21k - £29k), while the larger fellowships range from €300k - 500k (£256k - £427k).  37	

<sup>&</sup>lt;sup>37</sup> Annual financial data for two fellowships are not publicly available.



Followship	4 10 months: [1]			
Fellowship durations	6-12 months: [1]     13 months-3 years: [2]			
	Over 3 years: [3]			
Scheme sizes	The Veni scheme is the most important with 153 awards			
	·			
Distinctions between early,	Career stage definition(s):			
mid, and	Career stages are defined based on post doctoral research experience.			
established .	Early career: recently obtained a PhD  Mid career: several years of post-doctoral research experience			
researchers' career stages	Established career: senior researcher with demonstrated ability to develop their own line of research			
ou.co. crugos	<u> </u>			
	<ul> <li>More fellowships are aimed at early career researchers (3), than mid career researcher (1) and established researchers (2)</li> </ul>			
	The high number of fellowships are for early career researchers (229), followed by established career researchers (93) and mid career researchers (82)			
	Individual grant sizes per year are larger for established career researchers €433k (£370k)compared to			
	early career researchers €144k (£123k) and mid career researchers €170k (£143k). <sup>38</sup> The variance in the individual grant sizes is because fellowships for established career researchers have a smaller amount of beneficiaries			
	NWO funds the majority (6/8) of the fellowships in the Netherlands			
Main strategic drivers of	NWO is the main funder of fellowships in the Netherlands and influences the research landscape     The strategic objective of funders influences the provision of fellowships			
fellowship provision				
Main gaps	There are few fellowship provisions in the Netherlands			
identified in the country provision	Fellowships offered by the NWO are split across domain and do not encourage Interdisciplinary research     There are not enough fellowships for small research projects to enable early career researchers to gain			
	experience required to compete for prestigious fellowships offered by the NOW			
	Few fellowships focus on humanities, arts, social sciences			
	There appears to be a limited number of mobility fellowships			
Main elements of	There are fellowships that provide support for women researchers			
good practice	Schemes cut across disciplines making it easy for applicants to understand which scheme to apply for			
highlighted by our research and	Integration of equity, diversity and inclusion into the selection and assessment process.			
evaluations identified	Some fellowships provide other forms of support such as subsidized accommodation, office space, networking events, seminars, interdisciplinary reading groups etc.			
Main challenges	Fellowships do not receive enough funding			
highlighted by our research and	Not enough fellowships schemes encourage blue sky thinking			
evaluations	Few fellowships schemes support interdisciplinary research			
identified	Administrative burden managing the selection and application process			
Links to recent evaluations	NWO programmes for curiosity driven research. <a documents="" files="" href="https://www.rathenau.nl/sites/default/files/2024-01/Rathenau%20Instituut%201%20Rapport%201%20NWO-01/Rathenau%20Instituut%201%20Rapport%201%20NWO-01/Rathenau%20Instituut%201%20Rapport%201%20NWO-01/Rathenau%20Instituut%201%20Rapport%201%20NWO-01/Rathenau%20Instituut%201%20Rapport%201%20NWO-01/Rathenau%20Instituut%201%20Rapport%201%20NWO-01/Rathenau%20Instituut%201%20Rapport%201%20NWO-01/Rathenau%20Instituut%201%20Rapport%201%20NWO-01/Rathenau%20Instituut%201%20Rapport%201%20NWO-01/Rathenau%20Instituut%201%20Rapport%201%20NWO-01/Rathenau%20Instituut%201%20Rapport%201%20NWO-01/Rathenau%20Instituut%201%20Rapport%201%20NWO-01/Rathenau%20Instituut%201%20Rapport%201%20Instituut%201%20Rapport%201%20Instituut%201%20Rapport%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%20Instituut%201%201%20Instituut%201%20Instituut%201%201%20Instituut%201%201%201%201%201%201%201%201%201%201&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;CTAIDAIIOIIS&lt;/td&gt;&lt;td&gt;programma%27s%20voor%20vrij%20onderzoek%20Engelse%20versie%20door%20DeepL%20aangepast%20&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;PD LM schoon.pdf&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;Talent without borders. An evaluation of the Rubicon programme. February 2010     &lt;a href=" https:="" nwo="" rubicon%20%7c%20talent%20without%20borders%20-%20an%20evaluation%20of%20the%20rubicon%20programme.pdf"="" sites="" www.nwo.nl="">https://www.nwo.nl/sites/nwo/files/documents/Rubicon%20%7C%20Talent%20without%20borders%20-%20An%20evaluation%20of%20the%20Rubicon%20programme.pdf</a> .      **Talent without borders. An evaluation of the Rubicon programme. February 2010     **Talent without borders. An evaluation of the Rubicon programme. February 2010     **Talent without borders. An evaluation of the Rubicon programme. February 2010     **Talent without borders."  **Talent without borders. An evaluation of the Rubicon programme. February 2010     **Talent without borders."  **Talent without borders. An evaluation of the Rubicon programme. February 2010     **Talent without borders. An evaluation of the Rubicon programme. February 2010     **Talent without borders. An evaluation of the Rubicon programme. February 2010     **Talent without borders. An evaluation of the Rubicon programme. February 2010     **Talent without borders. An evaluation of the Rubicon programme. February 2010     **Talent without borders. An evaluation of the Rubicon programme. February 2010     **Talent without borders. An evaluation of the Rubicon programme. February 2010     **Talent without borders. An evaluation of the Rubicon programme. February 2010     **Talent without borders. An evaluation of the Rubicon programme. February 2010     **Talent without borders. An evaluation of the Rubicon programme. February 2010     **Talent without borders. An evaluation of the Rubicon programme. February 2010     **Talent without borders. An evaluation of the Rubicon programme. February 2010     **Talent without borders. An evaluation of the Rubicon programme. February 2010     **Talent without borders. An evaluation of the Rubicon programme. February 2010     **Talent without borders. An evaluation of the Rubicon programme. February 20			
	Netherlands Institute for Advanced Study in the Humanities and Social Sciences. Self evaluation. 2017-			
	2018. https://storage.knaw.nl/2022-07/NIAS_5_Self_Evaluation_2008_2017.pdf			

 $<sup>^{\</sup>rm 38}$  Annual financial data for two fellowships are not publicly available.



# Appendix E Fellowship Provision overview: Sweden

- A large portion of the Fellowships target early-career researchers
- Sweden has a diverse pool of funders providing fellowships. Research councils, foundations and charitable bodies
- The identified schemes focusing on mobility are all provided by the same funder, the Swedish Foundation for Strategic Research (SSF)

#### E.1. National context

Sweden has a high overall level of R&D expenditure, 3.3% in 2021. The business sector accounts for approximately 72% the R&D expenditure of this total, while the university sector accounts for 23% and other sectors for 4.5%. In international comparison Sweden ranks among the top five OECD countries when it comes to R&D investments as well as proportion of researchers in the population. In 2021, roughly 75% of the researchers worked in the business sector, 20% in the higher education sector and 5% in the government sector. Sweden has a more business-centric research approach in comparison with the UK where over half of the researchers were employed by HEI when last measured (2017).<sup>39</sup>

The government's research proposal 2012 pointed out that Sweden seemed to have more difficulty recruiting successful international researchers than other prominent research nations. As a response, a drive for increased international recruitment of prominent researchers and support for young researchers was proposed and, amongst other things, the Swedish Research Council (SRC) was awarded funds to establish a programme for recruitment of internationally prominent researchers.<sup>40</sup>

## E.2. Fellowship provision at a glance

In Sweden we identified a total of 33 schemes. The Swedish fellowship funding landscape is rich, with varied funders. The main public funders are the Swedish Research Council (SRC), the Swedish Foundation for Strategic Research (SSF) and sector-specific funders and programmes like the Swedish Research Council for Health, Working Life and Welfare (FORTE) and Formas, a research council for sustainable development. There is a strong presence of non-profit foundations and charitable bodies, much like in the UK landscape. Some of the most relevant ones are The Bank of Sweden Tercentenary Foundation (Riksbankens jubileumsfond), the Knut och Alice Wallenbergs Stiffelse, The Lars Erik Lundberg Scholarship Foundation (Lundbergsstiffelserna), the Swedish Collegium for Advanced Studies (SCAS) and The Ragnar Söderbergs Foundation.

The funding landscape for individual researchers also includes grants and support measures that partially correspond to our definition of fellowships. Grants for Future Research Leaders, provided by SSF, are directed at young scholars who have the ability to become future leaders of academic and/or industrial research in Sweden. The scheme offers up to SEK15m (approx. £1.1m) over five years and can be used to finance up to 25% of the applicant's salary.

The country provision emphasises research fellowships with 30 research fellowship schemes identified against three focused on mobility. However, in two of the research fellowships,

<sup>&</sup>lt;sup>39</sup> Forskningsbarometern 2023, Swedish Research Council (2023)

<sup>&</sup>lt;sup>40</sup> The competitiveness of the Swedish R&D system – an international comparative analysis, Technopolis Group (2022)



international mobility is explicitly supported and encouraged. In some of the research fellowships, interdisciplinary knowledge exchange is encouraged, such as the Career Grants for Early-career Researchers provided by Formas. Knowledge exchange is also a key aspect in two schemes, the Human Past Fellowship Programme and the Global Horizons Fellowship Programme provided by SCAS. The three mobility fellowships are offered by the SSF and aim to facilitate the researchers' intersectoral mobility. Together, the three schemes provide support across all career stages.

Many of the schemes are not confined to individual career stages, instead targeting researchers across 2-3 career stages. Overall, most of the schemes are available for researchers in early career stages, with 28 schemes available to them. Mid-career researchers are targeted by 12 schemes and researchers in leadership stages are targeted by 13 schemes. Most of the schemes directed at more senior researchers are provided by foundations, with the exception of two SRC schemes: the Distinguished Professor grant within medicine and health and the Distinguished Professor grant within natural and engineering sciences.

Definitions of career stages vary across funders, although SRC adopts a single definition for all its funding schemes. Early career researchers are those whose doctoral degree was awarded more than two years and no more than seven years before the deadline for the application. Variations of this definition are found in the Lars Erik Lundberg Scholarship Foundation and the SSF. Others, like the Knut and Alice Wallenberg Foundation, do not state the time after PhD completion, only to have a PhD degree.

Research awards have a regular duration range across career stages, from one to five years. At the same time, mobility fellowships present a shorter duration, up to 1.5 years. Our review shows that most Swedish fellowships have a maximum duration of five years, with the exception of the two SRC schemes aimed at senior researchers, which are up to 8 years.

Data on beneficiaries is not available systematically, reducing our possibilities to compare with other countries and across funders.

#### E.3. Rationales and strategies

The overarching rationale for the fellowships is broadly based on the same principles of supporting individual researchers to develop their career and research through long-term funding without attached responsibilities of teaching or administrative tasks. However, there are some differences in the detailed rationales for specific schemes and these tend to differ also between career stages.

Schemes targeting early career researchers have a strong focus on developing skills, networks and shaping of one's research direction. The schemes intend to support researchers to increase independence, broaden perspectives, expand networks, facilitate sectoral interactions, facilitate international interactions, increase the national position within a sector, and/or improve leadership. Fellowships aimed at well-established researchers focus on aspects such as enhancing the international impact of their research to become world-class, widen competence, facilitate sectoral and disciplinary interactions, and retain talent by enabling the renewal of their research programmes.

Our research does not show that there is formal coordination between different funders around fellowships. However, there have recently been joint initiatives to map the general funding



landscape, such as a recent mapping of funding of geographical mobility.<sup>41</sup> The study was commissioned by the Swedish Institute (SI), SRC, the Swedish Higher Education Authority, the Swedish Council for Higher Education, and Vinnova.

There is also no coordinated information on the funding landscape for individual grants available, and no evident efforts into provided a stock of the available schemes.

#### E.4. Further details

In general, the public funders provide little support to the recipients other than the specific funding. A large portion of responsibility is put on the host organisation in providing support and development opportunities for the researcher.

Often the assessment process has the equivalent formal steps as for other grant funding. However, the focus differs, in being more focused on the individual rather the project at hand. The focus is on the potential future career and personal characteristics. For example, Formas is moving towards narrative CVs, to move away from metrics such as publications and rather focus on traits more relevant to the upcoming career.

To keep leading researchers in Sweden, SSF has introduced a scheme named "Escape risk". The scheme aims to prevent leading researchers from leaving Sweden after receiving attractive offers from abroad, through letting universities apply for funds on behalf of a researcher, that has received a concrete offer from a foreign employer, so that they will be attracted to stay in Sweden. The researcher in question must be among the top 10% of researchers within a broad scientific field.

The activities and measures relating to equality, diversity and inclusion are to a large extent confined to general practices applied by the funders, such as inclusive language, narrative CVs, and tracking equality amongst grants awarded. No fellowships specifically targeting equality, diversity or inclusion has been observed.

