Response: Migration Advisory Committee
Salary threshold and points-based system (PBS) commission
November 2019

Summary

Cancer Research UK (CRUK) is the world's largest independent cancer charity dedicated to saving lives through research. We support research into all aspects of cancer which is achieved through the work of over 4000 scientists, doctors and nurses. In 2018/19, we committed £546 million to fund and facilitate research in institutes, hospitals and universities across the UK. The UK research sector compr ises a mix of domestic and international scientists, underpinning our position as a world-leader in the life sciences. Cancer research projects are no different, bringing together a unique mix of expertise and skills from around the world to answer fundamental questions about cancer and develop new interventions to improve outcomes for patients. 76% of CRUK funded postdoctoral researchers at our Institutes and half of our funded PhD students are not from the UK. Thanks to this diverse research community, 2 in 4 people now survive their cancer for 10 years or more in the UK, compared to 1 in 4 in the 1970s

To maintain the UK's position as a world leader in medical research, **Government must design a post-Brexit immigration system that enables us to attract, recruit and retain global scientific talent at all professional levels, regardless of nationality, and that facilitates collaboration with international partners.** We welcome the opportunity to respond to this call for evidence, our response is based on information provided by our research centres, core-funded institutes and data on UK researchers.

1. Salary thresholds

This immigration system must have **entry criteria that enables skilled scientific talent to take up positions in the UK**:

- Our analysis has found that a minimum salary threshold of £30,000 will have a negative impact on the international recruitment of some skilled scientists (examples are included in the Appendix). If minimum salary thresholds are to be used, they should be at a level that does not prevent skilled scientists from taking up vital roles, in any region across the UK.
- Entry criteria should accommodate researchers who are working less than full time
- Government should consider more than just economic indicators when considering entry criteria, for example potential to improve research outputs.
- If the Migration Advisory Committee can design a shortage occupation list that is dynamic, it should be used to exempt skilled scientists from minimum salary thresholds.
- Viable alternatives to current Government proposals should be considered, including: exemptions from controls for scientists; a reciprocal migration deal with the EU for scientists; and the Russell Group's proposed EEA skills permit.

2. Tier 2 Visa route

The immigration system must **reduce costs and bureaucracy for scientists and research institutions:**

- The Home Office should reduce the costs associated with recruiting international scientists—for both the employing research institutions and applicant scientist.
- Building on proposals to scrap the Resident Market Labour Test, Government should commit to reducing bureaucracy for employers and international applicants for researcher posts, setting timeframes for digitization of the system.

3. An Australian Points Based System

Further clarity is needed on what aspects of an Australian type Points Based System would be introduced in order to provide insight into the relative importance of appropriate characteristics.

1. **Salary thresholds - Entry criteria should enable skilled scientists to take up research positions in the UK.**

There is currently a shortage of STEM skills in the UK's science and innovation sector. Among engineering, science, and tech-orientated firms, nearly half (44%) report difficulties in finding experienced recruits with the right STEM skills.[i]

What it means to be 'skilled'

To enter the UK as a skilled worker, UK Government is proposing individuals fill roles that require a minimum of RQF 3 (A-Level or equivalent qualification and above) and a salary of £30,000.[ii] If applicants are aged 25 or lower or switching from a tier 4 visa, lower thresholds are applied. This may be as low as £20,800, with different thresholds applying to different roles.

Expanding the definition of skill to RQF 3 is positive and can help the recruitment of international staff. However, salary thresholds should not present an additional barrier to recruiting to STEM roles. A minimum salary threshold of £30,000 could prevent some skilled scientists from entering the UK.

Minimum salary thresholds should not prevent recruitment of global scientific talent

An example of a highly-skilled, yet modestly paid, workforce is the technical workforce. Technical roles cover a diverse range of staff. Technical staff support researchers and research projects, with roles split to varying degrees between research directly and the management of lab space and processes. The technical workforce comprises UK and non-UK nationals and with staff both skilled by Government definitions and not.

