

# Science and Technology Committee

## Oral evidence: University Research Funding, HC 753

Wednesday 9 September 2020

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Members present: Greg Clark (Chair); Aaron Bell; Chris Clarkson; Katherine Fletcher; Andrew Griffith; Mark Logan; Carol Monaghan; Graham Stringer; Zarah Sultana.

Questions 1 - 47

### Witnesses

**I:** Professor Julia Buckingham CBE, President and Chair, Universities UK; Professor Dame Nancy Rothwell, Chair, Russell Group; and Professor Sir Anton Muscatelli, Principal and Vice-Chancellor, University of Glasgow.

## Examination of witnesses

Witnesses: Professor Buckingham, Dame Nancy Rothwell and Sir Anton Muscatelli.

**Q1 Chair:** This is a special hearing of the Science and Technology Committee to take evidence from UK universities on a number of current factors that may have implications for research funding. They include: any financial pressures arising from what happened with A-level results during the summer, with more students admitted to some universities; the impact of the coronavirus on the enrolment of overseas students for the coming academic year; and the current state of negotiations over UK participation in Horizon Europe.

We are very pleased to have three leading university vice-chancellors with us today as witnesses. I welcome Professor Julia Buckingham, vice-chancellor of Brunel University and the current president and chair of Universities UK; Professor Sir Anton Muscatelli, principal and vice-chancellor of the University of Glasgow, and, until the beginning of last week, chair of the Russell Group of universities; and Professor Dame Nancy Rothwell, president and vice-chancellor of the University of Manchester, and from last week the new chair of the Russell Group.

The session is principally to ask for your guidance on questions of funding for research, but, given we are about to see the return of students to each of your universities and all of the universities you represent, I hope you will understand if I start with a few questions about the impact of the coronavirus on what we might expect this term.

Perhaps I may start with Professor Buckingham. Do you expect universities to be hotspots for Covid infection this term?

**Professor Buckingham:** There has been an increase in infections in the 17 to 21 population, and that is a concern to all of us. There will be a large number of students moving across the UK to universities and international students coming into the UK. Universities have worked very hard to prepare their campuses for the start of term. Almost all of us are planning to welcome students on campus, but I would like to emphasise that we have gone to very great measures to ensure that our campuses are as safe as possible.

It is a moving feast and we are all changing our protocols most of the time. We are awaiting new guidance from the Department for Education, which we think will emerge in the next day or so and will help us with the current situation. We are all looking at ways in which we can improve testing on campus—a major issue for all of us. We are concerned about the possibility that students might have to travel some distance to get tested when they are showing symptoms, so we are working very closely with the DFE to look at ways in which we can try to resolve that.

**Q2 Chair:** On the question of where we might have outbreaks, do you, Dame



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Nancy, expect that universities will be associated with bursts of Covid infection this term?

**Dame Nancy Rothwell:** There is certainly that concern as many large cities such as London, Glasgow and Manchester will be welcoming a very large number of students. Like Julia, I am very confident that there will not be any spread of infection through teaching in our universities. We have taken every measure imaginable; we have followed all of the SAGE advice and will be following all of the DFE advice.

One concern for all of us is off-campus behaviour. I think we are all imposing quite strict codes of practice with sanctions if students do not adhere to them. It is not just the safety of the students and staff; we are also concerned to protect the safety of our local residents and communities.

Q3 **Chair:** I will come on to ask about what steps you are taking, but, to complete the assessment from Glasgow, Sir Anton Muscatelli, what is your expectation of the susceptibility of universities to infection?

**Sir Anton Muscatelli:** I echo what Julia and Nancy have said. With these concentrations of young people, given that the incidence at the moment is concentrated in that section of the population, that is a concern, but, as both of my colleagues have said, we are taking considerable steps to safeguard what is happening on campus.

I have little concern about potential infection spread on campus. Most of our teaching will be happening online, except for small numbers in laboratories. You may be aware that in Scotland guidance has already been issued by the Scottish Government that restricts the number of students who can receive face-to-face teaching to a maximum group of 30. We will be using that only in a context where students must have instruction face to face—in laboratories.

We are minimising face-to-face contact, but, as colleagues have stressed, we are working very hard. We stress to our students that they need to be mindful of their conduct off campus. For instance, just today I have written to the student unions in my university to remind all students of their obligations as members of our community.

Q4 **Chair:** When SAGE says it is highly likely that there will be significant outbreaks associated with higher education, you do not expect that to be so much from the teaching activities as from the wider groupings that come together at universities.