	Research Fellowships	Mobility and Knowledge Exchange Fellowships	
lumber of fellowships ound	30	3	
Main fellowship	• SRC	• SSF	
providers	Formas		
	• KAW		
	• SSF		
	• SCAS		
	• Forte		
	Lundbergstiftelserna		
	Coalition of 7 private foundations		
	• STINT		
	Ragnar Söderbergs Stiftelse		
	Svenska sällskapet för medicinsk forskning		

Landscape Review of Research and Innovation Fellowship Offers

<sup>&</sup>lt;sup>41</sup> https://www.uhr.se/internationella-mojligheter/Plattform-for-internationalisering/aktuellt-fran-plint/utbudet-av-finansiering-for-internationell-mobilitet-ar-brett-men-det-behover-anpassas-for-att-mota-nya-behov/



Average annual award value of awards identified	• £120,000	• £67,380	
Average annual award value variability	The annual budgets for research fellowships vary between £28,200 and £294,022	The annual budgets for mobility fellowships vary between £36,753 and £110,258	
Fellowship durations <sup>42</sup>	<ul><li>6-12 months (including 12 months!): 7</li><li>13 months-3 years: 9</li><li>Over 3 years: 13</li></ul>	<ul> <li>6-12 months (including 12 months!): 0</li> <li>13 months-3 years: 2</li> <li>Over 3 years: 1</li> </ul>	
Scheme sizes	We have access to number of beneficiaries for very few of the schemes, making comparisons and definitive conclusions unfeasible. For the schemes we have numbers, the number of beneficiaries vary to a large extent, from a handful up to over 100. However, most seem to be somewhere between 20-40 awarded annually.	All three identified schemes are provided by the same funder (SSF) and have complementary rationales.	
Distinctions between early, mid, and established researchers' career stages		sed nation-wide in this context. For the sake of this the schemes in the respective category: Early career searcher	
	number of schemes that cater to the respective specifically catering said career stage in parentl  Early career researcher: 28 (17)  Mid career researcher: 12 (0)  Senior researcher: 13 (4)	e e e e e e e e e e e e e e e e e e e	
Main strategic drivers of fellowship provision	<ul> <li>One of the larger drivers seem to be to provide a basis for free and explorative research</li> <li>The provision seems to have a large focus on providing opportunities for early career researchers to establish themselves as researchers and lay the foundation for an academic career</li> </ul>		
Main gaps identified in the country provision	<ul> <li>There is a very large focus on early career fellowships when it comes to schemes targeting singular career stages</li> <li>The activities to address EDI seem to be more on a level of general research funding tools (inclusive language etc.) rather than on a scheme specific level</li> <li>Few of the identified schemes are focusing on intersectoral mobility</li> </ul>		
Main elements of good practice highlighted by our research and evaluations identified			
Main challenges highlighted by our research and evaluations identified	Stock-taking and communication of the national attraction     Limited provision of mobility schemes, mainly	on-wide offer would facilitate talent retention and provided by one funder	
Links to recent evaluations	<ul> <li>international-recruitment-of-leading-research</li> <li>Analysis of Intersectoral Mobility, 2019: <a href="https:/mobility_final-report-191002.pdf">https:/mobility_final-report-191002.pdf</a></li> <li>Evaluation of STINT's programme Strategic Gr</li> </ul>	porter/2021-04-08-implementation-of-the-grant-for- ners.html /strategiska.se/app/uploads/ssf intersectoral-	

 $<sup>^{\</sup>rm 42}$  One of the research fellowships have no specification of the duration



## Appendix F Fellowship Provision overview: USA

- National funders, such as the National Science Foundation and National Institute of Health, are key players in supporting researchers to advance projects in STEM-related disciplines and biomedical sciences. They support early-career researchers during their postdoctoral phase to facilitate their transition to an independent tenure-track faculty position
- Federal agencies also play a key role in providing funding for researchers. These fellowships
  are aligned to national priorities (e.g., green energy transition), or connect researchers with
  policymakers to foster knowledge exchange between the two groups. They are generally
  administered by other non-profit organisations or institutes
- Fellowship schemes and programmes from private and philanthropic foundations, such as
  the Sloan Foundation, are somewhat broader in their remit, but generally share the same
  purpose as those offered by the national funders and the federal agencies in supporting
  postdoctoral researchers in their transition to becoming independent researchers

#### F.1. National context

The research landscape in the USA is characterised by a large network of universities, research institutions, and industry partners thriving on collaboration, entrepreneurship, and innovation. At the national level, research priorities in the USA are driven by a combination of government agencies, private foundations, and industry stakeholders. The federal government plays a significant role in shaping this landscape through agencies like the National Science Foundation (NSF), the National Institutes of Health (NIH), the Department of Defense (DoD), and the Department of Energy (DOE), among others. These agencies allocate funding and support research projects in areas deemed critical to national objectives, such as healthcare, energy, national security, and environmental sustainability.

In addition to government initiatives, private foundations and philanthropic organisations also play a crucial role in shaping and funding research. Entities such as the Howard Hughes Medical Institute (HHMI), the Alfred P. Sloan Foundation, the Smithsonian Institute, or the American Council of Learned Sciences (ACLS), invest in research areas ranging from global health, natural and physical sciences, as well as the humanities and other social sciences.

A report by the National Center for Science and Engineering Statistics (NCSES) suggests that the USA spent \$789b (£629b) on R&D in 2021, which was equivalent to 3.4% of its GDP that year. This exceeded the OECD's average R&D intensity of other major economies.<sup>43</sup> Considering funding sources, most of the funding devoted to R&D originates from business (75%), followed by the federal government (19%), higher education institutions (3%), non-profit organisations (2.7%), and other non-federal governments (0.7%).

Funding for basic research amounted to \$119b (£95b) and is mostly sponsored by business (36%), the federal government (40%), and higher education institutions (13%). Funding for applied research, which amounted to \$87b (£69b), is greatly funded by business (61%) and the federal government (29%). The remaining portion of funding sources is equally distributed between higher education institutions and non-profit organisations. Funding for experimental

<sup>&</sup>lt;sup>43</sup> Anderson G; National Center for Science and Engineering Statistics (NCSES). 2024. U.S. R&D Increased by \$72 Billion in 2021 to \$789 Billion; Estimate for 2022 Indicates Further Increase to \$886 Billion. NSF 24-317. Alexandria, VA: National Science Foundation. Available at <a href="https://ncses.nsf.gov/pubs/nsf24317/">https://ncses.nsf.gov/pubs/nsf24317/</a>.



development amounted to \$526b (£419b) and is almost entirely attributed to business (88%), and less so to the federal government (11%).

## F.2. Fellowship provision at a glance

The fellowship landscape in the USA is vast and encompasses a diverse collection of opportunities across various fields and career stages. In our rapid search, we have found several fellowship schemes offered by the federal funders, namely the NSF and NIH, as well as federal agencies. In addition, fellowships offered by philanthropic institutions supporting high quality research are key actors. The synthesis presented here is based on information relating to 62 fellowships programmes and schemes from such entities. Where appropriate, this was complemented with information gathered via interviews and correspondence with representatives from several of these funding organisations, as well as one senior scholar.

The fellowships we have identified in our search predominantly target early- and mid-career researchers. They are designed to support individuals to engage in independent research and to help them establish themselves in leadership positions, ultimately allowing them to progress in their tenure track. The fellowship offer in the USA varies greatly in terms of size and duration (among other characteristics of the awards), which themselves generally vary depending on the career stage targeted by the scheme. The financial awards given to individuals often impose conditions on how they can be used. Generally, these take the form of an annual stipend paid in monthly instalments to the researcher of which a portion (or in some cases an additional allowance) is expected to be used to cover expenses directly related to carrying out the proposed research. For instance, successful applicants of the NSF Postdoctoral Research Fellowships are awarded an annual stipend of \$80k-\$110k (approx. £64k-£88k) of which approximately 70% is paid directly to the researcher, while the remaining 30% is expected to be used to cover other research costs. An exception to this can be seen in the NSF's Graduate Research Fellowship Program where successful applicants receive an annual cost of education allowance on top of the annual stipend to cover tuition and fees to the institution as opposed to project costs.

An interesting feature of the fellowship landscape in the USA is that there are specialised institutes that are part of federal agencies that manage and administer fellowship programmes. Such is the case of the Oak Ridge Institute for Science and Education (ORISE), which manages fellowship programmes for the U.S. Department of Energy, U.S. Department of Health and Human Services, U.S. Department of Defense, and the U.S. Department of Homeland Security. Specifically, the objective of ORISE is to connect recent graduates, postdocs, and faculty with programmes that help grow their STEM expertise and experience. To a certain extent, the American Association for the Advancement of Science (AAAS) plays a similar role through its offer of Science and Technology Policy Fellowships, connecting scientists and engineers with policymakers in various branches of the US federal government to facilitate the exchange of expertise and knowledge between the two groups.

Philanthropic organisations identified as key players in our landscape review include the Sloan Foundation, the Smithsonian Institute, the Hertz Foundation, and the Howard Hughes Medical Institute (HHMI). One of the main aims of the schemes offered by these organisations is, once again, to support early- and mid-career researchers in their tenure track and pursuit of a professorial position. Thus, an important element in the evaluation of proposals for these schemes is the applicants' potential to become a leader in their field (on top of their research accomplishments and other common evaluation criteria). It is worth noting that a prominent feature of these fellowships refers to mentorship and professional development opportunities on top of their financial support.



Generally, the fellowship offer encountered in our search appears to be geared towards STEM and disciplines related to biomedical sciences. It is not immediately clear why this is the case although, presumably, these disciplines align better with national priorities. Nevertheless, it is worth noting the National Endowment for the Humanities (NEH) and the American Council of Learned Societies (ACLS) are an important support tool for scholars in the humanities and social sciences. The standard ACLS Fellowship Program, for example, awarded approximately \$3.8m (approx. £3m) to 60 individuals in its most recent competition year.

#### F.3. Rationales and strategies

The main rationales for the fellowship schemes we have identified in our search are generally to support academic researchers and scholars at various stages of their career to conduct independent research and to help establish them in leadership positions. Many of the fellowship provisions also place emphasis on mentorship and training opportunities, while others incentivise high-risk interdisciplinary research. The fellowships we identified in our search are mainly geared towards supporting research (sometimes alongside teaching duties) and only a small number appear to be concerned with creating opportunities for knowledge exchange.

The fellowship programmes by the NSF work towards the mission of the foundation, which is to "promote the progress of science, advance the national health, prosperity and welfare, and secure the national defence." To this end, the NSF's Postdoctoral Research Fellowships (PRFs) aim to allow fellows to perform work that will broaden their perspectives and facilitate interdisciplinary interactions. The duration of the NSF PRFs ranges from 24 to 36 months, while the current documentation about the 10 PRF programmes suggests that as many as 241 individuals are awarded these fellowships every year. The awards across the 10 fellowships amount to approx. \$73.6m (£59m) every year. The Engineering Postdoctoral Fellowship, funded by the NSF but administered by the AAAS, specifically refers to mentoring activities designed to prepare beneficiaries for future research careers.

The NSF's Graduate Research Fellowship Program (GRFP) has a similar function as the PRFs, except it supports outstanding graduate students who are pursuing full-time research-based master's and doctoral degrees in STEM disciplines. Other schemes and programmes by the NSF, such as the CAREER programme, support early-career faculty who have the potential to serve as academic role models in research and education (i.e., they combine support of research with teaching activities). To this end, they also target pre-tenured faculty from groups that have been historically excluded and underrepresented to help launch their careers (e.g., the LEAPS-MPS Program), or specifically lack access to adequate organisation resources (e.g., the Computer and Information Science and Engineering (CISE) Research Initiation Initiative). It is worth noting, however, that these schemes do not necessarily specify an FTE conditions and, as such, may not always fall within the scope of our definition for a fellowship. Beyond the PRF and the GRFP, it appears that the fellowship provision by the NSF, per our definition, is somewhat limited and that, instead, the NSF is more active in providing research grants to universities as opposed to individuals.

In a similar way to the NSF, the NIH offers a variety fellowship programmes that are also designed to support the training and career development of researchers. Naturally, however, the fellowship programmes by the NIH are geared toward the biomedical sciences. These include, among others, the Postdoctoral Intramural Research Training Award (IRTA) and the Research Fellow (Visiting) Program. The fellowships cover stipends and research expenses for

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<sup>44</sup> https://new.nsf.gov/about



up to five years, enabling fellows to pursue innovative research projects. Their longer duration compared to most NSF fellowships is presumably attributed to the nature of biomedical research. Additionally, the NIH offers the Pathway to Independence Award (K99/R00) to promising postdoctoral scientists seeking to complete needed, mentored research career development that will facilitate their timely transition to an independent, tenure-track or equivalent, faculty position.

Fellowship schemes, such as those offered by non-federal or philanthropic organisations, generally follow the same rationale as the ones referred to above. The Sloan Fellowship, for example, awards fellowships to early-carer faculty who have the potential to become next-generation leaders. The fellowship itself is highly prestigious, which in part is due to the competitive selection processes and size of the awards. Successful applicants to the fellowship program are introduced to an alumni network that provides opportunities for further collaboration, mentorship and professional development after completion. Interestingly, candidates to the Sloan Fellowship must be nominated by fellow scientists. The fellowship schemes by the HHMI greatly follow the same rationale in supporting individuals during their postdoctoral phase, as well as in their transition to becoming faculty, through its offer of the Gilliam Fellows Program, Hanna H. Gray Fellows Program, and Investigator Program. Lastly, the fellowship schemes by the ACLS target researchers who have traditionally had less access to external research support and scholarly recourses, but specifically focus on the humanities and interpretative social sciences.

### F.4. Further details

There are no great differences in the selection processes of the fellowships we have identified in our search to standard processes applied elsewhere. The NSF adopts a standard selection process assessing applications based on a merit review process that considers both the intellectual merit and the broader impacts of the proposal. This is true for all NSF Fellowships despite their sectoral focus (albeit with very minor differences). Other points of consideration in evaluation criteria include: the potential of the project to advance the field or fields of study and make an original and significant contribution to knowledge; the quality and innovativeness of the proposal; feasibility of the project within the proposed time frame; the scholarly record and career trajectory of the applicant. In the case of those fellowships that connect researchers to policy, an important criterion is the applicants' interest in applying their technical skills and knowledge to policy-related issues. Moreover, the NIH further refers to a candidate's preparedness and potential and research training plan in its scored review criteria.

