

Short-term research contracts



Short-term research contracts

Applied Microbiology International is a global membership organization that seeks to bring the international microbiology community together to advance scientific impact. We are the oldest microbiology society in the UK and with more than half of our membership outside the UK, we are truly global, serving microbiologists based in universities, private industry and research institutes around the world.

The microbiology work force plays an integral role in global responses to public health emergencies. Throughout the COVID-19 pandemic, microbiologists have played a key role, from testing to clinical research involving patients, and not forgetting the incredible efforts of our NHS healthcare scientists working on the frontline. However, the COVID-19 pandemic has caused immense disruption to microbiology research across the various career stages and disciplines, further exacerbating the inequalities in microbiology research careers, including career insecurity and uncertainties around career progression.

We fundamentally believe that global challenges need to be solved by global, interdisciplinary experts who apply their diverse experience and unique voices to achieve a common goal. We bring the microbiology community together across borders and disciplines, we look to the future and nurture those working and studying in our field, and we enable meaningful collaboration to advance scientific impact.

INTRODUCTION

The COVID-19 pandemic has worsened the plight of scientific research staff. Most researchers are driven by intellectual curiosity rather than the desire for financial reward, spending years on a succession of short-term contracts, which can make a career in science an unattractive option.

According to the latest figures, around 54% of all science and technology researchers working in UK universities are employed on fixed-term contracts as contract research staff¹. In 2001, the House of Commons Science and Technology select committee conducted an inquiry into short-term research contracts². The report highlighted a number of concerns for researchers on short-term contracts, including career insecurity, increasingly uncompetitive salaries and lack of a clear career structure, and called for improvements to employment terms for science researchers.

A recent *Nature* survey asked postdoctoral researchers how the pandemic is affecting their current and future career plans³. The poll ran in June and July 2020, and more than 7600 people responded across 19 disciplines. Six out of ten respondents thought the pandemic has worsened their career prospects, with 51% of respondents considering leaving active research because of work-related mental-health concerns.

This statement aims to cover the main issues and challenges faced by our members on short-term contracts during the pandemic and highlight the increased need for support to ensure we do not lose a generation of microbiologists.

We intend this statement to be shared with research councils and other research-supporting organisations to inform change within the scientific community. In this statement we refer to short-term research contracts and fixed-term contracts interchangeably. This term refers to contract lengths varying from 1 month to 5 years, with most between 2 and 3 years. This statement is inherently focused on academic posts as this is where the majority of fixed-term science posts are found; however, we acknowledge that similar positions exist in organisations that are not universities.



IMPACTS OF COVID-19

To consider the impacts of COVID-19 on our membership and identify possible solutions, AMI conducted a survey of our microbiology community on how COVID-19 had impacted both their work and life and 112 members and 1 non-member responded to the survey, which equates to 6.6% of members. In addition, we convened COVID-19 task-and-finish groups addressing three essential issues: future preparedness; ensuring other areas of microbiology continue; and social impacts and equality.

The findings from these activities unequivocally highlighted the disproportionate effects of the COVID-19 pandemic on specific groups and career stages of the AMI membership, specifically members on short-term research contracts. To support our members on short-term research contracts, we intend to disclose their concerns and challenges that have been exposed by the COVID-19 pandemic within this position statement.

EXPOSING AND WIDENING CRACKS

COVID-19 pandemic has amplified the pre-existing challenges and inequalities for researchers on short-term contracts. The unprecedented financial uncertainty due to COVID-19 has resulted in university-wide recruitment freezes and incited job losses for staff on fixed-term contracts. Concerningly, the university-wide



recruitment freeze could worsen the uncertainty faced by postdoctoral researchers on short-term contracts, as research positions and promotion opportunities may be delayed or limited.

The additional barriers imposed by the COVID-19 pandemic could be catastrophic for retention of postdoctoral researchers and further discourage prospective researchers. The possible fallout of pre-pandemic short-term contracts included a drop in productivity during the last portion of contracts due to issues surrounding career stability and individuals having to spend time job-hunting and preparing for interviews. We are extremely concerned that individuals within our membership are exhausted and actively considering leaving research for more secure 'less toxic' career routes.

To further assess the impact of COVID-19 on the AMI membership, we included a question in our end-of-year membership survey on whether members had considered changing research area, sector (academic, industry etc.) and/or career because of the impact of COVID-19. Worryingly, of the 217 survey respondents 18.6% stated they have considered changing research career due to the impact of COVID-19.

LAB ACCESSIBILITY

There are specific challenges for our members on lab-based short-term research contracts. The majority of postdoctoral researchers in microbiology perform 'wet lab' research that has been hit hard by COVID-19 with regard to both restricted lab accessibility and competition for resources from COVID-19 projects,

diagnosis etc. Our survey participants have raised numerous concerns over the long-term implications of the current pause in non-essential lab research and the ongoing issues regarding restricted laboratory access.

Individuals on short-term research contracts at career transition points are particularly reliant on securing future funding to enable career progression. Survey participants stressed that researchers are simply unable to access the laboratory to complete the essential project milestones to meet funding partner requirements. Further to this, there are fears amongst members that the reduced lab access will lead to gaps in data collection, which will ultimately impact both publication records and career progression.

