

EXECUTIVE SUMMARY





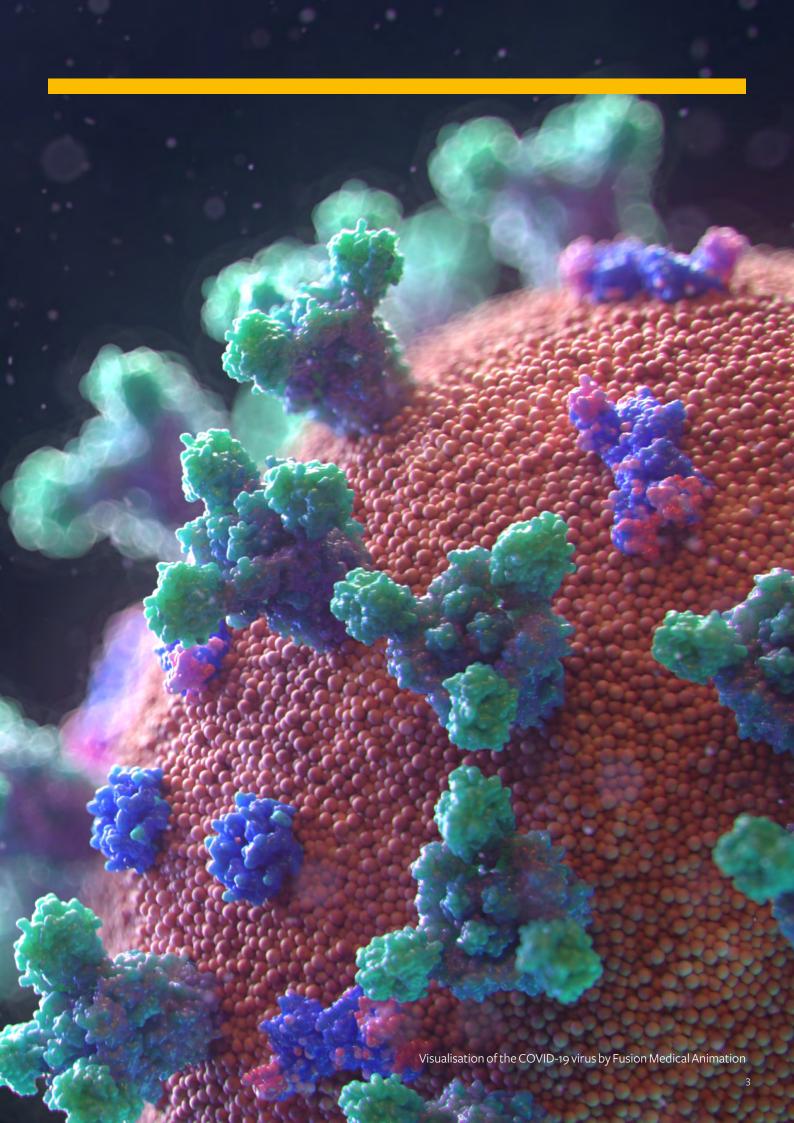
Dr Lucy Gates

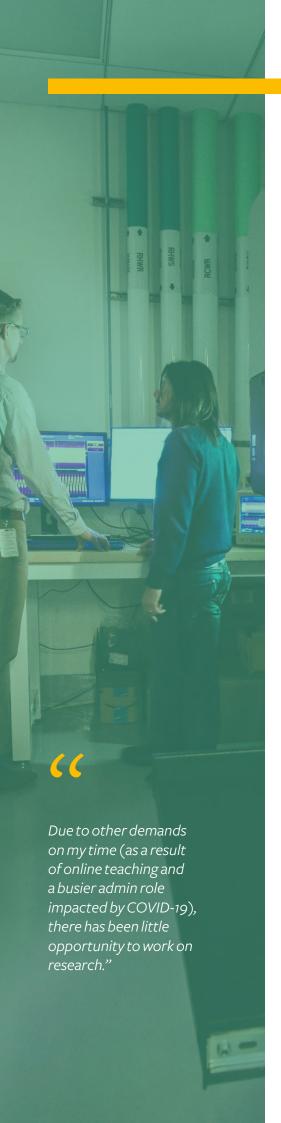
Dr James Gavin

COVID-19 had a significant impact on Early Career Researchers (ECRs) and research activities, not least felt by researchers with caring responsibilities and those working within clinical or experimental lab-based research. The change in working circumstances and increased emphasis on teaching has reduced ECRs' capacity to undertake research.

The lockdown led to some researchers being furloughed or having funding cut, whilst others have worked substantially more. A significant amount of research has been delayed and there remains uncertainty over the ability to complete and disseminate work within the time frame of individual contracts. For some, new opportunities have arisen in the form of new studies and new collaborations, for others recruitment strategies and study designs have been forced to

change. There is no doubt ECRs have faced significant challenges throughout the pandemic, and many ECRs fear these challenges will have an impact on career development. We have listened to what ECRs need and summarised the key findings from this report, from which University recommendations are provided. There is a need to ensure researchers can thrive irrespective of personal circumstances





KEY FINDINGS

- The additional demands placed on ECRs from teaching, administration and new research, are exponentially increasing workload and pressure. For many ECRs, there is ambiguity over contractual research and education obligations.
- Many ECRs have had work delayed as a result of the pandemic. For some, particularly those on short-term contracts and limited funding, it is therefore unlikely they will be able to produce outputs, or finish projects, within their contractual time frame. ECRs are asking for assurances that this gap in research, as a consequence of the pandemic, will be accounted for in appraisals and/or promotions.
- For many who are working from home, there is an unmet need for better access to resources, such as printing services, suitable working spaces and IT equipment.
- ECRs felt there has been little consultation with them, in terms of plans to return to work, and involvement in research planning, as well as decisionmaking moving forward.
- The importance of clear, honest and ECR-specific communication at every level (line manager, research team, school, faculty and university) should not be underestimated at this time.
- ECRs respect the challenges that many line managers have faced during the pandemic, and value the **importance of line manager support** in the form of one-to-one meetings. The ongoing need for discussions around career development should not be overlooked at this time.
- The pandemic's challenges have presented **new opportunities** for many, particularly in networking, new collaborations, and a shift in focus, to dedicate more time to more theoretical work or other studies.

- ECRs provide **key university outputs** yet typically hold more vulnerable positions and there is a stronger argument than ever for a change in this contractual culture, to guarantee greater security, particularly in such uncertain and demanding times.
- ECRs are keen to see university-wide schemes, such as an ECR academy and mentoring program, to provide career development and learning opportunities.
- Career development has been stifled for many ECRs. The impact of this is a primary concern for ECRs in the short- and long-term for their research careers.
- The pandemic has placed **significant stress** on our ECRs. Although various stress management techniques were reported, they shared commonalities in: physical activity, maintaining routines and social interaction (including colleagues, family and friends). Outdoor environments were particularly powerful. Where academic (research) time was compromised, family time benefitted. However, this did not relate to improved work-life balance due to rising administrative and teaching workloads.
- ECRs highly-valued the University's
 Mental Health and Wellbeing
 services. However, the main challenges
 to mental health were: financial insecurity,
 overworking and restricted opportunities
 for open dialogue between staff (in online
 communication and high workloads).



- Protect ECRs from additional demands (e.g. teaching and administrative burdens) that significantly increase workload and restrict research – a formal review of ECR workload is suggested.
- Support those on short-term contracts, or limited funding, who
 have had work delayed as a result of the pandemic and assure ECRs
 that any COVID-19 related gap in research will be accounted for in
 appraisals and/or promotions.
- Involve ECRs in team, school and faculty-level planning, and decisionmaking.
- Prioritise regular one-to-one meetings with line managers and/or PIs to maintain research and career planning.
- Build upon existing schemes to work harmoniously and collaboratively across the university. For example, a university-wide ECR academy and mentoring program, to mobilise the University's ECRs and harness, promote and build upon the University's ECR talents and provide opportunities to develop, learn and collaborate.
- Stress management strategies should be built around physical, behavioural and social needs, and seek engagement in outdoor environments to enhance their impacts.

- Increase flexible access to office, printing and IT resources for those working from home.
- Deliver clear, honest and ECR-specific communication at every University level.
- Provide greater security, with particular consideration to contract and funding extensions, where ECRs were unable to finish conducting and publishing work, due to delays arising from the pandemic.
- Support career development opportunities in the form of funding applications, ongoing continued professional development, research dissemination and CV boosting activities. Learnings from the pandemic should be used to support ECRs in being responsive to threat, in terms of stress, productivity and self-awareness (management).
- Promote opportunities for group meetings to discuss expectations, concerns, and working hours (including annual leave), as well as non work-related meetings. Training should also be prioritised in selfmanagement training, for practices such as stress management and weekly goal setting.



ABOUT THIS REPORT

This analysis of the data from a survey on the impact of COVID-19 on University of Southampton ECRs was undertaken by a team of ECR representatives and a Vitae Researcher Developer Senior Fellow within the University of Southampton.

The study observes the impact of COVID-19, specifically on ECRs, and focuses on the consequence to research/funding/contracts, the support received from the university and the wellbeing of ECRs. The report features both quantitative and qualitative analysis and summaries from ECRs in 21 schools across all 5 Faculties within the University of Southampton. This report is aimed at line managers, senior staff and those institutional stakeholders who are creating or amending strategies (such as those centred on the Researcher Development Concordat) to support the future of researchers. It is also aimed at policy makers responsible for funding and supporting these endeavours. We are enormously grateful to those ECRs who have taken the time to contribute to the survey and the ECR and Equality Diversity and Inclusion representatives across the university who provided review of the survey. This document is a report summarising the key findings from the survey study. We wish to acknowledge the creative expertise of Elin Jeon, Online Materials Developer (Centre for Higher Education Practice), who designed this final report.