The NSF has a dedicated Evaluation and Assessment Capability to study programmes and activities, as well as their impact on the people who participate and benefit from NSF investments. Concrete evaluations of programmes, however, have not been located. Other foundations (e.g., the Hertz Foundation) publish impact and success stories as outcomes of their funding but lack formal evaluation studies. Similarly, the NIH has an Office of Evaluation, Performance, and Reporter (OEPR), but no specific assessments of its fellowship were located.

Another recurring theme in our search was that all the NSF Postdoctoral Research Fellowships require applicants to be national or permanent citizens of the USA. The Sloan Fellowship extends this to Canadian nations. Beyond this, the Fulbright Program specifically supports international and cultural exchanges for scholars and other researchers.



	Research Fellowships	Mobility and Knowledge Exchange Fellowships	
Number of fellowships found	59	3	
Main fellowship providers	<ul> <li>National Science Foundation</li> <li>National Institutes of Health</li> <li>Federal Agencies (e.g., Department of Energy)</li> <li>Sloan Foundation</li> <li>Smithsonian Institute</li> <li>American Council of Learned Societies</li> <li>Howard Hughes Medical Institute</li> <li>Hertz Foundation</li> </ul>	American Association for the Advancement of Science     Oak Ridge Institute for Science and Education	
Average annual award value of awards identified	• Approx. \$80,000 (£63,800)	Not specified	
Average annual award value variability	There is considerable variation in the size of awards. The award for researchers at their earliest stage start at around \$60,000 (£47,850), while for more experienced researcher it can be as much as \$300,000 (£239,252) or more	n/a	
Fellowship durations	<ul> <li>6-12 months: 32</li> <li>13 months-3 years: 16</li> <li>Over 3 years: 7</li> <li>N.B. Discrepancies with total due to missing information</li> </ul>	Not specified	
Scheme sizes	Some awards limit the number of offers to as little as 10 per year (e.g., some of the NSF Postdoctoral Fellowships) – but it is not clear why this is the case. Other philanthropic foundations grant awards to anywhere between 10 to over 100 individuals.		
Distinctions between early, mid, and established researchers' career stages	Career stage definition(s):  There are no evident definitions used for career stages. Fellowships refer to pre- and post-doctoral status of candidates in their eligibility criteria, some specifying a maximum number of years between receiving the doctorate degree and the time of application. The use of early- and mid-career researcher is somewhat prominent but not consistent. Some fellowships require applicants to be on a tenure-track.		
		at early-career researchers and are devised for	
Main strategic drivers of fellowship provision	<ul> <li>The main rationales for the fellowship schemes we have identified in our search are to support acaden researchers and scholars at various stages of their career to conduct independent research, and to establish them in leadership positions</li> <li>Mentorship and training are core aspects of the fellowship provision</li> <li>In some cases, fellowships are designed to incentivise participation from minority or underrepresented groups</li> </ul>		
Main gaps identified in the country provision	STEM-focused and biomedical disciplines are predominantly targeted by national funding organisations, federal government agencies, and other foundations. There fellowship offer for researchers in the humanities field appears to be somewhat lacking, but may be provided by universities instead.		
Main elements of good practice highlighted by our research and	There are standard selection procedure and proce as well as reporting processes across the NSF's prog	sses based on merit review and broad impact review rrammes.	



evaluations identified	
Main challenges highlighted by our research and evaluations identified	Combining fellowship funding is often restricted, i.e., there are restrictions for individuals applying to a fellowship scheme if they are already holders of another
Links to recent evaluations	NSF: <a href="https://new.nsf.gov/od/oia/eac/what-we-do">https://new.nsf.gov/od/oia/eac/what-we-do</a> NIH: <a href="https://dpcpsi.nih.gov/oepr/index">https://dpcpsi.nih.gov/oepr/index</a>



# Appendix G Interview details

Table 4 List of interviewees

Country	Interviewee name	Organisation	Position	Interview date & time	Interviewer
Australia	Alison Beasley	Australian Research Council	Acting Branch Manager, Programs	09/05/2024 07:30	Adebisi Adewusi
Australia	Gavin Reid	Australian Research Council	Executive Director, Mathematics, Physics, Chemistry and Earth Science	09/05/2024 07:30	Adebisi Adewusi
Australia	Stacey Waters	Office of Medical Research and Innovation	Director, Research Office of Medical Research and Innovation	09/05/2024 09:00	Adebisi Adewusi
Germany	Almut Caspary	Alexander von Humboldt Foundation	Head of Strategic Planning	03/05/2024 14:00	Guillermo Larbalestier
Germany	Holger Finken	German Academic Exchange Service	Head of Research Fellowship Programmes	02/05/2024 15:00	Guillermo Larbalestier
Germany	Oliver Grewe	Volkswagen Foundation	Scientific Program Director, Freigeist	02/05/2024 11:00	Guillermo Larbalestier
Netherlands	Jan Duyvendak	Netherlands Institute for Advanced Study in the Humanities and Social Sciences	Director of Netherlands Institute for Advanced Study in the Humanities and Social Sciences	22/05/2024 9:00	Adebisi Adewusi
Netherlands	Odin Dekkers	Dutch Research Council	Head of Curiosity Driven Research and Scientific Disciplines (SSH)	01/05/2024 13:30	Adebisi Adewusi
Sweden	Daniel Holmberg	Malmö University	Research coordinator	26/04/2024 14:30	Sebastian Berggren
Sweden	Eric Olm	Swedish Research Council	Senior Research Officer	08/052024 08:30	Sebastian Berggren
Sweden	Josefin Thoresson	Formas	Senior Research Officer	30/4/2024 12:30	Sebastian Berggren
Sweden	Josefin Wangel	Formas	Senior Research Officer	30/4/2024 12:30	Sebastian Berggren
UK	Alex Lewis	The British Academy	Director of Research	03/05/2024 9:00	Sebastian Berggren
UK	Ken Emond	The British Academy	Head of Research Funding	03/05/2024 9:00	Sebastian Berggren
UK	Michael Dunn	Wellcome	Director of Discovery Research	02/05/2024 15:30	Sebastian Berggren
UK	Paul McDonald	The Royal Society	Director of Grants	26/04/2024 13:30	Sebastian Berggren



Country	Interviewee name	Organisation	Position	Interview date & time	Interviewer
USA	Angela DePace	Howard Hughes Medical Institute	Scientific Program Officer	17/05/2024 14:30	Guillermo Larbalestier
USA	Diana Hicks	Georgia Tech	Professor of Public Policy	07/05/2024 14:00	Peter Kolarz, Guillermo Larbalestier
USA	Kendra Sharp	National Science Foundation	Office Head, Office of International Science and Engineering	16/05/2024 Written exchange	Guillermo Larbalestier
USA	Lauren von Eckartsberg	Sloan Foundation	Grants Administrator	10/05/2024 Written responses	Guillermo Larbalestier
USA	Various individuals	National Science Foundation	Various	E-mail exchanges and sharing of public links only	Guillermo Larbalestier

#### G.1. Interview tool

#### 4548 – UKRI international fellowships review

### Interview tool

**README**: These interviews fulfil two functions. First, to check we have our facts right and that we have captured all main fellowships that match our definition for each country. Second, to obtain some wider views about the logic/rationales for the fellowship offers in each country and get an assessment of what is going well, what is not going well, and what gaps may exist.

We are also interviewing people in two capacities: first, as representatives of their specific funding organisation; second, as experts on their country. We want both these perspectives from them. Hopefully this shouldn't be too hard to untangle. You can even say to them that we are interested in both the funder and the country-perspective if you suspect confusion.

Before the interview: please send the interviewee an email listing all the fellowships we have found that match our definition in the country, and ask them to take a look, noting our first question will be whether we seem to have captured everything or if there are any fellowships matching out definition we are missing. No need to send them our full excel with all scheme details. Just a bullet-point list in an email a day or two in advance of the interview will do.

Our definition of fellowships (if ever needed): "Prestigious awards which grant the holder freedom to undertake activities which require significant (at least 0.5FTE) time investment to achieve the proposed outcomes. They are designed to enable grant holders (including associated team if applicable) to conduct ambitious research and / or apply their knowledge and skills to other parts of the research and innovation ecosystem and / or support grant holders in developing the right skills and accessing opportunities to enhance their careers".



## Points to make prior to interview start

- UKRI has commissioned us to conduct this study, which is to review the Research and Innovation Fellowship Offers in five selected countries: the USA, Germany, The Netherlands, Sweden and Australia
- Our review aims to show what role fellowships play in their context and what are the main
  driving principles behind these policy instruments. The review seeks to identify potential
  opportunities to improve the UK's fellowship provision and identify best practices around
  fellowship provision, evaluation, and management. We hope the review will be of use to
  research funders in other countries too
- What you say in this interview will only be reported in aggregate non-attributable form, and the notes to this interview will not be shared with anyone
- However, we would like to note the names of all our interviewees in the method annex to the final report. In other words: we'd like to report that we spoke to you, but not what you specifically said. Is this ok with you?
- [If you are recording {your choice, however you take notes best!}: We wish to record the interview to ensure all the details are transcribed accurately. The recording will not be shared with anyone outside Technopolis Group and will be destroyed once our analysis is finalised. Are you happy with this?]
- Before we start, do you have any other questions or comments about this study?
- [If you have not sent the authorisation letter to the interviewee and they seem reticent in any way, you can offer to share it with them. Any other issues/questions you can't answer, you can say you'll refer them to the project manager after the interview]

[Please try to cover all questions for every interview. However, if you do need to skip a couple due to time constraints or if you have a very clear sense that the interviewee will have little to say or they mostly answered it while answering a different question, then that's ok.]

[Please provide shortened answers to each question, either in short prose or bullet-point form. No need to do full transcription, let alone 'um's and 'errr's. you can record and take notes after the interviews or just live-type if you are able to. Whatever works for you!]

Interviewee Name:	
Country	
Organisation	
Role	
Interview date/time	xx-xx-2024; xx:xx UK time
Interviewer	

We will come to [your organisation/funder x] shortly, however, I would like to start with some fact checking on the fellowship provision in [country x] more generally

• I have sent you our provisional list of all the fellowships we are aware of in [country x] that match our definition. As far as you can see, are there any we are missing?



- More generally, can you please provide an overall picture of fellowship provision in [country x]? Who do you see as the main funders, other key actors, and the most important schemes in terms of size, prestige and overall significance in the research system?
  - [prompt if needed:] Are there other contextual factors (e.g., institutional setting) of the [country]'s landscape that may influence the national fellowship provision?

Now I have a few questions about fellowship provision at [funder x], but please feel free to relate your answers to the wider national picture.

- What are the main drivers behind the fellowship offer in your organisation?
  - In other words: why do you offer the fellowships that you do, in the shape that you do?
  - Do they respond or align with any science and technology policy or priorities?
- Does [funder x] understand its fellowship provision to fill a particular gap? Is it the case that you fund certain things while other funders are responsible for other types of fellowships?
- Do you use any particular assessment and selection processes to make funding decisions about fellowships that are different from regular research grant funding? If so, what are the advantages (and drawbacks)?
- Do your fellowship holders benefit from any additional support measures during their award (besides the actual money)?
  - Might include access to supplementary grants, networks, mentoring, travel vouchers, etc
- Do you have any mechanisms or measures that address equality, diversity and inclusion aspects of your fellowship offer? If so, can you tell us whether any of them have been especially successful?
- Can you explain to what extent your fellowships are monitored and evaluated? are there standard processes and/or any approaches that have gone especially well (or indeed, ones that haven't gone so well)?

Space for you to add any specific questions you have based on your country research so far.		
(you can move this box to wherever makes sense in the interview!)		



- **Returning to the broader national picture**, do you see any gaps in terms of the fellowship provision in [country x]?
- Is the fellowship offer in [country x] well-coordinated? Is there a sense that different organisations cover different things or is there a lot of unnecessary duplication?
- Do you have any thoughts about the future of fellowship offers in [country x]?
  - What changes are likely to happen?
  - What changes would you like to see happen?
- Any other points you feel might be relevant for our study?



