## Online annex A: Tabulated summary of research grant schemes and fellowship awards available to biomedical researchers transitioning to independence

The critical career step of transitioning to independence is supported by multiple funders in the UK mainly via two routes: **lectureships and fellowships**. Both groups of researchers can apply for research grants. Fellowships provide salary support, however research grants do not. The tables below (tables A and B) provide a list of grants and fellowships available to UK biomedical researchers; some are exclusive to non-clinical or clinical researchers whereas others are open to both. It is not an exhaustive list but is intended to give a flavour of the type of awards available. Many smaller medical research charities also provide fellowships and grants to support the development of independent researchers. Examples include the Alzheimer's Society's <u>Junior</u> and <u>Senior</u> Fellowships, the Stroke Association's <u>Postdoctoral</u> Fellowships, and Diabetes UK's <u>RD Lawrence Fellowships</u>.

Table 1: Research grants

Funder	Scheme	Clinical/non -clinical	Eligibility criteria	What it provides	Demand/award rates
The Academy of Medical Sciences	Springboard	Non-clinical	<ul> <li>Applicants must:         <ul> <li>Be within three years of their first lectureship (or equivalent) post in one of the 40 participating higher education institutions.</li> <li>Not be in receipt of other substantive funding, excluding personal salary and not hold a clinical contract.</li> </ul> </li> </ul>	<ul> <li>£100,000 flexible funding for two years.</li> <li>Awards can cover: research         consumables, equipment, research         assistant time, contribution to the costs of         a PhD student or postdoctoral researcher,         travel for meetings and collaborations.</li> <li>Award holders are invited to join the         Academy's one-to-one mentoring         scheme and career development         programmes.</li> </ul>	Around 25% of full applications were awarded, which was limited by the funds the Academy had available rather than by excellence. Many more were above the bar for funding.
	Starter Grants for Clinical Lecturers	Clinical	<ul> <li>Applicants must:</li> <li>Be a research-active Clinical Lecturer (CL).</li> <li>Hold a PhD or MD.</li> <li>Hold a clinical contract.</li> </ul>	<ul> <li>Up to £30,000 for a maximum duration of two years.</li> <li>Covers the costs of research consumables to help CLs gather data to strengthen their bids for longer-term fellowships and funding.</li> </ul>	Approximately 120 applications are received per year and c50 awards are made over two selection rounds.
Biotechnology and Biological Sciences Research Council	New Investigator	Non-clinical	<ul> <li>Applicants must:         <ul> <li>Be within three years of the start date of their first appointment as a newly employed university lecturer, researcher in a Research Council institute (at a level equivalent to lecturer), or fellow (at a level equivalent to lecturer).</li> <li>Not have received competitive research funding from any source, as a PI, that included postdoctoral research assistant staff support costs.</li> </ul> </li> </ul>	<ul> <li>Up to three years support.</li> <li>The start-up costs of the applicant's laboratory.</li> </ul>	In 2015/16 the success rate was 21%.

Medical Research Council	New Investigator Research Grant (NIRG)	Clinical and non-clinical	NIRGs support individuals seeking to transition to independence through their first grant as a PI. There are no eligibility rules based on years of postdoctoral experience, and time on the research grant (~50% of contracted working hours) is combined with other activities such as teaching, other research, or clinical duties.	•	Up to 50% salary, research staff, consumables, and equipment. Three years' support with part-time options.	<ul> <li>In 2015/16:</li> <li>135 applications were received.</li> <li>21 awards were made.</li> <li>There was a 21% success rate.</li> </ul>
The Royal Society	Research grants	Non-clinical	<ul> <li>Applicants must:</li> <li>Be within five years of the start date of their first permanent or limited-tenured academic position.</li> <li>Hold a PhD.</li> </ul>	•	Up to £15,000 'seed corn' funding. Up to one year's support. Specialised equipment and essential consumable materials to support essential field research.	<ul> <li>Approximately 300 applications are typically received per round.</li> <li>Approximately 80 are typically awarded per round (across the whole remit of the Royal Society).</li> <li>The typical success rate is 25-30%.</li> </ul>
Wellcome	Seed Awards in Science	Clinical and non-clinical	<ul> <li>Applicants must:</li> <li>Have completed a PhD or an equivalent higher degree.</li> <li>Be based at a host organisation in the UK, Republic of Ireland or an eligible low- or middle-income country (apart from India).</li> </ul>		Up to £100,000 for a duration of up to two years. The support includes research expenses, including research assistance.  ed Awards in Science cannot be used bay a researcher's personal salary costs.	Applications are considered three times a year. For the latest round:  • A total of 234 applications were received  • A total of 186 applications were eligible  • A total of 20 were awarded