**Sir Anton Muscatelli:** Yes.

Q5 **Chair:** Dame Nancy, to go back to the question of how you are going to act to contain it, new rules are coming in from Monday whereby people outside work and in some other settings will not be able to meet in groups of more than six. The Health Secretary this morning said that freshers will not be able to socialise in groups above six. Is that realistic



in a university in your experience?

**Dame Nancy Rothwell:** It has certainly not been the norm in the past, but we are not in a normal situation, and we are very strongly stressing to students that they must behave differently. We are in an exceptional situation. It was on the news yesterday that all five universities of the Greater Manchester's university forum have come together on this and issued statements. We will sanction students if they do not adhere to those codes of conduct.

Q6 **Chair:** What will those sanctions be?

**Dame Nancy Rothwell:** Initially, a warning, of course, and potentially something more significant, and ultimately—I hope it does not come to this—it will be exclusion from the university if they fail to adhere to what is an important safety issue.

Q7 **Chair:** The police will have new powers but they will be supplemented in the case of Greater Manchester's universities by the university authorities.

Professor Buckingham, is what Dame Nancy has described typical across the university system?

**Professor Buckingham:** Certainly, from colleagues I have spoken to that is typical. It is also important to remember that many of us have had students on campus throughout the pandemic, so we have acquired some experience of how best to handle students in difficult situations. In my own university we have 400 students living on campus and isolating at one point. It was challenging, but students were extraordinarily well behaved. What we will be dealing with, if there is bad behaviour, will be exceptional students. I think the students themselves are very conscious of the importance of respecting social distancing.

Another concern for universities particularly in London is commuter students. Many students commute quite long distances each day to and from the university, and we will be putting in special measures to seek to protect them. This is where online teaching will be incredibly important. Many of us have set up processes where we can flip very easily from online to face to face to make sure we have continuation of teaching, but we are also protecting the safety and welfare of our students and communities.

Q8 **Chair:** Sir Anton, is it your intention at Glasgow to enforce the rules as well as the police?

**Sir Anton Muscatelli:** Yes, absolutely. At the moment, the rule around six persons does not yet apply in Scotland, but I would emphasise that we are continuously reviewing our rules and are in continuing dialogue with the Scottish Government.

May I add one point about quarantining that perhaps we did not stress earlier? Many countries from which we admit students are on the



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quarantine list, and we are taking measures to ensure that transport between airports and our residences and private residences is also an area where we are taking the lead in ensuring that students are supported during that quarantine period.

**Q9 Chair:** The SAGE publication of last week on the principles for managing the transmission associated with higher education states that university settings will require very easy access to a test facility, and that higher and further education are good locations to test the potential for enhanced testing.

Dame Nancy, I have myself seen the research and testing in labs at the University of Manchester. Will you be using them to have a testing capacity and facility for your students?

**Dame Nancy Rothwell:** We are working very closely with Government organisations rather than setting up something independently. There will be a testing site on campus and likely to be another one in the main residencies, and I think that is happening across the country in large cities. We are also working very closely as a potential test site for much wider testing.

I think it is a greater challenge for some of the more rural universities where it may be more difficult to get a testing site for students. Certainly around Manchester there are testing sites already, but there will be additional ones with very easy access for students. We have throughout had many volunteers in the Nightingale labs and in hospital testing labs as well.

**Q10 Chair:** Do you expect to have enough testing capacity for students at the University of Manchester throughout the term?

**Dame Nancy Rothwell:** We very much hope so, though we will be dependent on factors such as reagents and staff, and that is for all testing labs across the country. At the present time this is largely for symptomatic testing. There is still a lot of debate around asymptomatic testing, which is not without its complications—how you manage it, how you manage compliance and how you manage the results that come out of it—but for symptomatic testing the work we are doing with local authorities suggests we will be able to manage that.

**Q11 Chair:** SAGE made the recommendation in the paper on higher education that wider enhanced testing should be tested first in universities. Perhaps I can ask Sir Anton about this, knowing the calibre of the labs at the University of Glasgow. SAGE put out that the University of Illinois in America provides rapid saliva-based testing that can return results in six hours to everyone on campus twice per week. Given the standing of your university, should we not be able to do that, at least in some institutions, and would not yours be a likely candidate?

**Sir Anton Muscatelli:** We should be looking at all new technologies in this area, and in the UK one or two universities have been involved in



developing these technologies. I emphasise what Nancy said. We in Glasgow, as in Manchester and Milton Keynes, have supported the staffing in one of the DHSC Lighthouse labs. A lot of our staff are already contributing to the thinking around scaling up capacity there. I am aware that much more automation is coming into play literally this week to scale up that capacity.