# Appendix H List of fellowships

## H.1. UK Fellowship Schemes

Organisation	Fellowship Name	Туре	Size of Award (max. per year)	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
The British Academy	Innovation Fellowhips Scheme - Route A	Mobility and KE	£ 120,000	27 (2022- 2023)	Early-/ mid- career	0,5-1 year	Humanities and Social Sciences (researchers), organisations and business in the creative and cultural, public, private and policy sectors (Stakeholders)	-	https://www.thebritishacademy.ac.uk/fundi ng/innovation-fellowships-scheme-route-a- researcher-led/
The British Academy	Innovation Fellowhips Scheme - Route B: Policy-led	Mobility and KE	£ 120,000	N/A	Early-/ mid- career	1 year	Humanities and Social Sciences (researchers), organisations and business in the creative and cultural, public, private and policy sectors (Stakeholders)	-	https://www.thebritishacademy.ac.uk/fundi ng/innovation-fellowships-scheme-route-b- policy-led/
the British Academy/ the Royal Society	International Fellowships	Research	N/A <sup>45</sup> (80% FEC)	15 (2023) - British Academy applicants	Early career	2 years	social sciences and humanities; natural sciences, including biological research, biomedical sciences, chemistry, engineering, mathematics, and physics.	-	https://www.thebritishacademy.ac.uk/funding/international-fellowships/
The British Academy	British Academy Wolfson Fellowships	Research	£ 43,333	7 (2023)	Early career	3 years	humanities and social sciences.	-	https://www.thebritishacademy.ac.uk/fundi ng/british-academy-wolfson-fellowships/
The British Academy	British Academy Wolfson Professorships	Research	£ 68,000	5 (2022)	Senior career	3 years	humanities and social sciences.	-	https://www.thebritishacademy.ac.uk/fundi ng/wolfson-research-professorships/
The British Academy	British Academy Leverhulme Senior Research Fellowships	Research	N/A	11 (2023)	Senior career	1 years	humanities and social sciences.	-	https://www.thebritishacademy.ac.uk/fundi ng/bo-leverhulme-senior-research- fellowships/
The British Academy	Global professorships	Research	£ 225,000	8 (2023)	Mid career to senior	4 years	humanities and social sciences.	-	https://www.thebritishacademy.ac.uk/funding/global-professorships/
The British Academy	Postdoctoral Fellowships	Research	N/A (80%of salary costs)	50 (2022)	Early career	3 years	Humanities or Social Sciences	https://www.thebritishacademy.ac.uk/ documents/3296/Cloud-Chamber- Evaluation-British-Academy- Postdoctoral-Fellowship-Scheme.pdf https://www.thebritishacademy.ac.uk/	https://www.thebritishacademy.ac.uk/fundi ng/postdoctoral-fellowships/

<sup>&</sup>lt;sup>45</sup> N/A may denote that award size is dependent on the awardee's salary, or that the award size is variable for other reasons, or that award size is not listed in the scheme notes.



Organisation	Fellowship Name	Туре	Size of Award (max. per year)	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
								documents/3296/Cloud-Chamber- Evaluation-British-Academy- Postdoctoral-Fellowship-Scheme.pdf	
The British Academy	Mid-Career Fellowships	Research	£ 152,000	43 (2023)	Mid career	0,5-1 years	Humanities or Social Sciences	https://www.thebritishacademy.ac.uk/ documents/3295/Cloud-Chamber- Evaluation-British-Academy-Mid- Career-Fellowship-Scheme.pdf	https://www.thebritishacademy.ac.uk/funding/mid-career-fellowships/guidance-notes- 2023/
Daphne Jackson Trust	Daphne Jackson Fellowship	Research	N/A	N/A	Any career stage	2 years	Daphne Jackson Fellowships are unique. They offer researchers the opportunity to return to a research career after a break of two or more years for a family, health or caring reason. By combining a personalised retraining programme with a challenging research project, held in a supportive UK university or research establishment, our Fellowships provide a vital opportunity for those looking to return to a research career.		https://daphnejackson.org/about- fellowships/
Wellcome	Wellcome Early- Career Awards	Research	N/A	62 (2022/2023)	Early career	5 years	Discovery Research, Climate & Health, Infectious Disease, Mental Health	-	https://wellcome.org/grant- funding/schemes/early-career- awards#what-we-offer-8137
Wellcome	Wellcome Career Development Awards	Research	N/A	34 (2022/2023)	Mid career	=< 8 years	Discovery Research, Climate & Health, Infectious Disease, Mental Health	-	https://wellcome.org/grant- funding/schemes/career-development- awards
Wellcome	Wellcome Discovery Awards	Research	£ 1,000,000	36 (2022/2023)	Mid Career	=< 8 years	Discovery Research, Climate & Health, Infectious Disease, Mental Health	-	https://wellcome.org/grant- funding/schemes/discovery-awards
Royal Academy of Engineering	Royal Academy of Engineering Research Fellowship	Research	£ 125,000	12 (2023)	Early career	5 years	Engineering	-	https://raeng.org.uk/research-fellowships
The British Heart Foundation	Intermediate Basic Science Research Fellowships	Research	N/A	N/A	Mid career to senior	5 years possibility of 2 year extension	-	-	https://www.bhf.org.uk/for- professionals/information-for- researchers/what-we-fund/intermediate- basic-science-research-fellowships
The British Heart Foundation	Immediate Postdoctoral Basic Science Research Fellowships	Research	N/A	N/A	Early career	4 years	-	-	https://www.bhf.org.uk/for- professionals/information-for- researchers/what-we-fund/immediate- postdoctoral-basic-science-research- fellowships



Organisation	Fellowship Name	Туре	Size of Award (max. per year)	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
The British Heart Foundation	Career Development Research Fellowships for Nurses & Healthcare Professionals	Mobility	N/A	N/A	Early-/ mid- career	3 years with a possible extension of 2 years	The research proposed should usually be related to the improvement of care and outcomes for people with cardiovascular disease. More fundamental/basic science research may be better supported through our other funding schemes. If you have any queries about the suitability of your research for this scheme, please contact us in advance of submitting an application.	-	https://www.bhf.org.uk/for-professionals/information-for-researchers/what-we-fund/career-development-research-fellowships-for-healthcare-professionals
The British Heart Foundation	BHF - Daphne Jackson Trust Fellowships	Mobility	N/A	N/A	Early-/ mid- career	3 years	Cardiovascular research	-	https://www.bhf.org.uk/for- professionals/information-for- researchers/what-we-fund/bhf-daphne- jackson-trust-fellowships
The British Heart Foundation	Career Re-entry Research Fellowships	Research	N/A	N/A	All	4 + 1 years	-	-	https://www.bhf.org.uk/for- professionals/information-for- researchers/what-we-fund/career-re-entry- research-fellowships
Leverhulme	Leverhulme Trust Early Career Fellowships	Research	£ 32,000	145 (2023)	Early career	3 years	Applications will be considered in all subject areas with the following exceptions: - studies of disease, illness and disabilities in humans and animals - research that is intended to inform clinical practice or the development of medical applications	-	https://www.leverhulme.ac.uk/early-career- fellowships
Leverhulme	Leverhulme Trust Research Fellowships	Research	£ 32,500	104 (2023)	Mid career to senior	3 and 24 months.	Applications will be considered in all subject areas with the following exceptions: - studies of disease, illness and disabilities in humans and animals - research that is intended to inform clinical practice or the development of medical applications	-	https://www.leverhulme.ac.uk/research- fellowships
Leverhulme	Leverhulme Trust International Fellowships	Research and mobility	£ 25,000	12 (2023)	Mid career to senior	3 and 24 months.	Applications will be considered in all subject areas with the following exceptions: - studies of disease, illness and disabilities in humans and animals - research that is intended	-	https://www.leverhulme.ac.uk/international _fellowships



Organisation	Fellowship Name	Туре	Size of Award (max. per year)	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
							to inform clinical practice or the development of medical applications		
National Institutes of Health and care Research (NIHR)	Advanced Fellowships	Research	N/A (full salary support & research costs)	N/A	Early to mid- career	2-5 years	The NIHR Advanced Fellowship is a postdoctoral Fellowship aimed at anyone with a PhD who hasn't yet been appointed to a professorial post. The Advanced Fellowship supports individuals undertaking research in any scientific discipline or sector that can demonstrate a contribution to improving health and/or care.		https://www.nihr.ac.uk/funding/advanced-fellowship-round-12/35833
Royal Society	Royal Society Wolfson Fellowship	Research	£ 60,000	N/A	Mid career to senior	5 years	Natural Sciences	-	https://royalsociety.org/grants/royal-society- wolfson-fellowship/
Royal Society	Royal Society Wolfson Visiting Fellowship	Research	£ 125,000	N/A	Mid career to senior	1 year (or flexibly over two years)	Royal Society's remit of natural sciences, which includes but is not limited to biological research and biomedical sciences, chemistry, engineering, mathematics and physics.	-	https://royalsociety.org/grants/royal-society- wolfson-visiting- fellowship/8gad source=1&gclid=CjwKCAjw ldyyBhAgEiwADSEjeBgkF0VPMTS4gAQ1xND1 KuxC11wArfgwRVlpWiDsBJkY93xX8U14sBoCF RoQAvD_BwE
Royal Society	Career Development Fellowship	Research	£ 172,500	N/A	Early career	4 years	Royal Society's remit of natural sciences, which includes but is not limited to biological research and biomedical sciences, chemistry, engineering, mathematics and physics.	-	https://royalsociety.org/grants/career- development-fellowship/
Royal Society	Faraday Discovery Fellowships	Research	£ 800,000	N/A	Mid career	10 years	Your primary area of research is within the Royal Society's remit of natural sciences, which includes but is not limited to biological research and biomedical sciences, chemistry, engineering, mathematics and physics. For a full list, please see the breakdown of subject groups and areas supported by the Royal Society.	-	https://royalsociety.org/grants/faraday- discovery-fellowships/
Royal Society	Dorothy Hodgkin Fellowship	Research	£ 228,750	N/A	Early career	8 years	Royal Society's remit of natural sciences, which includes but is not limited to biological research and biomedical sciences,	-	https://royalsociety.org/grants/dorothy- hodgkin-fellowship/



Organisation	Fellowship Name	Туре	Size of Award (max. per year)	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
							chemistry, engineering, mathematics and physics.		
Royal Society	University Research Fellowship (URF)	Research	£ 228,750	N/A	Early career	8 years	Royal Society's remit of natural sciences, which includes but is not limited to biological research and biomedical sciences, chemistry, engineering, mathematics and physics.	-	https://royalsociety.org/grants/university- research/
Royal Society	Industry Fellowships	Mobility	N/A	N/A	All	Awards can be for any period up to two years full-time or a maximum of four years pro rata (i.e. an award could be held at 50% part-time for four years), enabling fellows to maintain links with their employing institution more easily.	Royal Society's remit of natural sciences, which includes but is not limited to biological research and biomedical sciences, chemistry, engineering, mathematics and physics.		https://royalsociety.org/grants/industry-fellowships/
The Royal Commission for the Exhibition of 1851	Brunel Fellowship	Research	N/A	N/A	Early career	3 years	civil, mechanical, electrical or aeronautical engineering	-	https://royalcommission1851.org/fellowships /brunel-fellowship
The Royal Commission for the Exhibition of 1851	Research Fellowship	Research	N/A	N/A	Early career	3 years	Any of the physical or biological sciences, in mathematics, in applied science, or in any branch of engineering* Engineers proposing research which addresses the primary infrastructure needs of modern society should apply for a Brunel Fellowship	-	https://royalcommission1851.org/fellowships /research-fellowships
UKRI	AHRC - research, development and engagement fellowships (RDE) - Early Career	Research	£ 101,000	34	Early career	6months - 2 years		-	-



Organisation	Fellowship Name	Туре	Size of Award (max. per year)	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
UKRI	AHRC - research, development and engagement fellowships (RDE) - Standard	Research	£ 162,000	18	Mid career to senior	6-18 months		-	-
UKRI	BBSRC Discovery Fellowships	Research	£ 135,667	22	Early career	3 years		-	-
UKRI	EPSRC Open Plus Fellowships	Research	£ 260,000	3	All	<5 years		-	-
UKRI	EPSRC Open Fellowships	Research	£ 440,000	16	All	<5 years		-	-
UKRI	EPSRC Post- Doctoral Fellowships	Research	£ 160,000	25	Early career	<3 years		https://www.ukri.org/wp- content/uploads/2022/07/EPSRC- 070722- ValueEPSRCFellowshipsFinalReport.pdf	-
UKRI	ESRC Parliamentary Thematic Research Leads	Mobility and KE	£ 101,000	3	Mid career	1 year		-	-
UKRI	MRC Career development award (CDA)	Research	£ 320,000	18	Early career	5 years	Applications are welcomed from across all areas of MRC remit to improve human health. This may range from basic studies with relevance to mechanisms of disease, to translational and developmental clinical research. Science areas include:  Infections and immunity Molecular and cellular medicine Population and systems medicine Neurosciences and mental health Translation Global health Methodology Public health	-	
UKRI	MRC Clinician scientist fellowship (CSF)	Research	£ 360,000	16	Early career	5 years	Applications are welcomed from across all areas of MRC remit to improve human health. This may range from basic studies	-	-



Organisation	Fellowship Name	Туре	Size of Award (max. per year)	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
							with relevance to mechanisms of disease, to translational and developmental clinical research. Science areas include: Infections and immunity Molecular and cellular medicine Population and systems medicine Neurosciences and mental health Translation Global health Methadology Public health		
UKRI	MRC Senior clinician Fellowship (SCF)	Research	£ 400,000	3	Mid career to senior	5 years	Applications are welcomed from across all areas of MRC remit to improve human health. This may range from basic studies with relevance to mechanisms of disease, to translational and developmental clinical research.  Science areas include:  Infections and immunity Molecular and cellular medicine Population and systems medicine Neurosciences and mental health Translation Global health Methodology Public health	-	-
UKRI	MRC Senior non-clinical Fellowship (SCNF)	Research	£ 540,000	3	Mid career to senior	5 years	Applications are welcomed from across all areas of MRC remit to improve human health. This may range from basic studies with relevance to mechanisms of disease, to translational and developmental clinical research. Science areas include:  Infections and immunity Molecular and cellular medicine Population and systems medicine	-	-



Organisation	Fellowship Name	Туре	Size of Award (max. per year)	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
							Neurosciences and mental health Translation Global health Methodology Public health		
UKRI	NERC Independent Research Fellowships	Research	£ 158,200	13	Early career	<5 years		-	
UKRI	NERC Knowledge Exchange Fellowships	Mobility and KE	N/A		All	<3 years		-	
UKRI	Ernest Rutherford Fellowship	Research	£ 125,600	13	Early career	<5 years		-	-
UKRI	STFC Future Leaders Fellowships	Research	£ 400,000	83	Early career	4 + 3 years	We support fellowships across the whole remit of UKRI, including those carrying out interdisciplinary and cross-sector research.	https://www.ukri.org/publications/ukri- future-leaders-fellowships-process- evaluation-report/	-
UKRI	Innovation Scholars	Mobility and KE	£ 100,000		All	<3 years	1. Applications should result in training opportunities in data science to upskill health and bioscience researchers, relevant to one or more of the following themes: data stewardship, management and sharing manipulation and analysis of complex large-scale data data modelling skills and training in data exploration, interpretation, calibration or validation integration of different types of data, such as imaging and genomics improving software, computing, infrastructure, architecture and data engineering knowledge contextualised for data-intensive biosciences stallstics or mathematics skills contextualised for data-intensive biosciences.		