INTRODUCTION

With increasing coronavirus cases in the UK, the University ended face-to-face teaching on 13th March 2020 and then asked everyone (except business critical and operational staff) to work from home from March 23rd in line with government advice and the national lockdown. This brought significant working changes and challenges, particularly for researchers across many faculties. Prior to this work it was unclear how the University of Southampton's ECRs were adapting to the challenges the pandemic had brought. It was essential that the University understood how the COVID-19 pandemic impacted ECRs, in order to generate the information required to inform school and faculty level planning for ECRs.

METHODOLOGY

1. About the ECR

2. Type of Research / Funding / Contract

3. University Support

4. Well-being

A cross-sectional survey was designed by the main authors (Lucy Gates & James Gavin) and Dr Julie Reeves and Dr Mark Chapman. It was created on and distributed via the University of Southampton I-Survey platform. The survey was broadly separated into sections. 1) About the ECR 2) Type of Research/Funding/Contract 3) University support 4) Well-being. The survey took place in June and July 2020 and was distributed to UoS research staff via communications including Sussed portal, faculty and school level email distribution lists and school level Bulletins.



PARTICIPANTS

ERE staff levels 4 and 5, who could be on fixed or permanent contract, and on a Research, Mixed Portfolio or Enterprise pathway were invited to participate. Education only staff were not actively recruited.

ETHICAL APPROVAL

The project was reviewed and approved through the University of Southampton Ethics and Research Governance Online system (ref: 56857). All potential participants were given access to the participant information sheet with the link to the survey. A statement was included at the beginning of the online survey outlining the survey aim, and that completion is entirely voluntary and completion implies consent to participate and a section for participants to provide consent before being able to proceed to the survey questions. Risks of participating in the survey were identified as minimal, as it was voluntary and anonymous. All survey responses remain anonymous and to protect individual level anonymity, where direct statements are used from free text responses, we have refrained from linking these to potentially identifiable sources such as schools or faculties and have removed any reference to individuals' names or departments.

DATA ANALYSIS

Quantitative data was analysed using descriptive statistics and was undertaken using Stata 14 (StataCorp. 2015. Stata Statistical Software. College Station, TX: StataCorp LP). Descriptive data was calculated and presented as frequencies and percentages. A thematic analysis approach was used to explore the content of open question responses, identify patterns within data, and describe and interpret their meaning and importance (Braun et al 2016). The phases of thematic analysis was adapted from a proposed analysis framework by Nowel et al (2017): Phase 1: Data familiarization, Phase 2: Code generation Phase 3: Theme generation, Phase 4: Theme confirmation.

1. SURVEY

RESPONDENTS

231 ECRs at UoS completed the survey. Below displays ECR respondents in each faculty (Figure 1), with comparison to the approximate number of ECRs within each faculty as of April 2020 (Figure 2). These findings represent every school within every faculty across the University (Table 1).

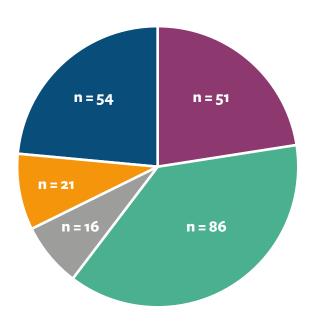


Figure 1. Respondents to survey across the University's faculties (total of n=231 respondents)

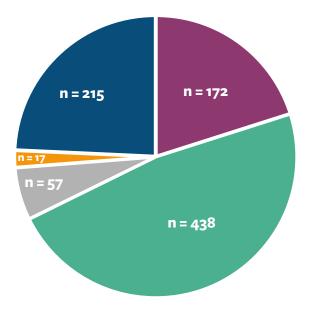


Figure 2. Estimated number of ECRs across the University's faculties





School	n (% from faculty)
Humanities	17 (89.47)
Winchester School of Art	2 (10.53)
Chemistry	16 (18.82)
Electrical & Computer Science	13 (15.29)
Engineering	38 (44.71)
Physics & Astronomy	6 (7.06)
Zepler Institute	12 (14.12)
Biological Sciences	4 (7.84)
Geography & Environmental Science	10 (19.61)
Health Sciences	17 (33.33)
Ocean & Earth Science	7 (13.73)
Psychology	13 (25.49)
Cancer Sciences	9 (16.67)
Clinical & Experimental Science	14 (25.93)
Human Development & Health	20 (37.04)
Medicine	1 (1.85)
Primary Care Population Science	10 (18.52)
Economic, Social & Political Sciences	10 (62.50)
Mathematical Sciences	2 (12.50)
Southampton Education School	2 (12.50)
Southampton Business School	2 (12.50)
	Humanities Winchester School of Art Chemistry Electrical & Computer Science Engineering Physics & Astronomy Zepler Institute Biological Sciences Geography & Environmental Science Health Sciences Ocean & Earth Science Psychology Cancer Sciences Clinical & Experimental Science Human Development & Health Medicine Primary Care Population Science Economic, Social & Political Sciences Mathematical Sciences Southampton Education School

2. PROFILE OF ECR RESPONDENTS

Out of 229 respondents to the following questions. On average ECRs have been a post-doctoral researcher at UoS for 3 years (IQR 2-5), with 3.5% (n=8) a post-doctoral researcher for over 10 years (figure 3). 18% (n=42) of respondents were non post-doctoral researchers (figure 4). ECR demographic information can be seen in table 2.

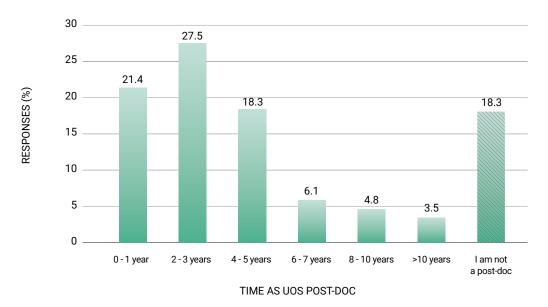


Figure 3. Years as post-doctoral ECR at UoS (out of 229 respondents)

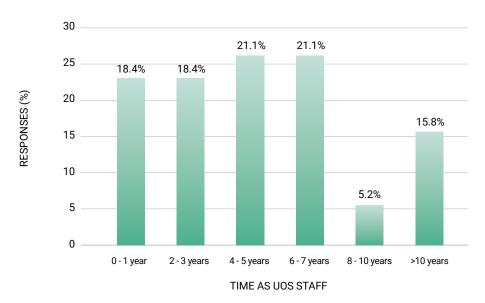
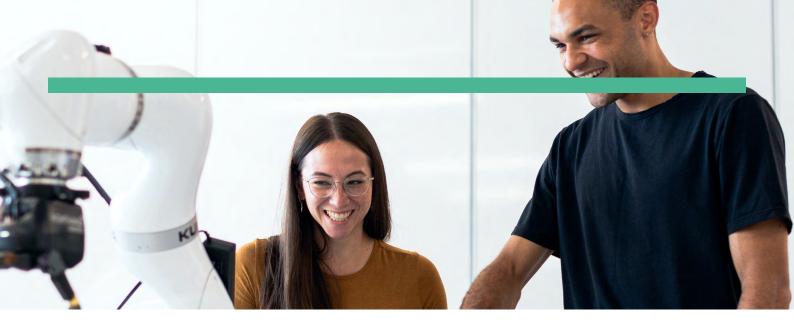


Figure 4. Years as researcher (not post-doctoral) at UoS (out of 38 respondents)



Identifiable Gender	Male	101 (44.69)
	Female	117 (51.77)
	Other	2 (0.88)
	Prefer not to state	6 (2.65)
Ethicity	American	3 (1.32)
	British	117 (51.32)
	Chinese	11 (4.82)
	Hispanic	1 (0.44)
	Indian	6 (2.63)
	Irish	3 (1.32)
	White & Hispanic	2 (O.88)
	Other Asian	7 (3.07)
	Other white background	60 (26.32)
	Other mixed background	4 (1.74)
	Other ethnic group	3 (1.32)
	Do not state	11 (4.82)
Impactful disability, impairment, health condition or learning difference	Yes	13 (5.83)
condition of learning difference	No	196 (87.89)
	Unsure	9 (4.04)
	Prefer not to say	5 (2.24)

Table 2. Demographics of respondents

3. STUDY HIGHLIGHTS

Who took part

The situation

Nature of contract

Research challenges

Contractual changes



231 ECRs at UoS completed the survey.

56% 44%



56% of ECRs felt somewhat or fully supported to balance their caring and work responsibilities. **44%** felt not so or not at all supported.

68% were on fixed term contracts
19% open ended not subject to funding
10% open ended subject to funding
1% other
2% not sure



67%

67% of ECRs have had their primary research delayed and **1%** ceased.



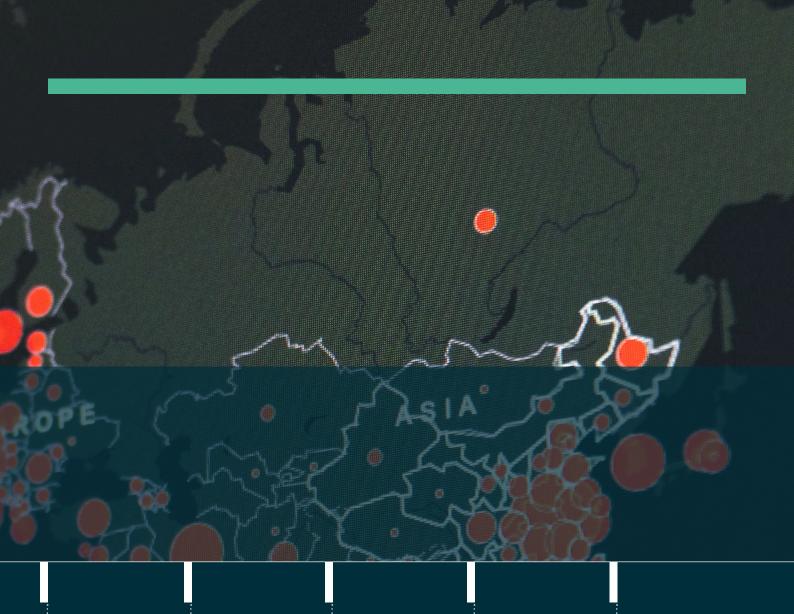
23% have changed research direction.