Minimum salary thresholds of £30,000 would restrict research institutions from recruiting from the international talent pool. UK institutions tend to recruit technicians from the international pool when filling an especially niche, specialist role. 90% of international technicians at Russell Group Universities are skilled to degree level, compared to 64% of the overall technical workforce.[iii] As illustrated by the case studies in the appendix, these individuals could be prevented from entering the UK, if £30,000 thresholds were retained.

Approximately 5% of skilled (by Government definition) scientific posts at Cancer Research UK's Francis Crick, Manchester and Beatson Institutes[1] are filled by EU nationals earning less than £30,000—and all of these staff are in technical roles.[iv] While a relatively small proportion, if this was indicative of the wider research sector, approximately 400 skilled science technicians at Russell Group Universities alone would not have been able to enter the UK to take up their current role under proposed salary thresholds.[2]

And, as illustrated by case studies in the appendix, many EU researchers now earning more than £30,000 entered the UK on less than £30,000. These individuals would be penalized by proposals and would inhibit early-mid career researchers over the age of 25 from continuing or beginning their career in the UK.

Entry criterion should accommodate those working less than full time

Current proposals do not allow salaries which are nominally less than £30,000, but above £30,000 when measured as pro-rata. A recent Russell Group report showed that disproportionate numbers of women tend to work less than full time in academia.[v] By not accommodating for posts that work less than full time (LTFT):

[1] Based on data provided by CRUK. This is the total percentage- the range was from 2.4% to 5.2% of technical staff.

[2] Based on the total number of Science technicians in post at Russell Group Universities, cited in the Russell Group's 'Challenges and costs of the UK immigration system for Russell Group Universities', 2019: https://russellgroup.ac.uk/media/5750/challenges-and-costs-of-the-uk-immigration-system-for-russell-group-universities.pdf This does not account for those subject to a lower threshold as a result of switching from a student (tier 4) visa, or those below the age of 25, since this data is not available.

1. Research institutions' ability to fill specialized, LTFT roles will be inhibited
2. Female applicants would be discriminated against

Regional variation in wages

While regional salary thresholds may not be practical to implement, a national salary threshold must account for regional disparities in wages. Wages in the South-East of England tend to be higher than the rest of the UK[vi], reflecting regional variation in cost of living and local employer budgets. If a national salary threshold is to be used, it must reflect regional disparities in wages, going against Government's place-based agenda, a key part of the industrial strategy.

Those applying for a Tier 2 visa through the 'new entrants' route will be subject to a lower minimum salary threshold of £20,800 under current proposals. This threshold could also prevent talented graduates from taking up employment across the UK, disproportionally impacting areas outside of the South East. For example, average salaries for graduates in the North West, Yorkshire and the Humber, the East Midlands, Wales and Northern Ireland are below the £20,800 Tier 2 new entrant salary threshold.[vii]

Entry criteria should consider more than economic factors

The immigration white paper noted that the Migration Advisory Committee would have an expanded role in helping to develop immigration policy, including entry criteria to the UK.[viii] The MAC is currently comprised solely of economists. When determining the merits of different approaches to immigration policy, it is important that Government considers more than just economic factors. While investment in medical research has a good return on investment for the wider economy[ix], the real value is in the discovery of new tests and treatments for UK patients.

The Shortage Occupation List

Clarity is yet to be provided on the role of the Shortage Occupation List, which is currently not dynamic enough to meet the needs of the research sector. It is not clear whether it is possible to have a shortage occupation list which is dynamic and able to keep up with the rapidly evolving needs of the research sector. If designed to meet the needs of the sector, the shortage occupation list should be used to exempt skilled scientists from minimum salary thresholds. If a shortage occupation list is to be used to make exemptions from immigration rules for the research sector, it should exempt job families—rather than job titles. Job titles in the research sector are extremely varied, with essentially the same role at two different institutions often having distinctly different job titles.