Organisation	Fellowship Name	Туре	Size of Award (max. per year)	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
UKRI	UKRI Policy Fellowships	Mobility and KE	£ 133,333		Early-/ mid- career	18 months	Fellows will co-design projects and activities with their host and produce analysis to inform government decisionmaking across a range of policy priorities.	-	-



# H.2. Australia Fellowship Schemes

Organisation	Fellowship Name	Туре	Size of Award	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
Australian Research Council	Discovery Programme: Early Career Researcher Award (DECRA)	Research	\$113k (£59k), including 30 per cent on-costs, for the DECRA recipient, for three consecutive years on a full-time basis; project costs of up to \$50,000 (£26K) per year for three consecutive years	200	Early-career (R1)	3 years	Biological Sciences and Biotechnology; Engineering, Information and Computing Sciences, Humanities and Creative Arts; Mathematics, Physics, Chemistry and Earth Sciences; Social, Behavioural and Economic Sciences	https://www.arc.gov.au/sites/default/files/2022- 06/Evaluation%20of%20the%20Discover y%20Projects%20scheme%20%28PDF%2 9.pdf	https://www.arc.gov.au/funding-research/funding-schemes/discovery-program/discovery-early-career-researcher-award-decra https://www.arc.gov.au/funding-research/funding-outcome/selection-outcome-reports/selection-report-discovery-early-career-researcher-award-2024
Australian Research Council	Discovery Programme: Future Fellowship	Research	A salary and salary related, including 30 per cent on-costs, support at one of three levels for the Future Fellow, for four consecutive years on a full-time basis; project costs of up to \$60,000 (£31k)per year for four consecutive years  • Level A - B: \$170,848 (£89k) (including 30 per cent on-costs) • Level C: \$206,818 (£108k) (including 30 per cent on-costs) • Level D - E: \$242,783 (£127k) (including 30 per cent on-costs)	100	Mid-career (R2, R3)	4 year	Areas of national and international benefit (these are food, soil and water, transport, cybersecurity, energy, resources, advanced manufacturing, environmental change and health)	https://www.arc.gov.au/sites/default/files/2022- 06/Evaluation%20of%20the%20Discovery%20Projects%20scheme%20%28PDF%29.pdf	https://www.arc.gov.au/funding- research/funding-schemes/discovery- program/future-fellowships
Australian Research Council	Discovery Programme: Australian Laureate Fellowships	Research	\$179,840 (£94k) per year (including 30 per cent on-costs) towards a \$29,880 (15k) per year for each of the two Postgraduate Researchers (PGRs) for four years each; project costs of up to \$300,000 (£157k) per year for five consecutive years (which may be used to fund additional PDRAs and PCRs); additional funding of up to \$20,000 (£10k)per year for the Kathleen Fitzpatrick or Georgina Sweet Australian Laureate Fellowship for use as part of the ambassadorial role to promote women in research	17	Established (R4)	5 years	Enhance the scale and focus of research in Australian Government priority areas	https://www.arc.gov.au/sites/default/files/2022- 06/Evaluation%20of%20the%20Discover y%20Projects%20scheme%20%28PDF%2 9.pdf	https://www.arc.gov.au/funding- research/funding-schemes/discovery- program/discovery-indigenous
Australian Research Council	Discovery Indigenous Scheme	Research	Between \$30k (£15k) and \$500k (£261k) per annum for up to 5 consecutive years	9	Early-career (R1)	5 years	Covers all disciplines - science and engineering, humanities and social sciences		https://www.arc.gov.au/funding- research/funding-schemes/discovery- program/discovery-indigenous
Australian Research Council	Linkage: Early Career Industry Fellowships	Mobility / KE	Contributions to salary and salary related oncosts of \$109k (£57k) per year; project costs not exceeding \$150k (£78k) may be requested	50	Early career (R1)	1-3 years	Industry-defined challenges using the expertise and skills of researchers from both universities and industry.	https://www.arc.gov.au/sites/default/fil es/continuous Ip evaluation report.pd f?token=MSBJkTaS	https://www.arc.gov.au/funding- research/funding-schemes/linkage- program/early-career-industry-fellowships https://www.arc.gov.au/funding- research/funding-outcome/selection-



Organisation	Fellowship Name	Туре	Size of Award	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
									outcome-reports/selection-report-early- career-industry-fellowships-2023
Australian Research Council	Linkage: Mid- Career Industry Fellowships	Mobility / KE	Contribution to salary and salary related oncosts of \$199k (£104k) per year; project costs not exceeding \$290k (£151k) may be requested	25	Mid-career (R2, R3)	2-4 years	Industry-defined challenges using the expertise and skills of researchers from both universities and industry.	https://www.arc.gov.au/sites/default/files/continuous lp evaluation report.pd f?token=MSBJkTaS	https://www.arc.gov.au/funding- research/funding-outcome/selection- outcome-reports/selection-report-early- career-industry-fellowships-2023
Australian Research Council	Linkage: Industry Laureate Fellowships	Mobility / KE	Contributions to salary and salary related on-costs of \$174k (£91k); Contribution to salary support of \$107k (£55k) per year for two Postdoctoral Research Associates (PDRA) will be provided for 4–5 years each	8	World-leading senior academic researchers or industry-based research professionals (R4)	4-5 years	Industry-defined challenges using the expertise and skills of researchers from both universities and industry.	https://www.arc.gov.au/sites/default/fil es/continuous lp evaluation report.pd f2token=MSBJkTaS	https://www.arc.gov.au/funding- research/funding-schemes/linkage- program/industry-laureate-fellowships
The National Health and Medical Research Council	NHMRC's Investigator Grant	Research	Investigator Grants – Leadership Level 1: \$153,931 (£80k) Investigator Grants – Leadership Level 2: \$179,433 (£93k) Investigator Grants – Leadership Level 3: \$190,608 (£47k) Investigator Grants – Emerging Leadership Level 1: \$82,408 (£43k) Investigator Grants – Emerging Leadership Level 2: \$117,238 (£61k)	274	Early- and mid- career (R1-R3)	5 years	Health		https://www.nhmrc.gov.au/funding/find- funding/investigator-grants
The Medical Research Future Fund	The Researcher Exchange and Development within Industry (REDI) Fellowship programme	Mobility / KE	Up to \$250,000 (£130k); the grant covers/contributes to salaries and on-costs (including superannuation) for the period of the REDI Fellowship; additional costs, such as relocation costs, may be covered if there is a requirement to relocate.	N/a	N/a	6 months - 1 year	Specific research and development project focussing on human health outcomes.		https://www.mtpconnect.org.au/Category? Action=View&Category id=293
Government of the Australia Capital Territory	Government of the Australia Capital Territory: Research and Innovation Fund (RIF) Fellowship Program (Health)	Research	Up to \$200k (£104k). Funding is provided to enable the research and can cover a combination of backfill for practising professionals to quarantine research time, as well as consumables, equipment, and other research related costs	5	Early- and mid- career (R1-R3)	Up to 3 years	Health		https://www.health.act.gov.au/sites/default /files/2022-12/2022- 23%20RIF%20Fellowship%20Program%20Fund ing%20Guidelines.pdf
Western Australian Future Health Research & Innovation Fund	The Future Health Research and Innovation (FHRI) Fund Distinguished Fellows Program	Research	\$6m (£3.1m) with up to \$3m (£1.5m) funded through the FHRI Fund. Funding package consisting of salary support for the Fellow as well as other research personnel salaries, direct research funding and relocation costs.	2	Early- and mid- career (R1-R3)	5 years	Health (Aboriginal, rural and remote health, Burden of diseases, Living with COVID-19 and Long-Covid & Mental health.)		https://fhrifund.health.wa.gov.au/~/media/ FHRI/Documents/Distinguished- Fellows/Guidelines-and-Conditions Distinguished-Fellows.pdf



Organisation	Fellowship Name	Туре	Size of Award	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
Western Australian Future Health Research & Innovation Fund	The Translation Fellowships 2024 – Burden of Disease and Genomics program	Research	\$200k (£104k) to support the Activity Lead's salary costs (up to \$150,000 (£78k) per annum) and a substantial research project (up to \$50,000 (£26k) per annum). An additional \$10,000 (£5k) perper annum towards research costs is required from the Responsible Entity.	N/A	Early- and mid- career (R1-R3)	Up to 3 years	Health and medical research. The top five disease groups contributing the most to Western Australian total burden of disease (disability adjusted life years; DALYs) include cancer, mental and substance use disorders, musculoskeletal conditions, cardiovascular diseases and injuries. Research concerned with the application of genomics to health care.		https://fhrifund.health.wa.gov.au/~/media/ FHRI/Documents/Translation-Fellowships BODandGen/Guidelines-and-Conditions Translation-FellowshipsBurden-of-Disease- and-Genomics.pdf
Western Australian Future Health Research & Innovation Fund and Raine Medical Research Foundation	Clinician Research Fellowship	Research	\$150k (£78k)	4	Early- and mid- career (R1-R3)	Up to 3 years	Health and medical research		https://www.rainefoundation.org.au/wp-content/uploads/2024/03/CRF-2024-Guidelines-and-Conditions-1.pdf
Western Australian Future Health Research & Innovation Fund	Innovation Fellowship	Research	\$150k (£78k) to support the Fellow's salary and innovation activity	10	N/a	1 year	Health and medical innovation		https://fhrifund.health.wa.gov.au/~/media/ FHRI/Documents/Innovation-Fellowships-Rd- 2-2022-23/Innovation-Fellowship-2022 Guidelines-and-Conditions.pdf
Western Australian Future Health Research & Innovation Fund	Early Career Child Health Researcher Fellowships (ECCHRF) program (Co- Funding Partnerships Program between FHRI and BrightSpark)	Research	Up to the value of \$120k (£62k) per annum that can contribute towards both salary and direct research costs	4	Early- and mid- career (R1-R3)	3 years	Health and medical research		https://www.brightsparkfoundation.com.au/ wp-content/uploads/2023/07/2023- Guidelines-and-Conditions-for-ECCHRF- FINAL clean-v5.pdf
Western Australian Future Health Research & Innovation Fund	Implementation Science Fellowships 2021 program – Aboriginal, country and regional.	Research	\$200k (£104k) wii be made to the successful administering institution, which may be used for Fellowship salary and research project costs.	4	Early- and mid- career (R1-R3)	3 years	Health and medical research		https://fhrifund.health.wa.gov.au/News- and-Events/2022/05/17/Researchers-benefit- from-funding-for-research-aimed-at- improving-health-outcomes
Western Australian Fustralian Research & Innovation Fund	Translation Fellowships 2021 – Aboriginal, country and regional	Research	\$200k (£104k)per annum to the successful administering institution, to support salary costs and a substantial research project. The Fellowship funding must be matched by the	3	Early- and mid- career (R1-R3)	3 years	Health		https://fhrifund.health.wa.gov.au/~/media/ FHR//Documents/Translation- Fellowships/Translation-Fellowships-2021- Guidelines-and-Conditions.pdf