19% have begun new research.



More than 32% of ECRs have experienced contractual changes or unsure if changes may be made.



Change to obligations

ECR Support

Stress & anxiety

Family & work Mental health connections

& emotion



We received 9 free text responses and these showed that overall workload has increased.



85% of ECRs felt supported by their line manager during the COVID-19 pandemic.



81% of ECRs felt more stressed.

The top ways of coping were:

- 1. physical activity and exercise.
- 2. keeping a routine, collegial support & adjusting expectations.
- 3. family and work connections.



The need to work, create, and plan online, although in some ways beneficial, significantly challenged work-life balance. In some instances, compromised research, coupled with greater family time without 'barriers', caused worse work-life balance.

Work-life balance

30% Better work-life balance



51% Worse work-life balance

Future career

13% Not worried



71% Worried about future

4. RESULTS

■ Results - Part 1: Type of research funding contract

1.1 CURRENT SITUATION

27% (n=62) of ECRs are working from home with childcare responsibilities. 5% (n=12) are working from home with other caring responsibilities. Figure 5 illustrates the hours per day ECRs' work has been impacted as a result of working from home with childcare responsibilities or other caring responsibilities. 13% (n=9) of ECRs felt fully supported to balance their caring and work responsibilities, 43.1% (n=31) somewhat supported, 26.4% (n=19) not so much and 18.1% (n=13) not at all supported.

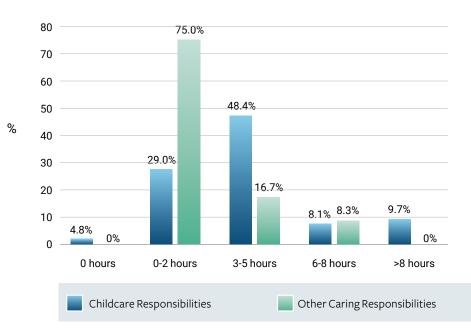


Figure 5. Hours per day work impacted as a result of childcare and other care responsibilities *Note % responses for childcare and other care based on different denominators (childcare total responses n=62, other care total responses n=12).

2.1 CURRENT LOCATION

84.3% of ECRS were located in the UK at the time of this study. Only 2.6% were located outside of the UK (figure 6) and of these all were able to return to the UK.

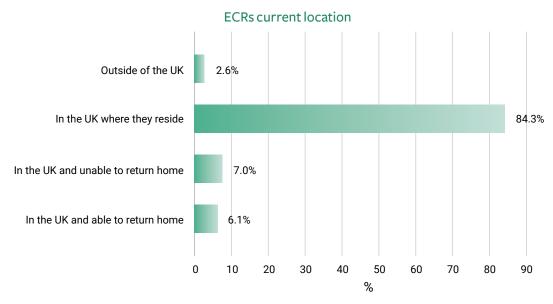


Figure 6. Location of ECRs (total of n=229 responses)

3.1 POSITION IN ACADEMIA

68% of respondents were employed primarily to undertake research (figure 7). Of the 1.3% (n=3) employed for something other than research, education and/or enterprise 1 was a research manager, 1 admin and the other pre-sessional teaching.

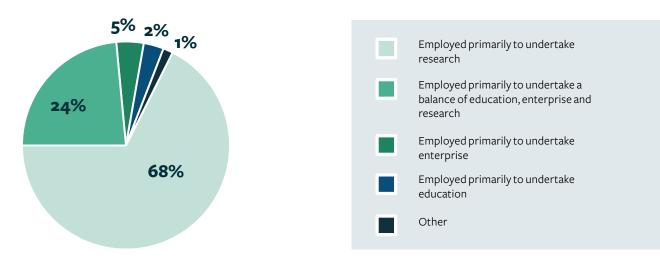


Figure 7. Position at UoS (based on a total of n=228 responses)

4.1 NATURE OF CONTRACT

67.8% (n=154) of respondents were on fixed term contracts. Of those on open ended contracts (n=66), 35.8% were subject to external funding. 1.8% of ECRs were unsure of the type of contract they held (figure 8). The nature of contract by Faculty is shown in appendix 1.

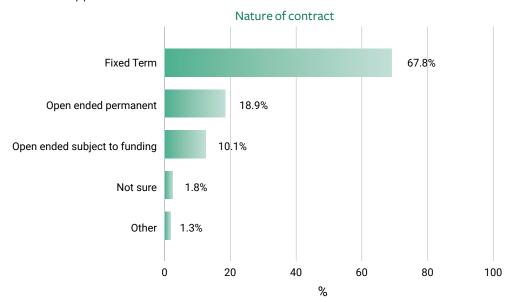


Figure 8. Type of contract held by ECR respondents at UOS (based on n=227 responses)

5.1 FUNDER

52 categories of funder were identified (table 3). EPSRC, NIHR, and UKRI were the top three funders, contributing respectively to n=34, n=33 and n=20 ECR funded positions across the Faculties of Engineering & Physical Sciences, Environmental and Life Sciences and Medicine. N=32 ECRs reported being supported by at least two funders, n=4 by at least 3 and n=1 by 4 funders. The University was funding between n=1 and n=3 ECRs in every faculty. A full breakdown of funder per Faculty can be seen in appendix 2.

Funders	Frequency of funder	% across the University	Funders	Frequency of funder	% across the University
AHRC	1	0.46	KRUK	1	0.46
AMR	1	0.46	Leverhulme Trust	2	0.93
Alan Turing Institute	1	0.46	MRC	2	0.93
Alzheimer's Society	1	0.46	NERC	6	2.78
Australian Research Council	1	0.46	NHS	2	0.93
BBSRC	3	1.39	NICE	1	0.46
BEIS	1	0.46	NIHR	33	15.28
CRUK	5	2.31	National Grid Innovation Funding	1	0.46
Commercial	3	1.39	National Trust	1	0.46
DFG	1	0.46	Royal Society	2	0.93
DTRA	1	0.46	Southampton City Council	1	0.46
EC	1	0.46	SuperGen	1	0.46
EPSRC	34	15.74	UK Space Agency	1	0.46
ERC	4	1.85	UKRI	20	9.26
ESA	1	0.46	Versus Arthritis	2	0.93
ESRC	5	2.31	Wellcome Trust	3	1.39
EU	6	2.78	Private Funder	3	1.39
EU H2020	5	2.31	No External Funding	3	1.39
European Space Agency	1	0.46	University	10	4.63
Gates Foundation	4	1.85	Unfunded	6	2.78
Great Ormond St Hospital Charity	1	0.46	Unknown	2	0.93
Health Education England	1	0.46	Other charity	5	2.31
IFLS	1	0.46	Other	3	1.39
Industrial	6	2.78	Self-Funded	1	0.46
Innovate UK	3	1.39	n/a	11	5.09
Innovative Medicines Initiative	1	0.46			

6.1 RESEARCH CHALLENGES

155 respondents (67.1%) have had their primary research delayed and 3 ECRs' research has been permanently ceased due to COVID-19 (figure 9). 44 have begun new research. Of these, this new research is COVID-19 related for 22 ECRs. It is in addition to previous research for 33 and it replaces previous research for 4 ECRs.

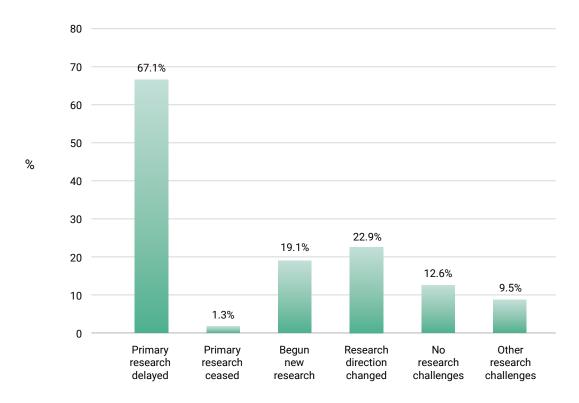


Figure 9. Research challenges faced due to COVID-19 (total of n=231 respondents)

7.1 THE EXTENT OF HOW ECRS' RESEARCH HAS BEEN AFFECTED

218 ECRs provided free text answers to explain the extent of how their research had been affected. A thematic analysis approach was used to explore the content of open question responses, identify patterns within data, and describe and interpret their meaning and importance (Braun et al 2016). A summary of the phases of qualitative thematic analysis is illustrated on page 3. A number of key themes were identified around the extent of how ECRs' research has been affected by COVID-19.

ABILITY TO CONDUCT RESEARCH:

A number of ECRs have been unable to conduct research through the pandemic. Particularly for those whose research which is experimental, involves lab-based work, or participants (i.e. trials) research has been paused or delayed, whilst others have been forced to change the design of projects.

"Surveys can't be fielded and interviews with participants cannot take place."

"Unable to conduct any experiments at work."

"Changed way we recruit and set up whole new study."

For others the lack of international travel has limited the ability to undertake research. Recruitment has been delayed, suspended or ceased for much clinical research.

"Overseas field work delayed."

"Recruitment for the trial has been paused, the nature of the trial means the trial may not be able to continue in the same way...."

THE CONSEQUENCES OF DELAYED OR TERMINATED RESEARCH:

Much research has been delayed, for some the consequences of this are uncertain, for others these delays mean they will not finish research before end of contract and this may have consequences on career development.

"I will be unable to finish my project before my contract finishes. I will not be able to publish my data."

"The inability to continue my lab-based work has impacted on deliverables to others in the research consortium... and also it has severely dented my own independent research aspirations at this early stage of my career."

In some instances there has been a financial consequence due to experimental damages. A number of ECRs report working outside of contracted hours to catch up or unfunded to limit the damage to career progression.