Alternative proposals

Government should consider looking at alternative arrangements to ensure a thriving research environment. Analysis from the Royal Society shows approximately half of comparable countries have a dedicated visa route for scientists.[x] Government has announced plans to develop a fast-track immigration route for researchers, the Global Talent Visa, although details of the route are not yet confirmed[xi]. As Government develops this route, they should consider inclusion of a range of roles, at all professional levels, that are of importance to research.

A disproportionate amount of our international funded researchers are from the EEA. Reciprocal arrangements for the migration of EEA scientists should be considered during EU withdrawal negotiations.

The merits of whole-system alternatives to current proposals should also be considered. For example, the Russell Group's proposal of an EEA skills permit would allow EEA students or migrants skilled by government definitions to work or study in the UK for up to 5 years.[xii] Applicants would simply have to demonstrate a job offer, bring a research grant to the UK or prove that they are studying at an accredited institution.

Recommendations:

- **If minimum salary thresholds are to be used, they should be at a level that does not prevent skilled scientists from taking up vital roles in regions across the UK.**
- **Entry criteria should accommodate researchers who are working less than full time.**
- **If the Migration Advisory Committee can design a shortage occupation list that is dynamic, it should be used to exempt skilled scientists from minimum salary thresholds.**
- **Consider viable alternatives to current Government proposals,** including: exemptions from controls for scientists; a reciprocal migration deal with the EU for scientists; and the Russell Group's proposed EEA skills permit.

2. Tier 2 Visa route – a new system must reduce costs and bureaucracy for scientists and research institutions

Engagement with HR professionals, employing institutions and non-EEA scientists based in the UK consistently highlights the current immigration system as both extremely costly and bureaucratic for both applicant and employer. Assuming a researcher has no dependents, the following costs are incurred[xiiixiv]:

- Visa application fees- £1,220 for tier 2 (skilled worker) visa, *commonly paid by researcher*
- The Health Surcharge- £200 a year, *commonly paid by researcher*
- The Immigration Skills Charge[xv]- £1,000[3] a year, *paid by employers*[4]

Extending these costs to EU scientists will significantly increase the amount employers spend on recruitment. Doing so may mean many research institutions[5], and funders may have to divert money away from funding important research projects and associated infrastructure. It may also give other EU countries a competitive advantage over the UK, where EU scientists face no visa costs.

The current system is also bureaucratic for employers and international applicants. Government has recognized this and the white paper committed to a new 'streamlined' system[xvi] that would aim to process visas in 2-3 weeks. If achieved, this would be a marked improvement from the current system—but still at a considerable disadvantage compared to EU countries for EU applicants. Proposals to achieve this include exploring digitizing visa processes. The white paper proposed scrapping the resident labour market test, which is a positive move that would reduce the time taken to recruit some international posts. CRUK also supports the endeavour to streamline and digitise the visa system, which has the potential to significantly reduce bureaucracy. However, currently there are no clear timelines for a digital solution or clear evidence detailing how the ambition to process visas in 2-3 weeks will be achieved.

Researcher costs are comparably high and should be lowered

The UK is already significantly more expensive than many comparable countries for international researchers and health professionals who accept job offers in the UK, and UK employers like research institutions and the NHS.

In a survey of over 600 CRUK funded researchers, 96% identified the ease with which dependents can access public services and take up work as a key factor in their decision when deciding where to choose as a research destination. However, the current UK system is particularly expensive for those researchers with dependents, and recent Russell Group analysis demonstrated that the majority of visa-related costs are covered by the researcher.[xvii] In 2018, a five-year visa for a researcher with a

[3] There is a lesser annual fee incurred by charitable or medium sized employers
[4] There is a Conservative Manifesto pledge to double this to £2,000, although there have been no recent developments
[5] Including those which are publicly funded

partner and three children cost over £11,000.[xviii] The same researcher and family could obtain a four-year French Talent passport, costing approximately £1,040.[xix]

Extending these current, non-EEA costs to scientists from the EEA could deter skilled EEA scientists from entering the UK, in turn damaging the competitiveness of the research sector. This is a key challenge for Cancer Research UK, as a high proportion of our international funded researchers come from the EEA. For example, a third of our Fellows are from the EU, compared to 10% from other countries outside of the UK. Comparably high dependent visa costs could contribute to a brain drain from the UK's research sector. Government should lower costs faced by all international researchers.