Table 2: Fellowships

Funder	Scheme	Clinical/non -clinical	Eligibility criteria	What it provides	Demand/award rates
The Academy of Medical Sciences	Clinician Scientist Fellowship*  Offered by multiple funders (see footnote below)	Clinical	<ul> <li>Applicants must be:</li> <li>Medically qualified researchers, with a PhD or MD in a basic science or clinical/health-related subject.</li> <li>Either approaching the end of their training or recently awarded consultant status.</li> </ul>	<ul> <li>Five years' funding to cover personal salary costs.</li> <li>An allowance for research expenses.</li> <li>A leadership development programme.</li> <li>Mentoring from an Academy fellow.</li> <li>Extensive opportunities to network with experts and peers.</li> </ul>	Twenty-six clinicians are supported over four rounds of funding.
Cancer Research UK	Advanced Clinician Scientist Fellowship	Clinical	<ul> <li>Applicants must have:</li> <li>Obtained a higher degree (MD/PhD) in a cancer-relevant research area.</li> <li>Obtained their Certificate of Completion of Training and hold consultant status.</li> <li>At least three years postdoctoral experience.</li> </ul>	<ul> <li>Salaries and associated running expenses for the fellow, one postdoctoral researcher and one research technician.</li> <li>Support for up to five years.</li> </ul>	There have been three rounds since the scheme started in 2016:  May 2016: Four applications, two successful.  November 2016: Six applications, three successful.  May 2017: Two applications, one successful.
Medical Research Council	Career Development Award (CDA)	Non-clinical	CDAs support postdoctoral researchers aiming to make the transition to independent investigator. There are no eligibility rules based on years of postdoctoral experience. Fellows are expected to spend 100% of their working time on the award.	<ul> <li>Salary, research staff, consumables, and equipment.</li> <li>Up to five years' support. Applicants are expected to take advantage of the full five years' funding available.</li> </ul>	<ul> <li>In 2015/16:</li> <li>Ninety-nine applications were received.</li> <li>Nine were awarded.</li> <li>There was a 9% success rate.</li> </ul>
	Clinician Scientist Fellowship	Clinical	<ul> <li>Applicants must be:         <ul> <li>Hospital doctors, dentists, general practitioners, nurses, midwives and members of the allied health professions or veterinarians.</li> </ul> </li> <li>There are no eligibility rules based on years of postdoctoral experience.</li> </ul>	<ul> <li>Four years' support, with up to five years' support for patient-orientated proposals where the project will require significant amounts of patient contact.</li> </ul>	In 2016/17:  • Fifty-two applications were received.  • Nine were awarded.  • There was a 17% success rate.

The National Institute for Health Research (NIHR)	Career Development Fellowship	Applied Health/Clinic al	<ul> <li>Open to all professions</li> <li>&lt; 7 years WTE post-doctoral research experience</li> <li>Significant outputs from research and evidence of developing research skills in others</li> </ul>	<ul> <li>Three years' funding to cover salary, research costs, full training and development</li> <li>Opportunities for further training and mentoring</li> <li>Can apply for a Research Assistant post</li> <li>Part-time options available</li> </ul>	<ul> <li>Forty-four applications were received and five awards were made.</li> <li>2015-2017:</li> <li>Nineteen awards have been made in the past three rounds.</li> </ul>
	Clinician Scientist Award	Applied Health/Clinic al	<ul> <li>Open to medical and dental graduates who are specialty registrars or have consultant status or the equivalent in general practice.</li> <li>Applicants must either have or have submitted a research doctorate (PhD or MD) in basic science, clinical or health-related research.</li> </ul>	<ul> <li>Five years funding to cover salary, research costs, full training and development</li> <li>Opportunities for further training and mentoring</li> <li>Can apply for up to three years Research Assistant post</li> <li>Part-time options available</li> <li>Allows for retention of clinical duties</li> </ul>	In 2016:  Thirty six applications were received and six awards were made.  Nineteen awards were made in the past three complete rounds.
The Royal Society	University Research Fellowship (URF)	Non-clinical	<ul> <li>Applicants must:</li> <li>Hold a PhD.</li> <li>Be at an early stage of their research career with between three to eight years of actual research experience since their PhD.</li> </ul>	<ul> <li>Five years' support, followed by a potential extension of three years.</li> <li>A research fellow's salary costs, estates costs and indirect costs. In addition, a contribution to research expenses (£13,000 in year one and £11,000 thereafter).</li> </ul>	Approximately 33 awards are offered per year.
Wellcome	Sir Henry Dale Fellowships	Non-clinical	<ul> <li>Applicants must:</li> <li>Have a PhD.</li> <li>Have significant postdoctoral research experience.</li> </ul>	<ul> <li>Five years' support, followed by a potential extension of three years.</li> <li>Salary and research expenses.</li> </ul>	<ul> <li>In 2016/17 over three rounds:</li> <li>A total of 197 full applications were received.</li> <li>Thirty-nine were awarded.</li> </ul>
	Clinical Research Career Development Fellowships	Clinical	Applicants must be postdoctoral medical, dental, veterinary or clinical psychology graduates.	<ul> <li>Support for up to eight years and the flexibility to balance research and clinical responsibilities.</li> <li>Up to £1 million of funding for each phase (the fellowship is split into two stages).</li> </ul>	There have been two rounds so far.  For round one:

Progression from stage one (exploration and consolidation) to stage two (early independence) involves a formal application and competitive interview. There is no set duration for each stage. For those holding the fellowship full-time neither stage can be held for longer than five years and the total length of the fellowship cannot exceed eight years.

Candidates who are ready to lead an independent research programme can apply to stage two directly, without doing stage one first.

- Forty-one full applications were received.
- There were 24 stage one applications, of which four were awarded, four withdrew before interview and 16 were not awarded.
- There were 17 stage two applications, of which four were awarded and 13 were not awarded.

## For round two:

- Sixty-three full applications were received.
- There were 41 stage one applications, of which six were awarded and 35 were not awarded.
- There were 22 stage two applications, of which five were awarded and 17 were not awarded.

<sup>\*</sup> Clinician Scientist Fellowships were developed by many funders as a result of the Academy's report, The Tenure-Track Clinician Scientist: A New Career Pathway to Promote Recruitment into Academic Medicine in March 2000. These awards can be funded through external bodies such as Cancer Research UK, the MRC, Wellcome and the NIHR.