"I had to destroy important experiments due to start of lockdown which not only cost time but also used a significant amount of the budget."

"I am concluding write up of two unfunded pieces of research; these have been delayed by the extra burden of teaching pressures and disruption to my normal working routine which has made it harder to work."

EFFECTS ON WELLBEING AND PRODUCTIVITY:

Lower productivity and efficiency has been reported. For many working from

home with childcare or other distractions has affected productivity and made concentrating in a different environment difficult.

"I am losing concentrated blocks of time on which to concentrate on research questions. This has severely impacted my productivity."

Some report working late hours to work around childcare responsibilities. For a number there has been a lack of access to particular resources. There has been much additional time invested in online teaching preparation and delivery whilst managing stresses related to the pandemic:

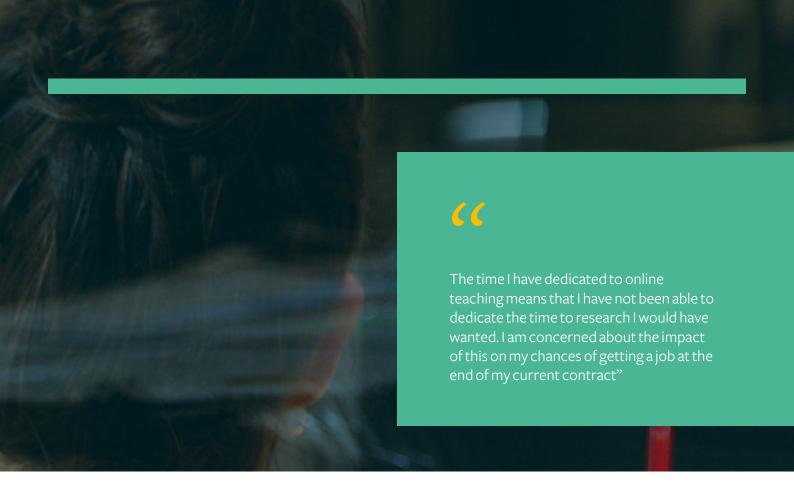
"Young children at home requiring home schooling means working late into the night and weekends to catch up."

"I have also had much more of a focus on teaching and teaching related activities meaning that research has been pushed back."

"Delayed ability to collect data due to investing time in online teaching preparation and delivery whilst managing stresses related to the pandemic in this country..."

FUNDING:

Some have lost funding or had delays in funding decisions. For some, funding applications have been shelved and uncertainty exists around future funds. Staff recruitment has also been



negatively affected for some.

"I was about to embark on securing funding and resources for a major series of publicfacing works... that has now been shelved."

"I have lost funding from the University..."

"...All of the above mean I currently have no income and am writing bids and papers unpaid."

"Also difficult to recruit new staff to work on research projects."

OPPORTUNITIES:

A number of ECRs highlighted particular opportunities that have arisen through the pandemic, including remote networking, forming new collaborations, undertaking virtual recruitment and new studies and creating new data. A small number reported more time to write up studies, undertake more theoretical work and apply for funding.

"Related to this I have commenced an international existing project... This may yield future collaboration and opportunities."

"Adapted and changed recruitment methods to a research study in response to the COVID-19 pandemic."

"The current environment will lengthen the current projects. As a natural experiment there will be unexpected opportunities to compare before and after information covering all areas of clinical practice."

"We have also taken the time to write a paper and to apply for more funding."

UNCERTAINTY:

Uncertainty has arisen regarding the "if and when" research will resume, and how this will develop. There is also much uncertainty over current and future contracts and funding.

"Unable to carry out in-person events, planning for future events/activities is very difficult due to all the uncertainty."

"field data collection plans abroad are more complex and uncertain to develop."

"...the money has been lost or it is not clear how I will be able to re-use the funds since they haven't been used before the end of the financial year."

IMPACT ON CAREER DEVELOPMENT:

Some ECRs have been unable to find the time to write grant applications or unable to publish papers due to delay in research, which is likely to extend the work beyond the length of their contract or funding was curtailed. For many additional teaching time is reducing research time, which then affects research job prospects at end of contracts.

"I will be unable to finish my project before my contract finishes. I will not be able to publish my data."

"The time I have dedicated to online teaching means that I have not been able to dedicate the time to research I would have wanted. I am concerned about the impact of this on my chances of getting a job at the end of my current contract."

"Due to other demands on my time (as a result of online teaching and a busier admin role impacted by COVID-19), there has been little opportunity to work on research."

A lack of conferences, networking and reduction in CPD is also heightening concerns for career development. It was also reported that furlough is putting some at a disadvantage as they can't progress any work-related tasks.

"Because I have been put on furlough, I am not allowed to do any other type of work either (incl. peer-review, writing papers & research grants, planning teaching and outreach resources etc.) (unless I would be willing to do it at my own time) which has me into a very disadvantaged position compared to my peers that have not been furloughed."

8.1 CONTRACTUAL CHANGES

Of n=227 respondents 67.8% (n=154) were on fixed-term contracts. Of those on open-ended contracts (n=66), 35.8% were subject to external funding. 1.8% of ECRs were unsure of the type of contract they held (figure 8). The nature of contract by Faculty is shown in appendix 1. Of n=231 respondents:



1.3% (n=3) of ECRs have had their contract shortened



3.9% (n=9) have had their contract extended



4.3% (n=10) of ECRs their contract remains the same in length but contractual obligations have changed



13.4% (n=31) their contract and obligations remain the same but the time to deliver them has been shortened



22.5% (n=52) of ECRs were unsure at the time if they may have changes to their contract due to COVID-19



23.4% (n=54) faced no contractual changes

10.1 FUNDING CHALLENGES

ECRs were asked a number of questions around recent funding circumstances. They were able to answer more than one question. Of 231 respondents:

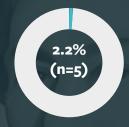


6.5% (n=15) have had their **funding extended**. This extension ranges from 1-12 months.



30.3% (n=70) of ECRs reported that their funding duration remains the same, yet it is unlikely that they will be able to deliver the research outputs

on time.



Funding ended during the pandemic for 2.2% (n=5), and they no longer have funding.



6.5% (n=15) **acquired new funding** during the pandemic (since February 2020).

9.1 HOW CONTRACTUAL OBLIGATIONS HAVE CHANGED

Of those whose contractual obligations had changed, we asked how. We received 9 free text responses and these showed that overall workload has increased. The obligations and time expected to spend on teaching have increased (on top of normal research capacity) despite formal changes to contracts. Some ECRs have been explicitly asked to prioritize teaching over research.

"I am still expected to undertake my previous research, plus additional education support, plus manage childcare" (Employed primarily to undertake research)

"The time I am asked and expected to spend on teaching and pastoral work has dramatically increased and we have been explicitly asked to prioritise this over research"

(Employed to undertake balance of education, enterprise and research)

"Overall workload has increased. Obligations to education has increased, other obligations are the same"

(Employed to undertake balance of education, enterprise and research)

"Teaching load has increased, but this is not reflected in the formal contract or "nominal" hours given. Expectations on teaching were simply cranked up by the university"

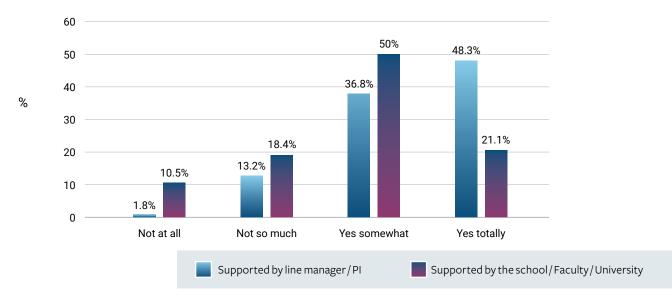
(Employed to undertake balance of education, enterprise and research)



■ Part 2 Results: University Support

11.1 LINE MANAGER / PI SUPPORT

85% of ECRs felt supported (somewhat or totally) by their line manager during the COVID-19 pandemic and 71.1% by the school/faculty/university (figure 10). Table 4 depicts those who felt supported by their line manager, stratified by Faculty. Some examples of how PIs/line managers have successfully supported UoS ECRs is depicted in figure 11.



 $Figure 10. \ Percentage \ of ECRs \ reporting \ level \ of \ support \ received \ (of \ n=228 \ total \ responses)$

	Arts & Humanities	Eng & Physical Sciences	Env & Life Sciences	Medicine	Social Sciences	Overall Total
Not at all	0	3	1	0	0	4
	0%	3.49%	1.96%	0%	0%	1.76%
Not so much	4	10	7	8	1	30
	19.05%	11.63%	13.73%	15.09%	6.25%	13.22%
Yes somewhat	7	29	21	18	8	83
	33.33%	33.72%	41.18%	33.96%	50%	36.56%
Yes excellent support	10	44	22	27	7	110
	47.62%	51.16%	43.14%	50.94%	43.75%	48.46%
Total by Faculty	21	86	51	53	16	227
	100%	100%	100%	100%	100%	100%

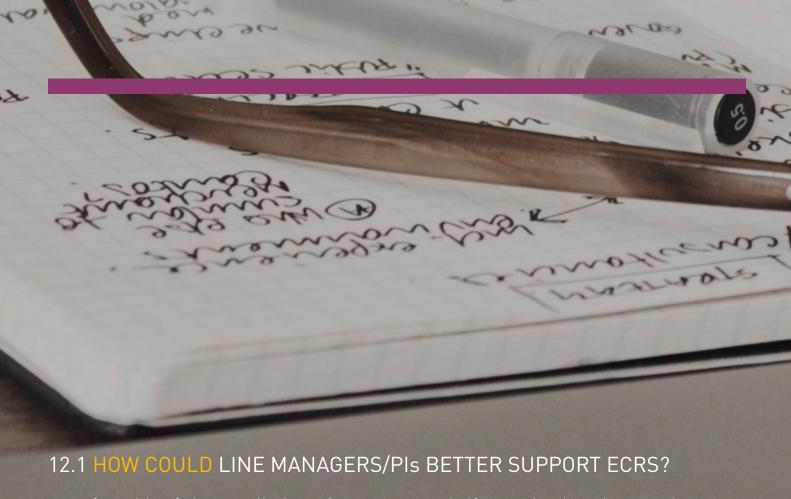


Childcare Regular-meetings
Kept-in-loop
Expectations
Communication Redesigning project

Childcare
Appraisal Understanding

Kept-in-loop
Reducing pressure to deliver

Communication Flexibility



14.9% of ECRs did not feel supported by their PIs/line managers. We asked for ECRs' thoughts to determine what ECRs would like PIs/line managers to have done to better support them. We undertook thematic analysis of their responses, the key themes are shown below. There were also a number of positive responses provided from those who wished to recognise their line managers/PIs were supporting them during this time. We have therefore included this as a final theme.