Rather than drawing away from those efforts by setting up our own autonomous testing, we have tried to support the overall UK effort, but you are absolutely right: if new technologies come to pass and they are validated by the health authorities in the UK, we will be very happy to start moving into that area and give support in whatever way we can, but at the moment we are feeding our expertise into the existing technologies that DHSC and NHS Scotland are using.

**Q12 Aaron Bell:** To follow up briefly what the Chair was asking about, I have a campus university in my constituency. I am very grateful for what I heard from Dame Nancy about holding students responsible for off-campus behaviour.

Professor Buckingham, is there a danger that if we are too draconian about what happens in campuses themselves we push more students off campus? Is there national guidance about how we can allow limited Covid-secure socialising on campus? Is that the issue for your members?

**Professor Buckingham:** We obviously have to work within Government guidelines, but universities want to be proportionate in their approach. While, yes, we will deal firmly with students, as Nancy indicated, we will probably start with a firm warning and, if they are repeat offenders, we will deal with it much more firmly.

It will be a changing feast. We have seen enormous change in the past week of what is expected of us. The important thing is that we all have our eye absolutely on the ball and are able to be agile and adapt to changes as they happen.

**Q13 Aaron Bell:** To turn to university research funding, I start with an open-ended question to all three of you. How do you see Covid-19 affecting funding for university research and what shortfall you might expect, and for what reasons? Professor Buckingham, how is Covid-19 affecting funding for research?

**Professor Buckingham:** The biggest concern initially was the impact on international student numbers. As I am sure you will be well aware, there is a very significant cross-subsidy of international student fees with the funding of research in our universities. There is not an exact correlation, but quite a good one between the number of international students in universities and the research intensity of those universities.

There was major concern back in August that a huge drop in international student numbers would have a very significant impact on our research activities. I think I am right in saying that our international students



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contribute almost £2 billion a year to our research activities, so we are talking about a significant amount of money.

You will be aware that a working party led by the Minister, Amanda Solloway, looked at possible mechanisms by which Government funding could be provided to bridge that gap. A research support package has been developed and that will help universities with shortfalls of up to 80% of international student income. That package is a mix of grants and loans, with the emphasis on loans rather than grants. Having the grant will be contingent on having a loan, so you could not opt for a smaller amount of money and have a grant; you would have to have a loan as well.

There are challenges around that because for some universities having the loan could impact on their bank covenants, and there are areas around that that we will need to think about very carefully.

Certainly, from Universities UK's perspective we very much welcomed that intervention from Government. There is a lot more detail to work out as to exactly how it will work.

How many international students we will all end up with is, of course, still an open question. Talking to my colleagues across the sector, application and acceptance numbers look rather better at the moment than we thought they would, but the proof of the pudding is very much in the eating. It is the international students who turn up and enrol who will contribute to the bottom line. Therefore, until we get to the actual point of enrolment we will not be able to say anything very concrete about international student numbers.

Many universities have deferred postgraduate courses to January starts, so we may well see reductions in the number of postgraduate students coming in September/October and changes in January.

It is a moving feast. At the moment, the signs are positive, but I am not confident until the students actually turn up.

Q14 **Aaron Bell:** You do not want to put a concrete number on it, but do you have a range? Are you expecting it to be over 50% of what we had last year?

**Professor Buckingham:** It is too difficult to say because there are too many different universities involved and I do not have the data. I can say that in my own university it would certainly be more than 50%, assuming they come.

Q15 **Aaron Bell:** Professor Muscatelli, do you want to add to the general comments on funding for research?

**Sir Anton Muscatelli:** There are two main areas of concern. One, as highlighted by Julia, is the potential shortfall of the cross-subsidy element. The figures for 2018-19 are of the order of a £2 billion cross-



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subsidy from non-publicly funded teaching towards research, which was running a deficit of about £4.4 billion in 2018-19 on a full economic cost basis. Indeed, for publicly funded teaching, even for our home students, we run a deficit of about £611 million. The loss of international students would be considerable.

The problem at the moment is not the demand for UK courses. All of our universities are experiencing very strong demand. Even going into the pandemic, applications were strong. As Julia says, the concern is more about whether these students will be able to travel to the UK given that international travel has been disrupted. Many visa offices have been closed.

We need to see how this unfolds. The projections I have seen across peer universities range from no loss at all in international numbers to potential losses as big as 40% or 50%. These are huge ranges, so we need to be aware of that.