Role	UK (%)	EEA (%)	Non-UK, non-EEA (%)
PhD[xx]	50	35	15
Post-docs[xxi]	24	42	34
Fellows[xxii]	61	31	8

Figure 1: CRUK's funded research workforce, by nationality[xxiii]

Research institutions should not face significant additional recruitment costs

Applying current costs in the non-EEA system to EU nationals will significantly increase the cost of employment for research institutions. Research institutions currently spend extensively to navigate the immigration system and covering visa costs. The Russell Group estimates current Government proposals would increase the cost of international recruitment for universities by 34%.[xxiv]

As demonstrated by figure 1, a disproportionate number of our international researchers are from the EU. By bringing EU citizens under the current immigration system, there will be a significant additional cost to bringing in scientific talent from the EU. As a medical research charity, we have finite budgets. Increasing expenditure to navigate the immigration system and sponsoring more researchers will cause a decrease in expenditure in other aspects of our research. Expenditure navigating the immigration system includes employing more non-research, administrative staff to process additional bureaucracy for international recruitment once freedom of movement has ended. An increase in visa costs and these additional recruitment costs may mean CRUK is less able to spend on lab consumables and other aspects of research. Increased expenditure for publicly-funded universities will also mean they have less budget for important research endeavours on a range of areas.

The NHS should not face significant additional international recruitment costs

NHS staff are essential to reaching CRUK's ambition of seeing 3 in 4 people survive their cancer by 2034. Alongside their clinical responsibilities, NHS staff undertake and facilitate research in the NHS and help to translate research breakthroughs into life-saving tests and treatments. NHS staff are currently stretched and struggling to recruit from the domestic pool of health professionals, with 1 in 10 diagnostic posts vacant in England and Scotland.[xxv] The Immigration White Paper proposals not only make it more difficult for the NHS to recruit from the non-UK pool by adding bureaucracy to the recruitment process, but they will also dramatically increase the costs associated with this. The Royal College of Physicians estimate that recruitment for the NHS alone would cost an additional £225m in the next 3 years under current proposals.[xxvi] As the Institute for Government concluded in an assessment of current processes, 'The system depends on charging applicants high fees and shifting problems elsewhere in government.'[xxvii] While the Home Office aims to be cost neutral, it is other departments – which are already stretched for financial resource – that are set to pick up the tab for visa costs associated with ending freedom of movement. Government should consider changing the Home Office approach from cost neutrality to one which views the Home Office as an active agent in attracting and recruiting global talent to contribute to UK.

Recommendations:

- **Government should commit to reducing costs for Tier 2 sponsors and applicants, including costs associated with dependents visas.**
- **Building on proposals to scrap the Resident Market Labour Test, Government should commit to reducing bureaucracy for employers and international applicants for researcher posts,** setting timeframes for digitization of the system.

3. An Australian Points Based System

Further clarity is needed on what aspects of an Australian type Points Based System would be introduced in order to provide insight into the relative importance of appropriate characteristics. The Australian system has many different routes with different levels of employer involvement. Our research institutes provided varied feedback on preferential characteristics, however the characteristics highlighted more consistently as of most importance were those that related to experience, qualifications and skills. We recommend a more rigorous and clear consultation process before any conclusions and recommendations are made by the Migration Advisory Committee on an Australian type Points Based System.

Appendix of case studies

The following case studies illustrate examples of skilled scientists from Cancer Research UK's research workforce where the £30,000 salary threshold would have a negative impact on the international recruitment.