BETTER COMMUNICATION AND GUIDANCE FOR RETURN TO WORK AND CONTRACT OPTIONS:

This included more transparency, communication and guidance particularly around on return to work, clarity on teaching expectations.

"More information on contract extensions/ obligations. More information on returning to work processes, the lack of communication has been very frustrating."

"Kept in touch more about the progress of re-opening research facility, not waiting for me to ask."

"Details on whether there are opportunities after my contract ends."

"Provided more guidance... Provide guidance with respect to any changes to funding/pay."

"Been able to provide clearer instructions on teaching expectations after the summer so we can know how to prepare. I understand this is a control."

MORE CONTACT AND SUPPORT:

In the form of one-to-one meetings with line managers and regular team meetings. Also consideration for mental health and wellbeing.

"At times it would have been helpful/ preferable to have 1:1 check-ins during the working from home period. At times it has felt isolating and whilst it usually is fine to be left to my own devices the lack of physical contact or passing in a corridor means I go unchecked for large amount of times. More of a balance would have been useful (for mental health and motivation)"

"Checking on my wellbeing and how this is impacting my work, checking how COVID has impacted my list of priorities and taking this in consideration for future plans and teaching distribution."

"One-to-one meetings with all ECRs to assess impact of COVID-19 and provide support accordingly."

INVOLVE ECRS IN DECISION MAKING:

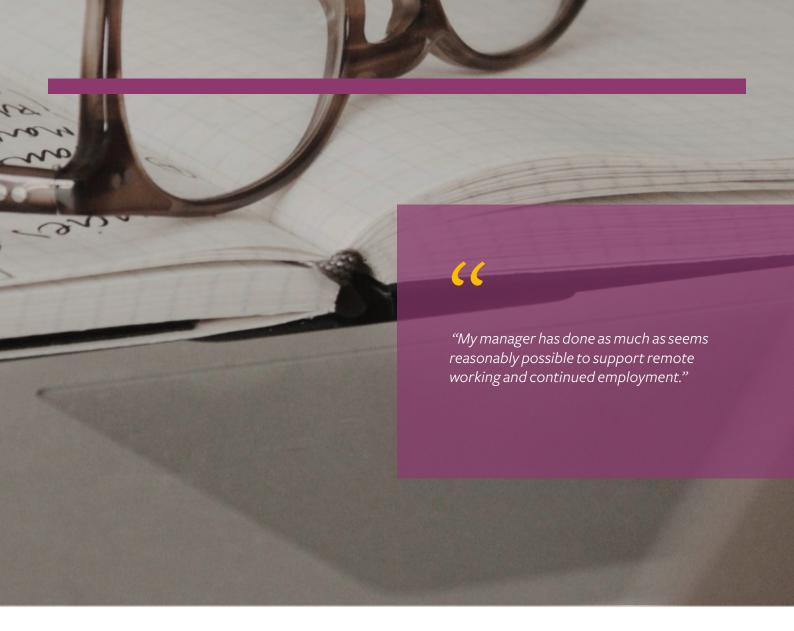
This includes research/project planning and returning to site.

"Listening a little bit more about what the research team has to say about how to restart the project."

"Also, now that the labs are being gradually opened, it would have been nice if we would have been asked if we feel comfortable and safe returning to work."

BETTER PLANNING AND OBJECTIVE SETTING FOR PROJECTS AND CAREERS:

ECRs appreciate these are challenging and time-consuming times for all staff but it is clear ECRs recognize the benefits in spending time planning and setting objectives with PIs and line managers. There continues to be a need for line managers and PIs to support ECRs in their career development.



"It would be nice if there was more time to spend on setting objectives and planning ahead, but it does feel like everyone is so busy with the immediate workload that this has not been considered yet. I do have some queries about my role in the long-term when my line managers have availability to discuss, but I don't expect this will be soon and I don't feel comfortable asking for this time in the current situation."

"The university, as represented by my line manager, needs to work out a plan for how to make up for the work lost by people affected through COVID (either directly or through childcare/caring/screening). It's not enough to be supportive, because the hours not worked by those are missing and the work needs to be made up by someone else. There seems to be no planning for this from management."

UNDERSTANDING AND
RECOGNISING THE
INCREASED WORKLOAD
AND PRESSURE AND
ADJUSTING EXPECTATIONS,
AND TIMEFRAMES OR

REDUCING WORKLOAD TO SUPPORT THIS:

ECRs request that seniors try to understand the challenges of being an ECR particularly in this uncertain climate, understand the distractions and impact of home working, recognise the need to change deadlines or reduce workload for those taking on additional COVID work and/or education.

"...additional workload was added to me to account for necessary changes to make to the study due to COVID... yet all my original pre-COVID deadlines remained the same, with much less time to meet them. I asked for extensions because of this and was refused. So I have had to work outside of my hours..."

"Better awareness that not doing research for a bit (or having less time for research) can have a great impact on ECRs in particular, as valuable opportunities (e.g. to collaborate with external colleagues) can evaporate or be delayed. This can have an impact on the identity (and reputation in the field) of ECRs as researchers and on their career development."

PROMOTE THE RIGHT MESSAGE TO ECRS:

Ensure line managers are not encouraging ECRs to work beyond contracted hours and without annual leave.

"I am feeling rather exhausted and my line manager is somewhat reluctant for me to make use of my annual leave due to the lack of project progress. It's rather difficult to know what to do in this instance."

LINE MANAGERS/PIS DOING WHAT THEY CAN:

A number of line managers/PIs have been recognised by ECRs for providing all the support they can.

"My PI has done a great job to support me."

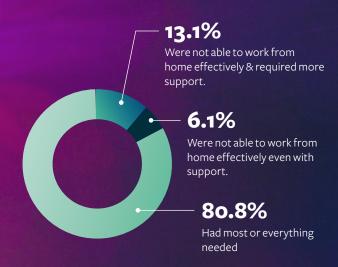
"My manager has done as much as seems reasonably possible to support remote working and continued employment."

13.1 OPPORTUNITIES TO STAY CONNECTED



59.0% of ECR respondents felt the School /Faculty/ University had provided them with opportunities to stay connected with peers and fellow academics.

14.1 REQUIREMENTS TO WORK FROM HOME EFFECTIVELY



Out of n=229 respondents, 80.8% of ECRs had most or everything they needed to work from home effectively. 13.1% were not able to work from home effectively and require more support and 6.1% were not able to work effectively even with support. 28 ECRs provided responses on the additional support required to work on their research from home effectively.

These responses are summarised below:

- An option for a University desktop computer.
- Multiple monitors.
- More suitable chair/table/furniture set up.
- Support transporting computing equipment from work to home in the instance of not having a car.
- Access to printing services.
- Quicker/more efficient IT support or supply of replacement equipment.
- Appropriate IT equipment such as audio, webcams etc to deliver teaching online.
- More support/flexibility for disabled ECRs.
- Financial support towards internet use and/or upgrade to better internet connection.
- Bespoke laptop/computer with better capacity.

15.1 RESEARCH ACTIVITY DURING COVID-19

We asked questions about the challenges of remaining research active and COVID-19 related research activity throughout the pandemic period. In total 78.6% (n=177) of respondents reported that their department had encouraged them to stay research-active (either fully or somewhat). Of those who disclosed their faculty (n=228) this ranged from 52.6% in the Faculty of Arts and Humanities to 84.9% in the Faculty of Medicine. The number of ECRs not encouraged to remain research active (not at all or not so much) ranged from 15.1% (Faculty of Medicine), 18.8% (Faculty of Social Sciences), 20.0% (Faculty of Engineering & Physical Sciences), 21.6% (Faculty of Environmental and Life Sciences) to 47.4% in the Faculty of Arts and Humanities (table 5).

	Arts & Humanities	Eng & Physical Sciences	Env&Life Sciences	Medicine	Social Sciences	Total
Not at all (n)	1	4	4	1	1	11
%	5.26	4.71	7.84	1.89	6.25	4.91
Not so much (n)	8	13	7	7	2	37
%	42.11	15.29	13.73	13.21	12.5	16.52
Not encouraged total (%)	47.40	20.00	21.60	15.10	18.80	21.40
Yes fully (n)	4	38	26	28	8	104
%	21.05	44.71	50.98	52.83	50	46.43
Yes somewhat (n)	6	30	14	17	5	72
%	31.58	35.29	27.45	32.08	31.25	32.14
Encouraged total (%)	52.63	80.00	78.43	84.90	81.30	78.60
Total	19	85	51	53	16	224
	100	100	100	100	100	100

 $Table \ 5. \ Responses \ per \ faculty \ to \ ``has \ your \ department \ encouraged \ you \ to \ remain \ research \ active?"$

In total 76.5% (n=173) of respondents found it difficult to remain research-active (yes or yes somewhat difficult). Of those who disclosed their faculty (n=228) this ranged from 64.8% of respondents from the Faculty of Medicine to 89.5% from the Faculty of Arts and Humanities (table 6).