There is a second area of disruption. Many projects that are non-Covid related have been disrupted. Labs have been closed. We have received support through UKRI for some of that activity, but we have to be aware that, if there is a further wave of the disease in the coming year, and a further closure of labs, this will cost several hundred millions simply in the costs of extensions for those projects, so there could be considerable disruptions to overcome.

Q16 **Aaron Bell:** There is simply some research that cannot take place because of the physical restrictions.

**Sir Anton Muscatelli:** Correct.

Q17 **Aaron Bell:** Dame Nancy, do you have anything to add to what your colleagues have said?

**Dame Nancy Rothwell:** I have two comments. As Julia noted, the Government have been very good in coming in and providing support by way of grant and loan for up to 80% loss of international student fee income, but the pandemic has highlighted a long-standing issue. By everybody's estimates, our research is funded only to the extent of about 72% of the true cost. That has been okay as long as we have had international fees, residencies, commercial activities and activities that are cross-subsidised. If you like, it has opened up the Pandora's box that we all managed to keep the lid on for a long time.

The short-term solution is great, but we are now working with Government and the Minister for Science and Research to say, "We can't let this long-term problem go on because it will keep coming back."

The other point I would highlight is the medical research charities, which provide a very large amount of funding. The UK is outstanding at biomedical and health research, as we have seen in Covid. Cancer Research UK, the British Heart Foundation and dementia charities have



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been very hard hit and they are already cutting back very hard. We also expect business to cut some of its funding for research. Like many sectors, we feel we are being hit somewhat on every side at the moment.

**Q18 Aaron Bell:** Speaking of the capacity at the Russell Group, obviously your universities are more research intensive. How do you see research funding specifically affecting the Russell Group differently perhaps from other universities?

**Dame Nancy Rothwell:** The Russell Group universities are all very research intensive and have a significant number of international students. This problem is quite focused on the research-intensive universities. There are fewer research-intensive universities with international students, but the concentration is very much in universities like those in the Russell Group and a number of others beyond. It is hitting those universities harder than some others.

**Q19 Aaron Bell:** We are all hoping that this year is essentially a one-off. I note what all of you have said about the long-standing problems, but, if it does end up being a one-off and we can go back to the numbers we had before, are the recent budget surpluses from increased tuition fee income sufficient to manage the impact of Covid for most of your universities?

**Dame Nancy Rothwell:** For most universities, possibly, but it depends on the scale. If we are going to lose 50% of our international students, there are virtually no universities that can withstand that loss without taking a significant loan. Of course, we are preparing to take loans to make sure things are fine, but they have to be paid back.

We are also all making huge savings in efficiencies. We are deferring capital projects and long-term maintenance. These are all things that will come back and bite us at some point, and, quite rightly, in terms of funding we are pulling ourselves in. Although we all hope that Covid is a short-term health problem, it is going to be a longer-term economic problem for society and universities alike.

**Q20 Aaron Bell:** Professor Buckingham, do you want to add anything from the wider sector?

**Professor Buckingham:** It is important to understand that international undergraduates are coming to the UK for three, four and sometimes even five years, if they do a placement year, so the impact from the loss of students in the coming academic year will have a follow-on effect for three or four years, ditto some postgraduate programmes, which are two years, not one year. I think it would be a mistake, no matter how well things turn out with Covid, to imagine that the ramifications in universities will all resolve themselves within a year.

**Q21 Andrew Griffith:** Thank you for all you are doing. You are a vibrant and important part of the economy, and we are all very grateful that you are making efforts to get back to work or college.



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My question is really a supplementary. It sounds a little premature today to understand where exactly you are on numbers, although I think you are through the UK admissions now and you have given your places. Term is in 21 days' time for most universities. Can you just talk through when you get visibility on the scale of that? I appreciate it must be quite fraught for you, not having that degree of forward visibility, but from where we are when would we know the scale of that delta?

**Dame Nancy Rothwell:** It will vary somewhat between universities. We have recruited UK students. As a result, many universities like mine and, I suspect, Anton's and Julia's are slightly over on home students, largely as a result of the change in A-levels. That does not help us financially because, as Anton mentioned, we break even or make a loss on home students.

As for international students, we will not know for certain until they not only arrive but register and pay. It is one thing to accept a place; it is another thing getting a visa and getting here safely. For us, the very last possible date of payment to register for this year is 31 October. We are very hopeful that many students will arrive and register before then, but that is the very last date.