Furthermore, the challenges and uncertainties remain despite the labs being reopened. As a result of the COVID-19 pandemic, there have been strict restrictions of lab access, with no weekend or evening access, which would normally be permitted given the appropriate safety considerations and training. However, for post-doctoral researchers with children or caring responsibilities this presents a further challenge – particularly with homeschooling of children during the day there is no chance for researchers to catch up on lab work at alternative times, widening the gaps and exacerbating the inequalities in research careers, particularly those pertaining to gender and caring responsibilities.

FUNDING DISCREPANCIES

The impact of COVID-19 on research funding has been very diverse, with discrepancies across the different funding bodies. Subsequently, these disparities have considerably influenced the ability of funders to offer support to current researchers through postdoctoral extensions and continued funding throughout the pandemic. Additionally, there are growing fears over the coverage of financial provision from funders across different research institutions. Financial support is urgently required across all (not just Russell Group) universities, in order to ensure they can remain research active in the post-pandemic future.

These issues were further compounded by a lack of guidance and clarity in the communication between funders and researchers on short-term research contacts. Survey participants revealed that despite the urgent need for postdoctoral extensions, they were informed that if furlough was not taken, they could not go back to UKRI and request an extension. Despite this, some researchers were only notified that they were going to be furloughed in June 2020, which had major knock-on effects for individual researchers. Concerns were also raised about the longer-term impacts of COVID-19 on research funding. Funding for COVID-19 research was heavily prioritised during the pandemic, leading our members to fear that COVID-19 research will continue to attract a disproportionate share of funding for many years to come.

Case study 1

2020

I would say that COVID-19 has affected my progress during this postdoc. I am working on an international project that requires sample collection and processing between institutions in both countries. Although I have had time to write some papers on my previous research (PhD thesis), work for my current research has been very slow and I am not sure how much I can publish by the time it ends. This uncertainty will probably affect my chances of getting my next postdoc and a future fellowship.

As postdocs we are also encouraged to travel and work on research in different labs, in different countries, in order to gain the skills necessary for a fellowship. COVID-19 has affected the possibilities of moving labs, even inside the UK. There is overall uncertainty of jobs available because of lockdowns. Since we can't afford to have a research gap and there are few postdocs (in our area, microbiology) available and due to the recession and having to support a family, sadly we need to choose what is available and what promises a more stable future.

Case study 2

2020

Being a postdoc is not easy. We are most of the time responsible that the project runs smoothly (we make sure we have all the reagents we need, programmes are updated and equipment is running). Sometimes being a postdoc is a catch-22, we can't or don't have time to teach, we might not have the opportunity to enrol in teaching courses (e.g. Postgraduate Certificate in Academic Practice), which makes it difficult to transition to lectureships in the UK due to a lack of teaching experience. Plus, many women in science decide to start a family after they have finished their PhD, making the situation more challenging still. Once you are no longer a student, childcare in the UK is expensive and it's not possible to afford both rent and childcare on a postdoc salary. Now, with COVID-19 and having children at home or being a caregiver, it is even more complicated for postdocs to pursue an academic career.

Case study 3

2020

My postgraduate student is funded by a charity, which has ceased to exist during the pandemic. He has no way of securing additional funding (stipend or lab expenses) to cover an extra 6 months of lab work beyond his current candidature. The university will not commit to funding him for this either and he has since been told his contract will not be honoured. My thought is that the government could possibly offer to cover this additional funding in circumstances where there is no other option available. I think as a society we ought to lobby government for researchers on short-term contracts who have lost months in the lab due to the COVID-19 pandemic. UKRI is going to be ridiculously competitive, money will inevitably go to Oxford, Cambridge and London but we need to ensure funding across the country as a whole – even for projects which aren't headline spinners. If research projects attracted funding prior to the pandemic, then they should be safeguarded. The lockdown is now far longer than 6 months, with a year's worth of disruption to research and no guarantee that the end is in sight.

AMI ACTIONS

1. Reviewing grants

We have recently made changes to our grants in order to increase accessibility. At present, we offer a PhD hardship grant as an emergency measure for Full, ECS or International Members of AMI and have since established a group to explore ways to financially support our members on short-term research contracts. We ensure flexibility when reviewing grant applications and assess each application on an individual basis.

2. Promoting equality, diversity and inclusion

We must continue working with our equality, diversity and inclusion partners in STEM including: Equality Diversity and Inclusion in Science and Health (EDIS), The APPG on Diversity and Inclusion in STEM and the Royal Society of Biology's Diversity and Inclusion Working Group (DIWG) to improve research culture and further promote equality, diversity and inclusion.

3. Prioritising early career scientists

As a organization, we strongly support early career scientists (ECS) enabling them to excel in their microbiology careers. Here, we have identified postdoctoral researchers as a cohort being disproportionately affected by the COVID-19 pandemic. We aim to provide greater provision for our members on short-term research contracts through our communities platform, encouraging both networking and mentoring but also protecting this group by providing additional training to protect the microbiology pipeline in the longer term.



REFERENCES

- 1 https://www.ucu.org.uk/media/7995/Precarious-work-in-higher-education-a-snapshot-of-insecure-contracts-and-institutional-attitudes-Apr-16/pdf/ucu_precariouscontract_hereport_apr16.pdf
- 2 <https://publications.parliament.uk/pa/cm200102/cmselect/cmsctech/1046/1046.pdf>
- 3 <https://www.nature.com/articles/d41586-020-02541-9>



Shaping the future of applied microbiology

Applied
Microbiology
International

Phone: +44 (0)20 3880 2881

Email: info@appliedmicrobiology.org

Website: www.appliedmicrobiology.org