	Arts & Humanities	Eng & Physical Sciences	Env & Life Sciences	Medicine	Social Sciences	Total
No (n)	2	18	11	19	3	53
%	10.53	21.18	21.57	35.19	18.75	23.56
Yes (n)	13	28	14	13	8	76
%	68.42	32.94	27.45	24.07	50	33.78
Yes somewhat (n)	4	39	26	22	5	96
%	21.05	45.88	50.98	40.74	31.25	42.67
Total yes (%)	89.47	78.82	78.43	64.81	81.25	76.45
Total (n)	19	85	51	54	16	225
	100	100	100	100	100	100
%	89.5%	78.8%	78.4%	64.8%	81.3%	76.5%

Table 6. Number of ECRs in each faculty finding it challenging to remain research active

A total 19.3% (n=44) of respondents were doing COVID-19 related research. Of those who also disclosed their faculty (n=227), the majority were in Faculty of Medicine (37.0%), Environmental and Life Sciences (29.4%) and Social Sciences (25.0%) (Table 7).

Arts & Humanities	Eng & Physical Sciences	Env & Life Sciences	Medicine	Social Sciences	Total
19	83	36	34	12	184
95.00	96.51	70.59	62.96	75.00	81.06
1	3	15	20	4	43
5.00	3.49	29.41	37.04	25.00	18.94
20	86	51	54	16	227
100	100	100	100	100	100
	Humanities 19 95.00 1 5.00 20	19 83 95.00 96.51 1 3 5.00 3.49 20 86	Humanities Sciences Sciences 19 83 36 95.00 96.51 70.59 1 3 15 5.00 3.49 29.41 20 86 51	Humanities Sciences Sciences Medicine 19 83 36 34 95.00 96.51 70.59 62.96 1 3 15 20 5.00 3.49 29.41 37.04 20 86 51 54	Humanities Sciences Sciences Medicine Sciences 19 83 36 34 12 95.00 96.51 70.59 62.96 75.00 1 3 15 20 4 5.00 3.49 29.41 37.04 25.00 20 86 51 54 16

16.1 INCLUDING ECRS IN DECISION MAKING

A total of 41.8% (n=94) of ECR respondents had and 58.2% (n=131) had not been involved or consulted in plans for returning to the research environment. Of those who disclosed their faculty (n=228) 51.9% of respondents from Faculty of Medicine reported being involved or consulted in plans for a return to their research environment, compared to 18.8% in Faculty of Social Sciences (table 8).

	Arts & Humanities	Eng & Physical Sciences	Env & Life Sciences	Medicine	Social Sciences	Total
Not at all (n)	10	32	24	20	13	99
%	52.63	38.1	47.06	37.04	81.25	44.20
Not so much (n)	2	10	13	6	0	31
%	10.53	11.90	25.49	11.11	0	13.84
Not included total (%)	63.16	50.00	72.55	48.15	81.25	58.04
Yes fully (n)	1	20	4	11	0	36
%	5.26	23.81	7.84	20.37	0	16.07
Yes somewhat (n)	6	22	10	17	3	58
%	31.58	26.19	19.61	31.48	18.75	25.89
Included total (%)	36.84	50.00	27.45	51.85	18.75	41.96
Total	19	84	51	54	16	224
	100	100	100	100	100	100

 $Table\ 8.\ The\ number\ of\ ECRs\ who\ have\ been\ involved\ or\ consulted\ in\ plans\ for\ a\ return\ to\ their\ research\ environment$

17.1 UNIVERSITY LED ACTIONS TO BENEFIT ECRS

187 ECRs provided free text responses to the question "What immediate and future actions (from PI, School, Faculty and/ or University) would have the most significant benefit to you as a researcher". Thematic analysis revealed a number of key actions that ECRs would like to see. To note, a number of these actions are likely specific to the time the survey was undertaken (i.e. during lockdown).

SECURITY AND ASSURANCE FOR THOSE AFFECTED BY THE PANDEMIC

ECRs have reported the need for contract or funding extensions to mitigate lost research time and assurances that this gap in research due to the pandemic will be accounted for in appraisals/ promotions. Some report a need for greater security and/or opportunities for permanency for those on fixed term contracts. ECRs wish to see evidence that actions/policies are being put in place to support ECRs impacted by the pandemic.

"Top-up funding to allow extension of my fixed term contract by a period of time equal to that lost."

"Assure staff that a gap in our research productivity during this period will not be held against us on future appraisals or promotion applications."

"I really, really need security. I am trying to set up a research project but the current insecurity is making it almost impossible to make plans."

"Because of online teaching and a busier admin role impacted by COVID-19), there has been little opportunity to work on research."

"I would like to know what policies are being put into place and acted on to help staff who have childcare responsibilities. I would like to know what they intend to do to mitigate the negative effects (which research shows bears heavily on women) that childcare responsibilities will have on career progression and abilities to meet REF requirements not only in the short term, but in the medium-long term too."

FINANCIAL & MATERIAL SUPPORT

Financial support for those in certain situations during the lockdown and the provision of appropriate office/IT equipment to support working from home.

"Continue to top up CJRS (furlough scheme) as appropriate, so our salaries and livelihoods are not affected."

"Office equipment to help me do my job more effectively."

"Wi-Fi upgrade financial support."

"Access to printing."

TIME TO TALK

Time to discuss and plan ECR opportunities including career progression with line managers/Pls. Time to plan a new direction of research with the team. Also, opportunities to have open meetings with the Head of School to express concerns.

"Perhaps planning a time to discuss career progression and objectives, even if that time is some way in the future. This could also include discussion of personal development and conference attendance, as it feels like we're all living in the here and now but not really thinking ahead about these important things."

"Talking about opportunities."

"Whole lab group meeting to determine how we want to go forward as a group."

"I wish the Head of School would meet with just the ECRs to discuss our concerns."

SUPPORTING CAREER PROGRESSION & INVESTING IN ECRS

For the university to provide a formal plan to invest in ECRs and provide training. To provide career guidance and funding support and advice, especially for those ECRs coming towards the end of a short-term contract. More support from line managers and support and advice with funding bids. Also to facilitate independence and leadership, irrespective of contract type (for those on short term contracts to have the opportunity to lead on large funding bids).

"Long-term investment in researchers career/development."

"Skills development training (virtual, or when possible, physical)... networking and CV building opportunities which have been missed."

"Support for developing vision and infrastructure to get to next level of research leadership."

"Support with funding grants and/or inclusion on large grants going in so new researchers are not brought in to do the work, but the work is distributed among the researchers we have."

"Information on how COVID will impact on future and current job posts and funding a real plan to invest in us, train us further in research areas/tools relevant to us and to help us develop."

"Co-ordinating funding and careers advice for researchers who may lose out significantly due to the pandemic would also be welcome."



"A commitment to supporting ECRs and improving the culture of short-term contracts would ease career anxiety."

CLEAR & SPECIFIC COMMUNICATION

Provide formal guidance for line managers on ECR research targets.
Provide clear communication and involvement in decision making at school level and specific and honest communication around the future of ECR contracts, ECR funding and the expected workload of ECRs going forward.

"Formal (instead of informal) guidance for line managers on what research targets should be."

"More direct information on the decision making processes would also help."

"The messaging of expectations for research outputs needs to be clear and needs to acknowledge the stress and strain of the situation for ECRs."

"Better communication on a school level, as decisions are made without any input from researchers."

WORKLOAD & EXPECTATIONS

Place more emphasis on research with a reduction in teaching load that has become significant for many ECRs through the pandemic. Provide more support for those whose research time has been significantly impacted by having to take on more education. Produce

formal guidance/clarification on the expected level of education to be provided. Consider a formal review of ECR workloads and opportunities for ECRs to switch pathways if the nature of work has changed since the pandemic. Provide opportunities to continue flexible/remote working.

"Ensure ECRs on balanced pathways really have time for research and are supported in that rather than putting all of our time to teaching/admin."

"A review of our workloads."

"Allowing me to continue remote working."

"Moving me to a mixed pathway - paying for the time I spend teaching/contributing to education rather than seeing it as a must for experience."

RECOGNITION & INVOLVEMENT

Recognition that much of the university's research is fulfilled by those on insecure fixed-term contracts, therefore involve researchers in planning and decision making. Recognise the extra workload ECRs take on and the challenges faced, particularly the additional impact this has had on female researchers and ECRs with caring responsibilities.

"Much work at the university is done by employees with a fixed term contract. Those employees suddenly see their contract terminating in the middle of a global crisis, that erased most of the opportunities they were relying on to progress their career paths."

"Consult academic staff on decisions that will primarily affect us."

"Recognition that childcare is important and celebrating those members of staff who have given everything they can to keep their work going and their family looked after."

"Recognition of the extra work load and if not possible to promote to next level, perhaps an adjustment to HRZ is well overdue."

"Time off teaching to do research, recognising the disproportionate impact COVID-19 has had on ECRs who teach."

LET'S CREATE

A university-wide mentoring programme and a university or faculty-wide ECR academy to develop ideas, collaborate and learn. Consider ongoing mental health meetings and support.

"Organising of school/faculty seminar series, ECR mentoring programme."

"Regular meetings, sessions about mental health."

"Create a new University-wide ECR academy: with a remit to offer ECRs opportunities to learn together, develop research ideas individually, share them and work them up in teams, have guidance from experienced colleagues in working up good ideas, input from RIS about relevant funds to apply for in relation to these specific ideas, and input from experienced colleagues to ensure that resulting grant applications are excellent."

■ Part 3 findings: Wellbeing

18.1 STRESS AND ANXIETY LEVELS

Of the respondents, 81% felt more stressed (n = 187), whilst 10% felt no different (n = 24) and 9% less stressed (n = 20) (Figure 12).