Case study 1: Romana Ranftl, Austrian scientist at the Institute of Cancer Research

Romana is an Austrian researcher who currently works in a technical role as a Higher Scientific Officer at the Institute of Cancer Research (ICR). Romana currently works on projects which seek to discover novel cancer therapies. For example, she helps her team to identify molecules in cancer cells that can be targeted to stop breast cancer cells growing. She is using state-of-the-art technical methods such as CRISPR/Cas9 and performs her experiments in 3D cell cultures that better mimic the tumour compared to conventional 2D methods.

Romana began work in the UK in 2014, taking up a Scientific Officer role at the ICR. Her initial salary was £29,000**. Subsequently, despite her niche academic and professional background, under the Government proposal of a £30,000 minimum salary threshold, she would not have been allowed into the UK for work.**

Romana completed her university education in Vienna in 2011, specializing in Biotechnology. She then worked as a Research Technician for a Pharmaceutical company in Austria until 2014, contributing to projects aiming to develop novel cancer drugs. In 2014, aged 32, she came to the UK to work as a Scientific Officer at the ICR. She first helped to set-up the newly established research laboratory for Tumour Microenvironment at the ICR and contributed to research investigating the role of non-cancerous cells within a tumour.

Romana's time, as with many technical staff, is split between research and managerial duties. She contributes to maintaining a functional laboratory and teaches new lab members such as PhD students and Postdoctoral researchers how to operate within the lab effectively and safely. Romana is also involved in research directly; a cited author[xxviii] having contributed to scientific publications and gathering preliminary data for research projects.

Case study 2: Stela Monk, Romanian scientist based at Medical Research Council's Cancer Unit

Stela, originally from Romania, works as a Research Assistant in the MRC Cancer Unit at the University of Cambridge, where she has been since 2015. She is part of a research team that assesses novel treatments such as drugs directed against various epigenetic modulators in combination with immunotherapy- that harnesses the body's immune system to fight cancer progression. These treatments focus on treating pancreatic ductal adenocarcinomas. In the UK, only 20% of patients with this cancer survive for more than one year after being diagnosed.

Stela is integral to the functioning of the research project and her responsibilities include: planning and executing experiments; analysing the results of experiments *and;* presenting data to internal and external colleagues. She also trains some technical staff so that they can contribute effectively to research projects.

Stela came to the UK to study as soon as Romania joined the EU in 2007, as she was able to afford domestic fees and was eligible for student loans. She studied a BSc in Medical Genetics at Queen Mary, followed by an MSc in Immunology and Infectious Diseases at the London School of Hygiene and Tropical Medicine. Stela says she would not have been able to afford a UK education if it was not for her domestic status and would have pursued her studies elsewhere in Europe if she had to pay international fees.

Stela's current role at the MRC cancer unit requires 5 years work experience and a master's degree in a relevant field. Like others in the medical research sector, Stela is highly skilled, but does not receive a high wage. **Stela started her role on c.£25,000 in 2015, 3 years after finalizing her studies, so would not have been eligible to apply for this role according to Government's current proposal for a £30,000 minimum salary threshold.**

Case study 3: Barbara Martins da Costa, Portuguese Scientist based at the ICR

Barbara, originally from Portugal, works as a Scientific Officer at the Institute of Cancer Research (ICR). Her role is split between assisting with trials involving animals in the biological service unit and assisting in clinical trials looking into brain cancers neuroblastoma and medulloblastoma.

Barbara completed her ungraduated studies in Biology in Portugal, before gaining 5 years' experience in veterinary biology in Portugal, working in a veterinarian hospital. In 2016, she came to the UK to help advance progress in cancer research, taking up her current role.

Barbara was 40 and earned £26,000 when she came to the UK. **Under Government's current proposal of a £30,000 minimum salary threshold, she would not have been allowed into the UK to work, despite her experience and academic background.** This threshold is lower for those who have studied in the UK or are under the age of 25—neither of which apply to many researchers seeking to come to the UK, including Barbara. Minimum salary thresholds should not prevent institutions focussing on cancer research from employing the most qualified candidates.