Organisation	Fellowship Name	Туре	Size of Award	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
			administering institution with a 'support package' to at least the same value						
Western Australian Future Health Research & Innovation Fund	Translation Fellowships Mental Health 2021	Research	\$200k (£104k) per annum to support the CPI's salary and the costs of a substantial research project	2	Early- and mid- career (R1-R3)	3 years	Mental health		https://fhrifund.health.wa.gov.au/~/media/ FHRI/Documents/Translation-Fellowships Mental-Health/Translation-Fellowships-2021— Mental-HealthGuidelines-and- Conditions.pdf
Western Australian Future Health Research & Innovation Fund	WA Near Miss Awards: Emerging Leaders Fellowships	Research	Up to \$397,224 (£208k) for early- career and up to \$951,714 (£498k) for mid-career researchers,	4	Early- and mid- career (R1-R3)	3 years	There are no domains for these fellowships. All fellows work in health and medical research were deemed eligible based on missing out on NHMRC funding.		https://fhrifund.health.wa.gov.au/~/media/ FHR//Documents/WANMA-EL-2022/WANMA- Emerging-Leaders-2022-Guidelines-and- Conditions.pdf
The Science and Industry Endowment Fund (SIEF)	SIEF Ross Metcalf STEM+ Business Fellowship	Mobility / KE	Up to \$115k (£60k) per annum, which must be matched in cash by the business	N/A	Early-career (R1)	2-3 years	No industry sector- restrictions. The project must simply be research involving science, technology, engineering or mathematics.		https://www.csiro.au/en/work-with- us/funding-programs/SME/STEM-Plus- Business/SIEF-Ross-Metcalf-Fellowship
The Sidney Myer Fund and The Myer Foundation	Kenneth Myer Innovation Fellowships	Research	\$180,000 (£94k); comprising a stipend of \$140k (£73k) and up to \$40,000 (£20k) for approved project expenses	3	Not indicated	1 year	Social or environmental challenges. Projects that are likely to produce results, aligned with one or more of The Myer Foundation & Sidney Myer Fund's priority areas of Inclusion & Equality. Sustainability & Environment including climate change, and Human, Civil & Legal Rights		https://www.myerfoundation.org.au/grant- opportunities-list/Kenneth-myer-innovation- fellowships
L'Oréal	The L'Oréal- UNESCO For Women in Science Australia and New Zealand Young Talents Fellowships	Research	\$25k (£13k)	5	Early-career (R1)	2 years	Life sciences (including medical sciences), physical sciences, computer science, engineering and mathematics		https://www.forwomeninscience.com.au/a bout
Westpac Scholars	The Westpac Research Fellowship	Research	\$400k (£209k). This funding can be attributed toward salary, as well as learning and development experiences, including overseas travel.	2	Early-career (R1)	3-5 years	Research must contribute to the future of Australia in one of the Trust's priority funding areas; Australia in Asia, Thriving Tech Sector, an Inclusive Australia and Sustainable Futures		https://scholars.westpac.com.au/scholarshi ps/research-fellowship/ https://scholars.westpac.com.au/content/d am/public/wsch/documents/2024 Researc h Fellowship Funding Guidelines.pdf
Cancer Council	The Cancer Council WA Research Fellowship	Research	Up to \$120k (£62k) a year for no more than four years. The main purpose of the award is to support the salary of a research fellow and associated on costs.	1	Not indicated (cancer researchers)	Up to 4 years	Cancer research		https://cancerwa.asn.au/wp- content/uploads/2024/03/Guide-to- Applicants-Research-Fellowship-2024.pdf



Organisation	Fellowship Name	Туре	Size of Award	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
			This could constitute: full or part costs of a researcher's salary, 'buy out' of teaching or clinical commitments, travel costs or other legitimate costs to the researcher in undertaking.						
The Heart Foundation	Future leader fellowship	Research	Fellowships are funded for four years, with salary support and project support at the levels specified.  Level 1: Project support \$40k p.a. (£20k); Salary support Year 1 \$90k (£47k); Salary support Year 2 \$91k (£47k); Salary support Year 3 \$93k (£48k); Salary support Year 3 \$93k (£48k); Salary support Year 4 \$94k (£49k) Level 2: Project support Year 1 \$110k (£57k); Salary support Year 2 \$112k (£58k); Salary support Year 2 \$112k (£58k); Salary support Year 3 \$114k (£59k); Salary support Year 3 \$126k (£56k); Salary support Year 1 \$120k (£62k); Salary support Year 1 \$120k (£62k); Salary support Year 1 \$120k (£63k); Salary support Year 1 \$120k (£63k); Salary support Year 2 \$122k (£63k); Salary support Year 2 \$122k (£63k); Salary support Year 3 \$124k (£64k); Salary support Year 3 \$124k (£64k); Salary support Year 4 \$126k (£65k)	19	Early-career to experienced (R1-R3)	4 years	Health -cardiovascular research.		https://assets.contentstack.io/v3/assets/blt8 a393bb3b76c0ede/blta904dc6a08dfb47f/R esearch Funding Guidelines 2024.pdf



## H.3. Germany Fellowship Schemes

Organisation	Fellowship Name	Туре	Size of Award	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
German Academic Exchange Service (DAAD)	Research Grants - Short Term Grants	Research Intl. mobility	Graduate: £798/month + allowances Doctoral and Postdocs: £1,111/month + allowances	N/a	Early-career	Up to 6 months	All disciplines	Monitoring & Evaluation by the DAAD: https://www.daad.de/en/the- daad/who-we-are/monitoring- evaluation/	https://www2.daad.de/deutschland/stipen dium/datenbank/en/21148-scholarship- database/?detail=50015434
German Academic Exchange Service (DAAD)	ERA Fellowships - Green Hydrogen	Research Networking Intl. mobility	£1,496/month + allowances	N/a	Early- and mid- career	Up to 12 months	Topics related to Green Hydrogen, organised in four working groups: Production; Transport and Infrastructure; Market stimulation; Cross- cutting issues (regulation, socio-economic and legal framework)		https://www.daad.de/en/studying-in- Germany/scholarships/daad-funding- programmes/green- hydrogen/ausschreibungen_announcement s/
German Academic Exchange Service (DAAD) and German Aerospace Center (DLR)	DRL-DAAD Fellowships	Research Intl. mobility	Graduate Students: £798/month + allowances Doctoral Students: £1,504/month + allowances Postdoctoral Students: £2,052/month + allowances Senior Scientists: £2,360/months + allowances	*offers currently open as of 30/5/2024	All stages	Graduate Students: up to 9 months Doctoral Students: up to 36 months Postdoctoral Students: 6 to 24 months Senior Scientists: up to 3 months	Mathematics, Natural sciences, Enginnering [Thematic areas: Aeronautics, Space, Transportation, Energy and Security]		https://www.daad.de/en/studying-in- germany/scholarships/daad-funding- programmes/dlr/
German Research Foundation (DFG)	Research Fellowships & Research Grants	Research	£1,710/month + allowances	3,661 (2022)	Early-career	Up to 2 years	All disciplines	Evaluation, Studies and Monitoring by the DFG: https://www.dfg.de/en/news/facts-figures/evaluation-studies-monitoring	https://www.dfg.de/en/research- funding/funding- opportunities/programmes/individual/resear ch-fellowships
German Research Foundation (DFG)	Walter Benjamin Programme	Research Investigator Group	£1,710/month + allowances, but variable	350 (2022)	Early-career	Up to 2 years	All disciplines		https://www.dfg.de/en/research- funding/funding- opportunities/programmes/individual/walter -benjamin
German Research Foundation (DFG)	Emmy Noether Programme	Research Investigator Group	No financial upper limit for funding; in addition to position as group leader, one can apply for all the staff funding and direct project funding required to carry out proposed project.	67 (2022)	Early- and mid- career	6 years	All disciplines	https://www.dzhw.eu/en/forschung/pr ojekt?pr_id=486	https://www.dfg.de/en/research- funding/funding- opportunities/programmes/individual/emmy -noether
German Research Foundation (DFG)	Heisenberg Programme	Research Investigator Group	£3,804/month + allowances, but variable	79 (2022)	Established	Up to 5 years	All disciplines	https://www.dfg.de/en/news/facts- figures/evaluation-studies- monitoring/studies/study-heisenberg	https://www.dfg.de/en/research- funding/funding- opportunities/programmes/individual/heisen berg
Fraunhofer Society	Attract Programme	Research Mobility (KE)	Up to £2.1 million	N/a	Mid-career	5 years	Sciences		https://www.fraunhofer.de/en/jobs-and- career/seasoned-professionals/fraunhofer- attract.html



Organisation	Fellowship Name	Туре	Size of Award	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
Alexander von Humboldt Foundation	The Humboldt Research Fellowship (HRF) for Postdocs	Research Intl. mobility	£2,137/month + allowances	approx. 600 across the two HRFs	Early-career	6 to 24 months	All disciplines	https://www.humboldt- foundation.de/en/entdecken/zahlen- und-statistiken/evaluation/evaluation- of-the-humboldt-research-fellowship- programme-2021	https://www.humboldt- foundation.de/en/apply/sponsorship- programmes/humboldt-research-fellowship
Alexander von Humboldt Foundation	The Humboldt Research Fellowship (HRF) for Experienced Researchers	Research Intl. mobility	£2,992/month + allowances	approx. 600 across the two HRFs	Mid-career	6 to 18 months	All disciplines	https://www.humboldt- foundation.de/en/entdecken/zahlen- und-statistiken/evaluation/evaluation- of-the-humboldt-research-fellowship- programme-2021	https://www.humboldt- foundation.de/en/apply/sponsorship- programmes/humboldt-research-fellowship
Alexander von Humboldt Foundation	Georg Forster Research Fellowship	Research Intl. mobility	Postdocs: £2,282/month + allowances Experienced researchers: £2,710/month + allowances	55 (2023)	All stages	Postdocs: 6- 24 month research stay Experienced: 6-18 month research stay	All disciplines	https://www.humboldt- foundation.de/en/explore/figures-and- statistics/evaluation/evaluation-of-the- georg-forster-research-fellowship- programmes-2023	https://www.humboldt- foundation.de/en/apply/sponsorship- programmes/georg-forster-research- fellowship
Alexander von Humboldt Foundation	Philipp Schwartz Initiative for Researchers at Risk	Research Intl. mobility	Fellowship amount: Sponsorship covers a fixed-amount fellowship or contractual employmen; Allowance for host institution: £17,098 for each individual sponsored.	Up to 40	Mid- and established	Up to 24 months	All disciplines	https://www.humboldt- foundation.de/en/entdecken/zahlen- und-statistiken/evaluation/evaluation- of-the-phillipp-schwartz-initiative	https://www.humboldt- foundation.de/en/apply/sponsorship- programmes/philipp-schwartz-initiative
Volkswagen Foundation	Freigeist Fellowship (completed)	Research	Up to £1.9 million N.B. includes fellows salary	10-15 each year	Early- and mid- career	5 (+3) years or 6 (+2) years.	All disciplines		https://www.volkswagenstiftung.de/en/fund ing/funding-offer/freigeist-fellowships- completed
Volkswagen Foundation	Change! Fellowships and Research Groups	Research Mobility (KE)	Up to £1.5 million	N/a	Early-career	Up to 5 years	All disciplines	There are indications of an overall evalauation of the foudnation, but no indication of an individual evaluation / impact assessment of this fellowship	https://www.volkswagenstiftung.de/en/fund ing/funding-offer/change-fellowships-and- research-groups
Volkswagen Foundation	Funding for Refugee Scholars and Scientists from Ukraine (completed)	Research Intl. mobility	Not specified.	N/a	All stages	6-12 months	All disciplines		
Fritz Thyssen Foundation	Support of Projects	Research	Applicants make the case for the funding - no maximum specified - award covers Personnel Costs and Travel Costs	N/a	Early-career	Up to 3 years	History, Language & Culture, Economy and Society, Medicine and the Natural Sciences		https://www.fritz-thyssen- stiftung.de/en/funding/types-of- support/support-of-projects/
Helmholtz Association	Helmholtz Investigator Groups	Research	£256,479/year	Up to 9 research groups are launched every year	Mid-career	5 years	Energy, Earth and Environment, Health, Information, Matter, and Aeronautics, Space, and Transport	https://www.helmholtz.de/en/about- us/structure-and- governance/program-oriented- funding/scientific-evaluation/	https://www.helmholtz.de/en/research/curr ent-calls-for-applications/article/helmholtz- investigator-groups/
Max Planck Institute for Multisciplinary	Stefan Hell fellowship for predoctoral students	Research	£1,167/month	N/a	Early-career	Up to 6 months	Sciences		https://www.mpinat.mpg.de/fellowships



Organisation	Fellowship Name	Туре	Size of Award	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
Sciences (Max Planck Society)									
Max Planck Institute for Multisciplinary Sciences (part of the Max Planck Society)	Manfred Eigen fellowship for postdoctoral fellows from abroad	Research, mobility	Up to £25,648/year	N/a	Early-career	Up to 2 years	Sciences		https://www.mpinat.mpg.de/fellowships
Max Planck Institute for Multisciplinary Sciences (part of the Max Planck Society)	Erwin Neher fellowship for established researchers	Research	Not specified.	N/a	Established	Up to 2 years	Sciences		https://www.mpinat.mpg.de/fellowships