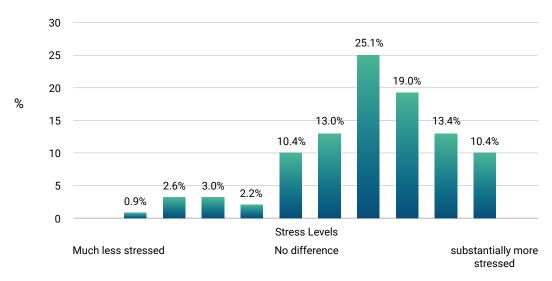


Figure 12: Levels of stress in the University of Southampton's early career researchers (ECRs) since the outbreak of the 2019 Coronavirus pandemic.

Method of coping	Frequency (n)
Physical activity & exercise*	84
Routine, collegial support & adjusted expectations	54
Family & work connections	49
Self-care & hobbies	29
Meditation & yoga	19
Increased alcohol intake	12
Eating healthily	8
Counselling, therapy & medication	6
Nothing (including acceptance)	34
Other	40

^{*}includes spending time outdoors

 $Table \ 9: Methods \ of coping \ with increased \ stress for the \ University \ of Southampton's \ early \ career \ researchers \ (ECRs) \ during \ the \ 2019 \ Coronavirus \ pandemic$



Of the 81% feeling more stressed, the most common ways of coping appeared to be, through: i) physical activity and exercise (n = 84), ii) maintaining a routine, collegial support and adjusting expectations (n = 54), and iii) family and work connections (n = 49); Table 9). This is typified in the following responses:

"Trying to talk to people online or by phone, managing my sleep, exercise and diet more mindfully, keeping a careful record of jobs in priority order to help structure my weeks."

"I am walking and exercising for more hours per week. I am sharing concerns with my mentor and trusting their judgement on how successful I am being at the moment. Stress relating to teaching is impossible to alleviate/manage, as everyone in the department is stretched to breaking point."



said:

PHYSICAL ACTIVITY & EXERCISE

Physical activity and exercise was reported by ECRs as being the most important method of coping with the increased stress brought on by the COVID-19 pandemic. For those using physical activity and exercise, the most common method was walking outdoors (n = 20), with others specifically mentioning: accessing the outdoors (n = 12), running (n = 6), cycling (n = 5), online fitness classes, weights or circuit training (n = 5). The combination of the outdoors and low-intensity, relaxing exercise were common themes:

"I am focusing on enjoying the time with my family and taking long walks outside with them."

ROUTINE, COLLEGIAL SUPPORT & EXPECTATIONS

For respondents that valued maintaining a routine, collegial support or adjusting expectations, most stated that they kept in touch with colleagues or line-managers (n = 16). Other methods included:

•	Being realistic about expectations	n=13
	(including taking more breaks)	
	Maintain regular daily routing /work-life halance	n-10

- Maintain normal working patterns n=6
- Regular breaks n=3
- Talking to family or partner
 Establish new schedules
 n=3

A recurring theme was the necessity to work, develop, and plan online, although in some ways beneficial, presented a major challenge to the individual's work-life balance. Keeping contact with colleagues, supervisor and linemanagers appeared important to manage this. As one

"Talking to colleagues about work related issues that cause stress. But learning to work with new online platforms and migrating teaching online in a short time frame has been stressful for all my colleagues.

So, accepting that we are doing the best we can, and ensuring I maintain work/life balance and exercise."

Two other major challenges to maintaining regular routines and stress levels were: i) family caring responsibilities, and ii) the increased time spent online.

For example:

"Trying to take small periods of time for myself, mainly to exercise, but this is very difficult with both parents working and caring for children"

"I try to spend time offline, so I am not bombarded by notifications and information"

FAMILY & WORK CONNECTIONS

The majority of those expressing higher levels of stress stated they spoke to family and friends (n = 26), whereas 8 talked specifically to their partner or spouse, and 5 used the opportunity to spend more time with their direct family. 10 respondents stated that they spoke to 'others', not necessarily family members. One such example being:

"I get a lot of fresh air as I live in the countryside, and I talk to people in a similar situation to find out how they are coping."

SELF-CARE & HOBBIES

Less important, but regularly stated (n = 29) were activities involving: reading*, music and watching television (n = 7), arts and crafts (n = 5), gardening (n = 4), maintaining normal sleep patterns (n = 3), learning new hobbies and courses (n = 3), playing games (n = 2) and others including shopping, journaling and bathing.

MEDITATION & YOGA

19 ECR respondents who felt greater stress levels used yoga (n = 11), meditation and/or relaxation exercises (n = 7) and 1 using psychotherapy. Online yoga offered an avenue to learn and regularly participate for mental and physical health. As one said:

"I do yoga every day, twice a day, it helps enormously. I wouldn't be coping with this workload without it."

EATING PATTERNS & ALCOHOL

9 ECRs stated that they had begun to eat more healthily since working from home, these included: 'mindful' eating, maintaining regular eating patterns (i.e. ensuring to eat), and reducing caffeine intake.

12 ECRs stated that they had increased their alcohol intake to manage their increased stress levels, but some only marginally and in personal reward (n = 3).

COUNSELLING, THERAPY & MEDICATION

6 ECRs experiencing increased stress had self-medicated or sought medical help. These involved: using antidepressants for anxiety (n=3), counselling (n=2), and 1 consulting a General Practitioner. These respondents



were all 'substantially more stressed' due to the pandemic (mean: 8.9 out of 10 [maximum stress]), but the majority (n = 5) felt supported by their line-manager and were aware of the University's Mental Health Services (n = 4). All were females of British, or white background, and were on fixed term (n = 5) or open-ended contracts (n = 1).

NOTHING SPECIFIC & ACCEPTANCE

Of respondents, 18% (n = 34) had done nothing consciously to cope with increased stress levels and/or had accepted the situation. 12 stated that they had done nothing specific, 4 mentioned acceptance and 2 had hope for the future. Other individuals stated that they: continued working (n = 1), were unable to do anything due to childcare responsibilities (n = 1) and shielding (n = 1), and one stated the pandemic (i.e. lockdown) suited their lifestyle.

"Much less stressed, despite IT issues, working from home is still significantly more productive and enjoyable.

Actually, feels less isolated than doing PhD work in an office alone for 38 hours a week."

Some were worrying less about work (e.g. commuting and work demands), but more about their family's health and wellbeing (including food, medications and safety). A number mentioned a lack of personal time to manage their stress, as one despondent ECR said:

"Not very much. I'm stuck indoors all the time... and am too afraid to go out due to the risk of infection, and the negligence of other people."

OTHER STRESS COPING STRATEGIES

These included maintaining focus and positivity (n = 6), reflection and a growth in resilience (n = 4), keeping busy (n = 4), avoiding news and social media (n = 3), planning finances or work for future (n = 3), adhering to Government guidelines (n = 3), pursuing online learning (n = 3), staying informed (n = 2), and planning for a change in career (n = 3).

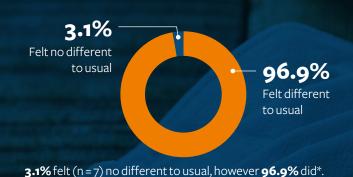
Other coping strategies included: working harder, acceptance of less success, public avoidance, and looking after the family. Working from home presented clear benefits for most, but at a loss of personal contact and the need for regular (personal) reviewing, as 2 stated:

"There are aspects which are better - working from home has many benefits, but the obvious downside is lack of physical contact with others and in-person meetings are sometimes just that much more effective (and also help boost well-being)"

"Keep reviewing what I can do to resolve the stressful problem. Usually making detailed experiment plans now to save time later once I can get into the lab. I worry about future lack of research funding. I can do nothing about resolving that concern..!"



19.1 FEELINGS TOWARDS THE CORONAVIRUS 19 (COVID-19)



We looked at our ECRs' feelings towards the pandemic. The results below highlight some of the inhibiting and negative outcomes of the COVID-19, in terms of their feelings towards work and home life. The pandemic appears to have benefited ECRs in family time, but not necessarily in work time, as highlighted below:

PRODUCTIVITY



14% 66% **More Less** productive productive

20% no different**

INNOVATION



14% 56.3% **More Less** innovative innovative

29.7% no different

ENERGY



13.2% 65.7% **More Less** energised energised

21.1% no different

WORK-LIFE BALANCE



30.1% 50.6% **Better Worse** balance balance

19.3% no different

OPTIMISM



25.8% 52.4% **Feel Not feel** optimistic optimistic

21.8% no different

RESEARCH



27.9% 49.8% Feel the Not same about my research same

22.3% no different

FUTURE CAREER



70.7% 12.7% Worried Not future worried

16.6% no different

HEALTH



42.4% 57.2% Worried not

health worried*

EMOTION



47.2% 52.9% Felt down/ Felt depressed ok*

TIME ALONE



31.9% 35.8% **Enjoying Not**

own time enjoying 22.3% no different 10% not applicable

TIME ALONE CONCERNS



34.5% 34.1% **Concerned Not** own time concerned

> 19.7% no different 11.8% not applicable

MORE FAMILY TIME



45.4% 7% **Enjoying Not** Family time enjoying

> 19.2% no different 28.4% not applicable

FAMILY TIME CONCERNS



41.9% 7.9% Concerned Not

about family time concerned

20.5% no different 29.7% not applicable

*including 'neither agree, nor disagree' and 'not applicable' responses. **indicated by a 'neither agree, nor disagree' response. 36

20.1 ACTIONS TO BENEFIT ECRS

We also looked at what our ECRs were doing in response to the threat of COVID-19. These included:

- The majority (60.7%) were focusing on **the daily positives** the same as always, whereas 25.3% were focusing more than usual and 14% less than usual.
- The majority (51.1%) were keeping busy with **practical, daily living or work tasks** the same as always, whereas 39.3% were doing this more and 9.6% less than usual.
- The majority (49.4%) were **carrying out academic work** the same as always, whereas 31% were working less and 19.7% were working more than usual.
- Of the 29.3% carrying out **clinical, industrial or private work**, 13.5% were doing this the same as usual, 12.7% less than usual, and 4.4% more than usual.
- 34.5% were less **physically active**, 33.2% more physically active and 31.8% the same as always.
- The majority (40.2%) were trying to **stay fit and healthy as before COVID-19**, whereas 36.2% were doing more to stay healthy and 21.8% less to stay healthy.
- The majority (45.9%) were no different in keeping

- a **structured routine for daily activities**, whereas 16.2%were being more structured, and 38% being less structured than usual.
- Of the 68.1% who used **psychological methods** (such as meditation and mindfulness), 29.7% did these the same, 21% did these more, and 17.5% less than usual.
- 39.3% were having **difficulties sleeping** more than usual, 54.1% slept the same as usual and 6.6% were having less difficulties in sleeping.
- The majority (57.6%) were **eating as healthily** as usual, whereas 23.6% were eating more and 18.8% eating less healthily than usual.
- The majority (42.8%) had been spending **more physical time with their family**, whereas for 29.7% family time was the same, and 27.5% family time was less.
- 57.6% were spending **more time with their families virtually**, whereas for 29.3% this was the same as usual, and for 3.5% less than usual. 9.6% do not communicate with their families online.