[i] ABPI (2019): Bridging the Skills Gap

[ii] Unless switching from a student visa, in which case the threshold is £20,800

[iii] Russell Group (2017): Impact of Brexit on Technicians

[iv] Based on data provided to CRUK from the HR departments at Cancer Research UK's Beatson, Crick and Manchester Institutes
[v] Russell Group (2019)
[vi] The Office for National Statistics (2018): Low and high pay in the UK: 2018 https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/bulletins/lowandhighpayuk/2018
[vii] HESA data accessed by Universities UK
[viii] Home Office, The UK's Future Skills-based Immigration System, Cm 9722, The Stationery Office, 2018, Accessed March 2019, www.gov.uk/government/publications/the-uks-future-skills-based-immigration-system
[ix] Every £1 of public spend on medical research returns around an additional 25p to the UK economy every year. This includes health benefits equivalent to around 10p plus a further 17p, which is the current best estimate of 'spill over' effects from research to the wider economy. Grant J, Buxton MJ, Economic returns to medical research funding, *BMJOpen* 2018;8:e022131. doi:10.1136/bmjopen-2018-022131
[x] TBC: Forthcoming Royal Society report looking at visa systems in comparable countries
[xi] PM sets out vision to cement UK as a science superpower (August 2019), https://www.gov.uk/government/news/pm-sets-out-vision-to-cement-uk-as-a-science-superpower
[xii] Russell Group (2018): An EEA Skills permit https://russellgroup.ac.uk/news/skills-permit/
[xiii] Based on analysis by the Together Science Can campaign, documented in 'An Profile of International Visa systems' https://drive.google.com/file/d/1ETU8hWw2M54h9kQ7WDti6GPqVEegr9yu/view
[xiv] Whether this is paid by the researcher or employing institution varies depending on individual institutions' policies. Cancer Research UK currently funds projects involving over 4,000 nurses, students and scientists
[xv] Excluding roles requiring a PhD, who are currently exempt from this charge
[xvi] Immigration White Paper (2018)—'We will also take this opportunity to transform our operational systems and processes, using the latest digital technology to streamline and improve our service to individuals and employers'
[xvii] For example, only 10% of Russell Group Universities always cover the immigration health surcharge; 50% cover tier 2 visa application fees; 0% cover dependent family members costs. The Russell Group and Ernst Young (2019): Challenged posed by immigration proposals to Russell Group Universities
[xviii] Quoted in the S&T committee report
[xix] French Premier Emanuel Macron said he wanted France to become 'Europe's new capital for research and innovation'
[xx] Internal data collected by CRUK, for PhD students receiving a CRUK award
[xxi] Internal data for post-docs based at our core-funded institutes
[xxii] Internal data
[xxiii] Internal data collected by CRUK
[xxiv] The Russell Group and Ernst Young (2019): Challenged posed by immigration proposals to Russell Group Universities
[xxv] HEE Phase 1 Cancer Workforce plan
[xxvi] The £490m question, Royal College of Physicians
[xxvii]The Institute for Government (2019): Managing migration after Brexit
[xxviii] Publications Romana has contributed to: Dickkopf-3 links HSF1 and YAP/TAZ signalling to control aggressive behaviours in cancer-associated fibroblasts. (Ferrari N, Ranftl R, Chicherova I, Slaven ND, Moeendarbary E, Farrugia AJ, Lam M, Semiannikova M, Westergaard MCW, Tchou J, Magnani L, Calvo F.) Nat Commun. 2019 Jan 10;10(1):130; Analysis of Breast Cancer Cell Invasion Using an Organotypic Culture System. (Ranftl RE, Calvo F.) Methods Mol Biol. 2017;1612:199-212; Cdc42EP3/BORG2 and Septin Network Enables Mechano-transduction and the Emergence of Cancer-Associated Fibroblasts. (Calvo F, Ranftl R, Hooper S, Farrugia AJ, Moeendarbary E, Bruckbauer A, Batista F, Charras G, Sahai E.) Cell Rep. 2015 Dec 29;13(12):2699-714