## H.4. The Netherlands Fellowship Schemes

Organisation	Fellowship Name	Туре	Size of Award	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
Dutch Research Council	Talent programme (Vidi)	Research	€850k (£726k)	82	Mid career	5 years	Across disciplines Science (Science/ENW), Social Sciences and Humanities (SSH/SGW), Applied and Engineering Sciences (AES/TW), ZonMw (Health Research and Development)	https://www.rathenau.nl/sites/default/files/2024- 01/Rathenau%20Instituut%20I%20Rappo rt%201%20NWO- programma%27s%20voor%20vrij%20ond erzoek%20Engelse%20versie%20door%2 0Deepl%20aangepast%20PD LM scho on.pdf	https://www.nwo.nl/en/calls/nwo-talent- programme-vidi-science-domain-2023 https://www.nwo.nl/sites/nwo/files/media- files/Call%20for%20Proposals%20Vidi%202023 %20EN.pdf
Dutch Research Council	Talent programme (Vici)	Research	€1.5m (£1.2m)	35	Senior researchers	5 years	Across disciplines Science (Science/ENW), Social Sciences and Humanities (SSH/SSW), Applied and Engineering Sciences (AES/TTW), ZonMw (Health Research and Development)	https://www.rathenau.nl/sites/default/files/2024- 01/Rathenau%20Instituut%20I%20Rappo 1%20I%20NWO- programma%27s%20voor%20vrij%20ond etzoek%20Engelse%20versie%20door%2 0Deept.%20aangepast%20PD LM scho on.pdf	https://www.nwo.nl/en/researchprogrammes/nwo-talent-programme
Dutch Research Council	Open competition (L)	Research	€800k (£683k)	Not available	Established career	Up to 6 years	Social Sciences and Humanities	https://www.rathenau.nl/sites/default/files/2024- 01/Rathenau%20Instituut%20I%20Rappo rt%20I%20NWO- programma%27s%20voor%20vrij%20ond erzoek%20Engelse%20versie%20door%2 0Deept.%20aangepast%20PD_LM_scho on.pdf	https://www.nwo.nl/en/calls/ssh-open- competition-l
Dutch Research Council	Open competition (XL)	Research	Maximum €3m (£2.5m)	Not available	Not available	Up to 6 years	Exact and natural science	https://www.rathenau.nl/sites/default/files/2024- 01/Rathenau%20Instituut%20I%20Rappo 1%20I%20NWO- programma%27s%20voor%20vij%20ond erzoek%20Engelse%20versie%20door%2 0Deept_%20aangepast%20PD_LM_schoon.pdf	https://www.nwo.nl/en/calls/open- competition-domain-science-xl
Dutch Research Council	Rubicon	Mobility	€70k (£59k)	46	Early career (R1)	1 -2 years	Across disciplines Science (Science/ENW), Social Sciences and Humanities (SSH/SGW), Applied and Engineering Sciences (AES/TTW), ZonMw (Health Research and Development)	https://www.nwo.nl/sites/nwo/files/doc uments/Rubicon%20%7C%20Talent%20 without%20borders%20- %20An%20evaluation%20of%20the%20R ubicon%20programme.pdf	https://www.nwo.nl/en/researchprogrammes/rubicon
Netherlands Institute for Advanced Study in the Humanities and Social Sciences (NIAS)	Individual fellowships	Research	€25k (£21k)	30	Early career (R1)	5 or 10 months	Humanities and/or social sciences;	https://storage.knaw.nl/2022- 07/NIAS 5 Self Evaluation 2008 2017.p df	https://nias.knaw.nl/fellowships/nias- individual-fellowship/
University of Groningen	Rosalind Franklin Fellowship	Research	N/a	N/a	N/a	N/a	Across disciplines		https://www.rug.nl/fse/meet-the- faculty/rff/?lang=en



## H.5. Sweden Fellowship Scheme

Organisation	Fellowship Name	Туре	Size of Award	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
Forte	Starting Grants 2024 (Etableringsbidr ag 2024)	Research	£91k	27 (2023)	Early career	2 or 3 years	Health, Working life, Welfare		https://forte.se/utlysning/etableringsbidrag- 2024/
SRC	Consolidator grant within medicine and health	Research	£146k	7 (2023)	early to mid career	5 years	medicine and health		https://www.vr.se/english/applying-for- funding/calls/2022-11-10-consolidator-grant- within-medicine-and-health.html
SRC	Distinguished professor grant within medicine and health	Research	£293k	4 (2023)	Senior	8 years	medicine and health		https://www.vr.se/english/applying-for- funding/calls/2022-11-10-distinguished- professor-grant-within-medicine-and- health.html
SRC	Consolidator grant within natural and engineering sciences	Research	£146k	7 (2022)	early to mid career	5 years	natural and engineering sciences		https://www.vr.se/english/applying-for- funding/calls/2023-11-15-consolidator-grant- within-natural-and-engineering- sciences.html
SRC	Distinguished professor grant within natural and engineering sciences	Research	£293k	3 (2021)	Senior	8 years	natural and engineering sciences		https://www.vr.se/english/applying-for- funding/calls/2023-11-15-distinguished- professor-grant-within-natural-and- engineering-sciences.html
SRC	Starting grant within natural and engineering sciences	Research	£80k	71 (2023)	Early career	4 years	Undirected within natural and engineering sciences		https://www.vr.se/english/applying-for- funding/calls/2023-11-15-starting-grant- within-natural-and-engineering- sciences.html
SRC	Starting grant within medicine and health	Research	£110	34 (2023)	Early career	4 years	Medicine, health		https://www.vr.se/english/applying-for- funding/calls/2023-11-15-starting-grant- within-medicine-and-health.html



Organisation	Fellowship Name	Туре	Size of Award	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
SRC	International post doc within artistic research	Research	£95k	1 (2023)	Early career	1,5-3 years	artistic research		https://www.vr.se/english/applying-for- funding/calls/2023-11-15-international-post- doc-within-artistic-research.html
SRC	International postdoc within natural and engineering sciences	Research	£95k	29 (2023)	Early career	1,5–3 years	natural and engineering sciences		https://www.vr.se/english/applying-for- funding/calls/2023-11-15-international- postdoc-within-natural-and-engineering- sciences-spring-call.html
SRC	International postdoc within humanities and social sciences as well as educational sciences	Research	£95k	21 (2023)	Early career	1,5–3 years	humanities and social sciences as well as educational sciences	-	https://www.vr.se/enqlish/applving-for- funding/calls/2023-11-15-international- postdoc-within-humanities-and-social- sciences-as-well-as-educational-sciences- autumn-call.html
SRC	International post doc within medicine and health	Research	£95k	23 (2023)	Early career	1,5–3 years	medicine and health	-	https://www.vr.se/english/applying-for- funding/calls/2022-11-10-international-post- doc-within-medicine-and-health-spring- call.html
the Swedish foundation for Strategic Research	Grants for Strategic mobility	Mobility	£54k	N/A	All	2 years	Natural sciences, Engineering, and Medicine		https://strategiska.se/utlysningar/bidragsfor mer/
the Swedish foundation for Strategic Research	Escape risk	Research	£146k	N/A	Senior	5 years	Natural sciences, Engineering, and Medicine	-	https://strategiska.se/utlysningar/bidragsfor mer/
the Swedish foundation for Strategic Research	SSF Sabbatical	Mobility	£110	N/A	Mid to senior	1-2 YEARS	Natural sciences, Engineering, and Medicine		
the Swedish foundation for Strategic Research	Research Infrastructure Fellows	Research	£219k	N/A	All	5 years	Natural sciences, Engineering, and Medicine		
the Swedish foundation for Strategic Research	Industry oriented Postdoc	Mobility	£37k	N/A	Early career	3 years	natural science, technology or medicine		



Organisation	Fellowship Name	Туре	Size of Award	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
Formas	Karriärstöd för forskare tidigt i karriären - karriärålder 0–3 år	Research	£110k	N/A	Early career	3-4 years	Environment, Agricultural Sciences, and Spatial Planning		https://formas.se/arkiv/alla- utlysningar/utlysningar/2023-10-16- karriarstod-for-forskare-tidigt-i-karriaren karriaralder-0-3-ar.html
Formas	Kamärstöd för forskare tidigt i kamären - kamärålder 4–7 år	Research	£110k	N/A	Early career	3-4 years	Environment, Agricultural Sciences, and Spatial Planning		https://formas.se/arkiv/alla- utlysningar/utlysningar/2024-01-23- karriarstod-for-forskare-tidigt-i-karriaren karriaralder-4-7-ar.html
Formas	Mobilitetsstöd för forskare tidigt i karriären	Research	N/A	22 (2023)	Early career	4 years	It covers all of Formas' areas – environment, agricultural sciences and spatial planning – including transdisciplinary projects		https://formas.se/en/start- page/archive/calls/2022-03-31-mobility- grants-for-early-career-researchers.html
Collaboration of seven private funds	Swedish Foundations' Starting Grant	Research	N/A	4 (2023)	Early career	N/A	N/A		https://startinggrant.se/
STINT	STINT International Postdoc	Research	N/A	N/A	Early career	> 1 year	N/A		https://www.stint.se/en/program/stint- international-postdoc/
Knut och Alice Wallenbergs Stiftelse	Wallenberg Academy Fellows	Research	£183k (dependant on field)	31 (2023)	Early to mid career	5 years	medicine, natural sciences, engineering, technology, humanities and social sciences.		https://kaw.wallenberg.org/wallenberg- academy-fellows
Knut och Alice Wallenbergs Stiftelse	Wallenberg Scholars	Research	£293k	118 (2024)	Senior	5 years	natural sciences, Medicine and biomedical engineering, Humanities and social sciences, Technology and physics		https://kaw.wallenberg.org/press/knut-och- alice-wallenbergs-stiffelse-beviljar-21- miljarder-kronor-till-118-av-sveriges-basta



Organisation	Fellowship Name	Туре	Size of Award	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
Knut och Alice Wallenbergs Stiftelse	Program for mathematics (international postdoctoral positions and funding for two years after they return to Sweden)	Research	£43k	N/A	Early career	2 Years	Mathematics	-	https://kaw.wallenberg.org/en/program- mathematics-2023
Ragnar Söderbergs stiffelse	post doc-grants in Law 2024	Research	N/A	N/A	Early career	2 Years	Law	-	https://ragnar.soderbergs.se/utlysning-post- doc-anslag-inom-rattsvetenskap-2024/
Lundbergsstiftel serna	Postdoc Scholarship	Research	£28k	N/A	Early career	1 year	Built Environment	-	https://www.lundbergsstiftelserna.se/stipend iestiftelsen/ansokan-postdoc/
Svenska sällskapet för medicinsk forskning	SSMF Postdoctoral Grant	Research	£84k	N/A	Early career	3 years	Medicine	-	https://www.ssmf.se/for- scientists/postdoctoral-grant/
Swedish Collegium for Advanced Study (SCAS)	The General Fellowship Programme	Research	£53k (dependant on career stage)	N/A	All	1-2 semesters	mainly in the humanities and social sciences	-	http://www.swedishcollegium.se/subfolders/ Fellowships/generalfellowships.html
Swedish Collegium for Advanced Study (SCAS)	The Barbro Klein Fellowship Programme	Research	£53k (dependant on career stage)	N/A	All	1-2 semesters	the study of cultural diversity in a global perspective	-	http://www.swedishcollegium.se/subfolders/ Fellowships/barbro klein.html
Swedish Collegium for Advanced Study (SCAS)	The Global Horizons Fellowship Programme	KE	£53k (dependant on career stage)	N/A	All	1-2 semesters	global governance	-	http://www.swedishcollegium.se/subfolders/ Fellowships/global_horizons.html
Swedish Collegium for Advanced Study (SCAS)	The Human Past Fellowship Programme	KE	£53k (dependant on career stage)	N/A	All	1-2 semesters	across a wide range of disciplines, such as archaeology, population genetics and historical linguistics.	-	http://www.swedishcollegium.se/subfolders/ Fellowships/human past fellowship.html



Organisation	Fellowship Name	Туре	Size of Award	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
Swedish Collegium for Advanced Study (SCAS)	The Nordic Fellowship Programme	Research	N/A	N/A	All	1-2 semesters	humanities and social sciences	-	http://www.swedishcollegium.se/subfolders/ Fellowships/nordic_fellowship.html
Swedish Collegium for Advanced Study (SCAS)	The SCAS-VUIAS Fellowship Programme	Research	£53k (dependant on career stage)	N/A	All	1-2 semesters	Mainly in the humanities and social sciences	-	http://www.swedishcollegium.se/subfolders/ Fellowships/scas-vuias.html



## H.6. USA Fellowship Schemes

Organisation	Fellowship Name	Туре	Size of Award	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
National Science Foundation (NSF)	NSF Postdoctoral Fellowships (NSF PRF), including:  -Astronomy and Astrophysics Postdoctoral Fellowships (AAPF) -Atmospheric and Geospace Sciences Postdoctoral Research Fellowships (AGS-PRF) -Earth Sciences Postdoctoral Fellowships (EAR-PF) -Mathematical and Physical Sciences Ascending Postdoctoral Research Fellowships (MPS-Ascend) -Mathematical Sciences Postdoctoral Fellowships (MSPRF) -Ocean Sciences Postdoctoral Research Fellowships (OCE-PRF) -Office of Polar Programs Postdoctoral Research Fellowships (OPP-PRF) -Postdoctoral Research Fellowships in Biology (PRFB) -SBE (Social, Behavioral, and Economic Sciences) Postdoctoral Fellowship (SPRF) -Science, Technology, Engineering and Mathematics Education Individual Postdoctoral Research Fellows (STEMEAIPRF)	Research	Approx. £63,800- £87,726/year* *Depending on the program, some with small increments in successive years	Varies between 8 for the AAPF and 60 for the PRFB	Postdoctoral	2 to 3 years	Program-specific, including: Mathematical and Physical Sciences; Geosciences; Biological sciences; SBE; STEM		https://new.nsf.gov/funding/opportunities?7%5B0%5D=student_educator_eligibility%3Apostdoc
National Science Foundation (NSF)	NSF Engineering Postdoctoral Fellowship ('eFellows program') The eFellows program is administered by the American Society for Engineering Education (ASEE) with funding provided by the National Science Foundation (NSF)	Research, training	£59,813/year	N/a	Postdoctoral	2 years	Engineering	https://efellowsimpact.a see.org/about/program- overview/	https://efellows.asee.org/home
National Science Foundation (NSF)	Graduate Research Fellowships (GRFs)	Research	\$37,000 (£29,500) stipend and \$16,000 (£12,500) cost of education allowance to the graduate degreegranting institution of higher education for each Fellow who uses the support in a fellowship year	2,500	Graduate students	3 years	Chemistry, Computer and Information Sciences and Engineering, Engineering, Geosciences, Life Sciences, Materials Research, Mathematical Sciences, Physics & Astronomy, Psychology, Social, Behavioural, and Economic Sciences, STEM Education and Learning Research	https://www.nsf.gov/ed u/Pubs/GRFP Final Eval Report 2014.pdf	https://new.nsf.gov/funding/opportuni ties/nsf-graduate-research-fellowship- program-grfp
National Science Foundation (NSF)	Faculty Early Career Development Program (CAREER)	Research Teaching	£319,000	500	Assistant professor	5 years	Engineering, Mathematical and Physical Sciences, Geosciences, Computer and Information Science and Engineering, Biological Sciences, Social Behavioural and Economic Sciences, STEM Education		https://new.nsf.gov/funding/opportunities/faculty-early-career-development-program-career/nsf22-586/solicitation#pgm_desc_txt