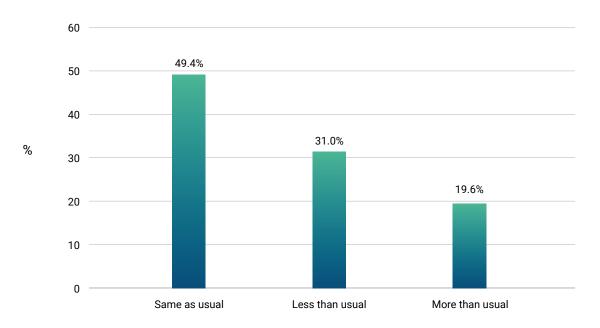


Figure 13: How much the University of Southampton's early career researchers (ECRs) felt they were doing academic work during the Coronavirus (COVID-19) pandemic.

21.1 COVID-19 AND MENTAL HEALTH

In response to the question: "What can the university do to encourage good Mental Health and Wellbeing whilst you are working from home?", there was a recurrent theme that COVID-19 is bringing: financial insecurity, overworking (i.e. working additional hours, including, but not limited to 'academic hours') and a need for open dialogue between staff. The examples below highlight these.

FINANCIAL INSECURITY

"Assure us that there will be no redundancies. No amount of meditation or yoga will ameliorate this very real fear."

"...my stress comes from the fact that I am on a fixed term contract so there is nothing the university can do to fix this."

OPEN DIALOGUE BETWEEN STAFF

"Encourage down time together. I am having entirely project-based meetings, but miss the social interaction and non-project-based, but still work-focused interaction. Creative time, networking, discussing stresses of the day, external influences on productivity and wellness!"

"Encourage line managers to ask if their employees are taking time off, and if not figure out why not. Employees are not likely to bring this up with their line managers by themselves." "Encourage PIs to acknowledge working hours...simple things, like the statement ... on their emails to say that they do not expect you to reply outside of your working hours..."

"Ensure we can have some work/life balance - currently our workloads are excessive."

"Equip line managers and supervisors better for talking about mental health and red flags with their reports."

OVERWORKING & MANAGING WORKLOAD / EXPECTATIONS

"More structure to planning, more acceptance that we can't do everything. Reduce emails with initiatives, PR, 'suggestions' for things we could be doing."

"Emphasise the importance of taking days off, and working the hours in your contract and no more than that."

"Examples of 'healthy' timetables or schedules

from seniors of a typical working week across pay scales."

"It is very easy to slip into the habit of working longer hours when working at home. There should be more encouragement from the university to keep evening and weekends free. This is probably needed more widely in academia and not just when working from home."

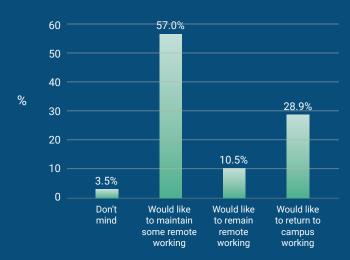
It was also clear that the current support provided by the University was much valued. For example:

"Keep advertising good sources of information/support e.g. on SUSSED."

"Continue with university personal tailored fitness programmes and free online fitness classes (they were brilliant!) and, also making flexible hours more acceptable..."

"I believe the university is doing a lot and I am not sure that more necessarily can be achieved. I know what is affecting my mental health... there is not much the university can do."

22.1 RETURNING TO CAMPUS



When asked: "How do you feel about returning to non-remote working?", 57% would like to maintain some remote working, whereas 28.9% would like to return to non-remote, 'campus' working, and 10.5% would like to remain remote working. Few (3.5%) did not mind (Figure 14). Interestingly, 50% were concerned about returning to non-remote working, whereas 50% were not concerned about returning to non-remote, 'campus' working.

Of the 111 who were concerned about returning to non-remote campus working, the majority (68.5%) had not expressed their concerns, whereas 12.6% felt their concerns had been heard, 5.4% felt their concerns had not been heard and 15.3% were unsure.

Figure 14: The feelings of returning to non-remote, 'campus' working for the University of Southampton's early career researchers in the Coronavirus pandemic

■ Part 4 Findings: What's next?

As we journey through and beyond the COVID-19 pandemic, the participants in this survey have highlighted the challenges and opportunities facing ECRs at the University of Southampton. This survey represents a cross-section of perspectives from all the academic faculties at the University. As such, it contains voices from ECRs across the disciplines and the academic pathways of Research only, Enterprise only and/or Mixed portfolio contracts.

On behalf of our ECRs, it will be crucial to work with the University to enable our 'early career' academics to continue to adapt to the pandemic and develop 'future proof' infrastructure applicable across Higher Education Institutions. Data presents a glimpse of how a global pandemic has impacted upon ECRs at the University during the UK 'lockdown' April to July 2020.

Further research is required to explore a number of the open-ended survey responses, particularly to find out our ECRs' perspectives on:

UNIVERSITY SUPPORT

- What impact will the pandemic have on their careers?
- What are their major professional and personal challenges?

WELLBEING

- How they are coping with stress and anxiety (*further insights).
- What can the University do to encourage good mental health and wellbeing, whilst working remotely.
- Concerns on returning to non-remote, 'campus' working.

APPENDIX

Appendix 1. Nature of contract by Faculty

	Arts & Humanities	Eng & Physical Sciences	Env & Life Sciences	Medicine	Social Sciences	Total
Fixed term	9	67	34	36	8	154
Open ended permanent	10	10	8	8	7	43
Open ended subject to funding	0	8	8	6	1	23
Other	1	0	1	1	0	3
Not sure	0	1	0	3	0	4
Total	20	86	51	54	16	227

Appendix 2. Funders by faculty

Faculty of Arts & Humanities

Funders	Frequency	Percent
AHRC	1	4.76
DFG	1	4.76
Private funder	1	4.76
University	3	14.29
Unfunded	2	9.52
Other	2	9.52
Self-funded	1	4.76
n/a	5	23.81
Missing	5	23.81
Total	21	100

Faculty of Social Sciences

Funders	Frequency	Percent
DTRA	1	6.25
ESRC	2	12.5
National Trust	1	6.25
UKRI	4	25.0
No external funding	3	18.75
University	3	6.25
Unfunded	1	6.25
Unknown	2	12.5
n/a	1	6.25
<u> </u>		
Total	16	100

Faculty of Engineering & Physical Sciences

Funders	Frequency	Percent
Alan Turing Institute	1	1.16
BBSRC	1	1.16
BEIS	1	1.16
Commercial	1	1.16
EC	1	1.16
EPSRC	32	37.21
ERC	4	4.65
ESA	1	1.16
EU	5	5.81
EU H2020	5	5.81
Industrial	4	4.65
Innovate UK	3	3.49
Leverhulme Trust	1	1.16
NERC	2	2.33
NHS	2	2.33
National Grid Innovation Funding	1	1.16
Royal Society	2	2.33
Southampton City Council	1	1.16
SuperGen	1	1.16
UK Space Agency	1	1.16
UKRI	5	5.81
Private Funder	1	1.16
Universiity	3	3.49
Other charity	1	1.16
Other	1	1.16
n/a	2	2.33
Missing	3	3.49
Total	86	100

Faculty of Environmental $\&\, Life\, Sciences$

Funders	Frequency	Percent
Alzheimer's Society	1	1.96
Australian Research Council	1	1.96
BBSRC	1	1.96
Commercial	1	1.96
EPSRC	1	1.96
ESRC	2	3.92
EU	1	1.96
European Space Agency	1	1.96
Gates Fundation	4	7.84
Great Ormond St Hospital charity	1	1.96
Health Educatiion England	1	1.96
IFLS	1	1.96
Industrial	1	1.96
NERC	4	7.84
NIHR	11	21.57
UKRI	7	13.73
Versus Arthritis	1	1.96
Wellcome Trust	2	3.92
University	2	3.92
Unfunded	2	3.92
Other charity	1	1.96
n/a	3	5.88
Missing	1	1.96
Total	51	100

Faculty of Medicine

Funders	Frequency	Percent
AMR	1	1.85
BBSRC	1	1.85
CRUK	5	9.26
Commercial	1	1.85
EPSRC	1	1.85
ESRC	1	1.85
Industrial	1	1.85
Innovative Medicines Initiative	1	1.85
KRUK	1	1.85
Leverhulme Trust	1	1.85
MRC	2	3.7
NICE	1	1.85
NIHR	22	40.74
UKRI	4	7.41
Versus Arthritis	1	1.85
Wellcome Trust	1	1.85
Private funder	1	1.85
University	1	1.85
Unfunded	1	1.85
Other charity	3	5.56
Missing	3	5.56
Total	54	100

Find out more:
https://www.southampton.ac.uk/waar/