Organisation	Fellowship Name	Туре	Size of Award	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
National Science Foundation (NSF)	Computer and Information Science and Engineering (CISE) Research Initiation Initiative (CRII)	Research	Up to £139,564	55-60	Early-career	2 years	Computer and Information Science and Engineering		https://new.nsf.gov/funding/opportunities/computer-information-science-engineering-research/nsf23-576/solicitation
National Science Foundation (NSF)	EArly-Concept Grants for Exploratory Research (EAGER);	Research	£239,253	N/a	Mid- and late- career	Dependant on proposal	STEM		https://www.nsf.gov/pubs/policydocs/ pappg22 1/pappg 2.jsp#IIE3
National Science Foundation (NSF)	EDU Core Research: Building Capacity in STEM Education Research (ECR: BCSER)	Research	£239,253	40	Mid- and late- career	2 years	STEM		https://new.nsf.gov/funding/opportunities/ehr-core-research-building-capacity-stem-education/nsf22- 548/solicitation#:::text=ECR:%20Building%20Capacity%20in%20STEM.the%20nation%20STEM%20education%20enterprise.
National Science Foundation (NSF)	Launching Early-Career Academic Pathways in the Mathematical and Physical Sciences (LEAPS-MPS)	Research	Up to £199,377 total costs (direct plus indirect).	32 to 48	Mid- and late- career	2 years	Mathematical and Physical Sciences		https://new.nsf.gov/funding/opportunities/launching-early-career- academic-pathways/nsf22- 604/solicitation#elig
National Institute of Health (NIH)	Postdoctoral Intramural Research Training Awards (IRTA) Program Research Fellow Program and Research Fellow Visiting Program	Research	Varies depending on experience (0/1 year - 6/7 years) and duration of fellowship (1-5 years); Initial stipend between \$67k-\$94k (£53k-£75k) incrementing to \$84k-\$111k (£67k-£88k)	N/a	Postdoctoral	Up to 5 years	Health sciences		https://www.nimh.nih.gov/research/research/research-conducted-at-nimh/scientificdirector/office-of-fellowship-and-training/fellowships-and-training-programs
National Institute of Health (NIH)	Pathway to Independence Award (K99/R00)	Research	Mentored Phase may not exceed \$125,000 (£99,688) Independent Phase may not exceed \$249,000 (£198,579)	N/a	Early-career	Up to 5 years	Health sciences	https://pubmed.ncbi.nl m.nih.gov/37757590/	https://www.nigms.nih.gov/training/ca reerdev/Pages/PathwayIndependenc e.aspx
National Endowment for the Humanities (NEH)	NEH Fellowships	Research	Maximum award amount £47,850 (£3,987 per month)	80	Early-career	6-12 months	NEH invites research applications from scholars in all disciplines, and it encourages submissions from independent scholars and junior scholars.		https://www.neh.gov/grants/research /fellowships
Office of Energy Efficiency and Renewable Energy (EERE), Department of Energy (DOE)	Science, Technology and Policy (STP) Program N.B. Administered by the Oak Ridge Institute for Science and Education	Mobility	Stipends will be based on academic level and commensurate with qualifications: Level 3: The stipend amount for Level 3 will be		Early- and mid- career	1 (+4) years	"Program Areas" related to Energy (Bioenergy, Geothermal, Water, Wind, Solar, etc.)		https://www.energy.gov/eere/jobs/energy-efficiency-and-renewable-energy-science-technology-and-policy-program



Organisation	Fellowship Name	Туре	Size of Award	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
			based on the rate for participants plus a factor for years of experience after the receipt of the graduate degree. Level 2: Porticipants with a Ph.D. will receive a stipend starting at \$60,912. Porticipants with a Master's degree will start at \$46,255. Level 1: The stipend rates for Level participants will start at \$23,028. The stipend rates for matriculated undergraduates will be competitive with other summer programs.						
Oak Ridge Institute for Science and Education (ORISE)	STEM Internships and Fellowships	Research	N/a	N/a	Early-career	Not specified	STEM		https://orise.orau.gov/internships- fellowships/index.html
American Association for the Advancement of Science (AAAS)	The Science & Technology Policy Fellowships	Mobility	£70,978 to £92,511 per year	N/a	Early-career	N/a	STEM		
American Association for the Advancement of Science (AAAS)	The L'Oréal USA Fellowships for Women in Science program	Research	£47,850 (funds are awarded to the institution)	5	Early- and mid- career	5 years	Life, physical/material sciences, engineering, technology, computer science and/or mathematics fields.		https://www.loreal.com/en/usa/page s/group/fwis/ https://lorealfwis.aaas.org/login/index A.cfm?adobe mc=MCMID%3D181879 91145299511611125592166222390355% 7CMCORGID%3D2428647254119970A 4C98A6%2540AdobeOrg%7CTS%3D17 11549698 https://lorealfwis.aaas.org/FellowshipF AQ2024.pdf
Sloan Foundation	Sloan Research Fellowships	Research	£59,813	125	Early- and mid- career	2 years	Chemistry; Computational & Evolutionary Molecular Biology; Computer Science; Earth System Science; Economics, Mathematics; Neuroscience; Ocean Sciences; Physics.		https://sloan.org/fellowships



Illowships: mithsonian Institution Fellowship Program IFP) mithsonian Biodiversity Genomics stactoctoral Fellowship Program (BioG) mithsonian Postgraduate/Postdoctoral Illowships in Conservation of Museum pllections Program Ig Ten Academic Alliance Smithsonian Illowship in Interest Life on a Sustainable anet initiative mithsonian Artist Research Fellowship ARF) eiorge Burch Fellowship in Theoretical edicine and Affiliated Theoretical	Research	Stipend + Research Allowance: -Senior & Postdoctoral: £45,458 per year + £3,988 -Predoctoral: £35,888 per year + £3,988 -Ten-Week Graduate Student:	N/a	Early- and mid- career	3-12 months	Animal behavior, ecology, and environmental science; Anthropology; Astrophysics and astronomy; Earth sciences and paleobiology; Evolutionary & systematic biology; Folklife;		https://fellowships.si.edu https://fellowships.si.edu/SIFP
cience ames Smithson Fellowship ulbright-Smithsonian Awards		£7,975				systematic biology, Politic, History of science and technology; History of art; Materials research; Molecular biology; Social and cultural history of the United States		
merican Council of Learned Societies CLS) Research Fellowships: CLS Pellowship Program (2023-24) CLS Digital Justice Grants CLS Digital Justice Grants CLS Emerging Voices Fellowships CLS HECU Faculty Fellowships and rants CLS Leading Edge Fellowships CLS Open Book Prize + Arcadia Open cocess Publishing Award CLS Sustaining Public Engagement rants rican Humanities Program /DF/ACLS Fellowships for Research on e Liberal Arts ethy/ACLS Postdoctoral Fellowships in e History of Art ce/ACLS Dissertation Fellowships in merican Art rec/ACLS Program in China Studies ce/ACLS Program in Religion, Journalism International Affairs ellon/ACLS Community College Faculty Illowships ellon/ACLS Dissertation Innovation ellowships ellon/ACLS Scholars and Society ellon/ACLS Ello	Research	ACLS Fellowship Program: In the most recent competition year, ACLS awarded approximately £3 million in support to 60 exceptional scholars. Maximum award: £47,850; Awards of shorter duration will be prorated at £3,987 per month, with the minimum award set at £24,000.	400+ across all fellowships	Early- and mid- career	6-12 months	All disciplines of the humanities and interpretive social sciences		https://www.acls.org/competitions/als-fellowships/
Illiam Fellows Program	Research	Each adviser- student pair receives an annual award of £42,267	50	Early-career	Up to 3 years	Biological and biomedical sciences		https://www.hhmi.org/programs/gillic m-fellows
ellon/ ellowsl e Rob ograr imme entral	ACLS Scholars and Society ips spert H. N. Ho Family Foundation in Buddhist Studies r Institute for the Study of East and Southeastern Europe	ÁCLS Scholars and Society ilps pert H. N. Ho Family Foundation in Buddhist Studies r Institute for the Study of East and Southeastern Europe	ACLS Scholars and Society ips pert H. N. Ho Family Foundation in Buddhist Studies r Institute for the Study of East and Southeastern Europe  Research  Each adviser- student pair receives an annual award of	ACLS Scholars and Society ilps petr H. N. Ho Family Foundation in Buddhist Studies r Institute for the Study of East and Southeastern Europe  Research  Research  Each adviser- student pair receives an annual award of £42,267	ACLS Scholars and Society ilps pert H. N. Ho Family Foundation in Buddhist Studies r Institute for the Study of East and Southeastern Europe  Research  Research  Each adviser- student pair receives an annual award of £42,267	ACLS Scholars and Society hips pert H. N. Ho Family Foundation in Buddhist Studies r Institute for the Study of East and Southeastern Europe  Research  Research  Each adviser- student pair receives an annual award of £42,267  Early-career  Up to 3 years	ACLS Scholars and Society hips pert H. N. Ho Family Foundation in Buddhist Studies r Institute for the Study of East and Southeastern Europe  Research  Research  Each adviser- student pair receives an annual award of £42,267  Early-career  Up to 3 years  Biological and biomedical sciences	ACLS Scholars and Society hips pert H. N. Ho Family Foundation in Buddhist Studies r Institute for the Study of East and Southeastern Europe  Research  Research  Each adviser- student pair receives an annual award of £42,267  Early-career  Up to 3 years  Biological and biomedical sciences



Organisation	Fellowship Name	Туре	Size of Award	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
			annual fellow stipend of £28,710, an institutional allowance (in lieu of tuition and fees) of £7,975, a fellow's discretionary allowance of £3,190, and an adviser allowance of £2,392 to support activities that improve the health and inclusivity of the graduate program.						
Howard Hughes Medical Institute (HHMI)	Hanna H. Gray Fellows Program	Research	Postdoctoral Training Phase: Fellows will receive an annual salary, £63,800 for the initial year, and a £15,950 expense allowance that is paid through a non-renewable grant to the training institution. Faculty Phase: Fellows will receive £199,377 in research funding and a £15,950 expense allowance per year, paid through a non-renewable grant to the institution where they have attained a faculty position. This phase of the award has a maximum length of four years.	25	Mid-career	2-4 years	Biological and biomedical sciences		https://www.hhmi.org/programs/hann a-h-gray-fellows
Howard Hughes Medical Institute (HHMI)	Investigator Program	Research	N/a	25	Mid-career	7 (+7) years	Biological and biomedical sciences		https://www.hhmi.org/programs/inves tigators#application
Howard Hughes Medical Institute (HHMI)	Freeman Hrabowski Scholars Program	Research	Each Scholar receives up to £6.9 million over the ten-year period, including full salary, benefits, a	30	Early-career	5 (+5) years	Biological and biomedical sciences		https://www.hhmi.org/programs/free man-hrabowski-scholars



Organisation	Fellowship Name	Туре	Size of Award	Number of awards per year	Career Stage	Duration	Remit	Evaluation / Assessment	Source
			research budget, and scientific equipment.						
Hertz Foundation	The Hertz Fellowship	Research	Up to \$250,000	15	Early-career	5 years	Applied physical and biological sciences, mathematics, or engineering. It's up to the applicant to advocate for their specific field of study and demonstrate how it will be applied to address real-world challenges with the greatest impact.	https://www.hertzfound ation.org/impact/	https://www.hertzfoundation.org/the-fellowship/apply-for-fellowship/
Ford Foundation	The Ford Global Fellowship	Research, networking	£199,377	25	Early- and mid- career	10 years	Not specified		https://www.fordfoundation.org/work/ investing-in-individuals/the-ford- global-fellowship/
Bureau of Educational and Cultural Affair, US Government	Fulbright Scholar Program	Research, teaching. International mobility and cultural exchange	N/a	N/a	All stages	Up to 1 year	All disciplines		https://fulbrightscholars.org
American Council of Learned Societies (ACLS)	American Council of Learned Societies (ACLS) Research Fellowships: ACLS Fellowship Program (2023-24) ACLS Digital Justice Grants ACLS Emerging Voices Fellowships ACLS HBCU Faculty Fellowships and Grants ACLS Leading Edge Fellowships ACLS Leading Edge Fellowships ACLS Open Book Prize + Arcadia Open Access Publishing Award ACLS Sustaining Public Engagement Grants African Humanities Program AVDF/ACLS Fellowships for Research on the Liberal Arts Getty/ACLS Postdoctoral Fellowships in the History of Art Luce/ACLS Dissertation Fellowships in American Art Luce/ACLS Program in Religion, Journalism & International Affairs Mellon/ACLS Community College Faculty Fellowships Mellon/ACLS Dissertation Innovation Fellowships Mellon/ACLS Scholars and Society Fellowships The Robert H. N. Ho Family Foundation Program in Budchist Studies Summer Institute for the Study of East Central and Southeastern Europe	Research	ACLS Fellowship Program: In the most recent competition year, ACLS awarded approximately £3 million in support to 60 exceptional scholars. Maximum award: £47,850; Awards of shorter duration will be prorated at £3,987 per month, with the minimum award set at £24,000.	400+ across all fellowships	Early- and mid- career	6-12 months	All disciplines of the humanities and interpretive social sciences		https://www.acls.org/competitions/acls-fellowships/





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