As I was explaining to my council today, that is not quite the time we breathe a sigh of relief. Imagine there is another spike in infections and those international students decide to go home, or are forced to go home, and they do not make the second payment. It is not as though it will all be done and dusted then, but it will be towards the end of October for many universities before they have certainty at least in this phase.

**Professor Buckingham:** I would concur with Nancy. In relation to home students, if you look at the sector as a whole the picture is probably very different. Clearing goes on for weeks and weeks now. It used to be a two or three-day event; it now drags on right into the beginning of term, and where you sit in the sector depends on where you actually end up recruiting students. There are still a number of universities very actively in recruitment mode, and they will not understand what the home student picture looks like until the beginning of term.

On international students, I absolutely concur with Nancy. I suspect that for all of us it is going to be the end of October before we can realistically say what our intake is in the coming year.

It is also important that we remember our returning students. Many of us have returning international students, and the same issues about coming to the UK will apply to them as they do to other students, except they will have their visas. That will be the only comforting thing. There are obvious concerns among parents and families about travel and so on, but I think it will be the end of October before we have that picture.

**Andrew Griffith:** That is useful.



Q22 **Chair:** Professor Buckingham, do you anticipate any institutions failing financially this autumn?

**Professor Buckingham:** A number of institutions are concerned about student numbers. What I do not know is how that relates to their finances. I think we will have to wait and see. Within the UK I think we are all agreed it would be very worrying if a university were to go under, not just for the students, who are incredibly important, but the local communities that are very dependent on the university. Universities will be one of the biggest employers in the community. They are working very hard to support economic and social recovery, and many of them are particularly focused on their local communities.

Q23 **Chair:** Would you not need a contingency plan? If it came to a failure, I imagine that the university system collectively would want to try to find places for those students and there would be an implication for researchers. Is it wise to wait and see? As Universities UK, should you not be preparing packages of intervention if, as we hope they will not be, they are needed?

**Professor Buckingham:** Universities through the Office for Students are all required to have a plan for what they would do if they were unable to continue a course, were going to close a campus, or any measure like that. Therefore, every university should have plans in place on what would happen. If a university has a problem, Universities UK would certainly want to work with it and with the Department for Education to find a solution.

We have had experience of a university going under. I think the sector came together very well last year when about 3,500 students had to find themselves places in a very short time, but it is very important when something untoward happens that Universities UK does help and support where it can and works very closely with Government in the best interests of the students, staff and the local community.

Q24 **Chair:** Are you satisfied in anticipation that that system of rescue and support is in place?

**Professor Buckingham:** There is still work to do. As you will know, the Government have put forward a restructuring fund that is designed to help universities reorganise themselves if they get into financial problems. We would want to work very closely with the DFE to make sure that was implemented effectively.

Q25 **Graham Stringer:** Can I follow up that question directly? Because of Covid there is a problem for some universities in being unable to predict student numbers, particularly overseas students. On top of that, you have a problem with pensions. Can I repeat Greg's question? Is it likely that any university will end up being unable to pay its bills, effectively being bankrupt, because of those two factors?



**Professor Buckingham:** The pensions issue is very serious and I do not even begin to think of minimising it, but the pensions impact will not happen in the current academic year. At the moment we are just beginning a consultation with employers on behalf of USS on the valuation of the USS and the technical details around that. It will probably be after Christmas before we have any real insight into what the contribution requirements will be for universities and how we will negotiate with the unions on any possible changes relating to that.

I think I am correct in saying that the deadline for a decision on USS pension is the end of July, and changes in any funding would come in from then.

To go back to your point, it is very important that universities are highly aware of all these issues and that UUK is working with the Department for Education to make sure that any situation is managed properly and it is protected.

**Dame Nancy Rothwell:** These are major concerns that exercise us all the time. On the whole, though not 100%, the universities in the USS scheme are not the ones that have difficulty recruiting home students; they are the ones that may suffer as a result of international students, and the pension is a separate concern.

Coming back to the university sector supporting others, we will do that. It depends very much on the nature and location of the university as a whole. If it is in a large city with lots of other providers that can pick up those student numbers, as has happened previously, that is not difficult. If it is rather highlighted or highly specialised with not many other universities able to pick it up, that presents a greater problem.

Q26 **Graham Stringer:** To follow up with a very specific question to Dame Nancy, going back to the last question but one about international students, I know Manchester and other universities have a large number of Chinese students; they are a major financial contributor to the university. Since the changed atmosphere in international relations with China, particularly around Huawei but other factors, is there any sense that that is affecting the number of Chinese students who are likely to come and register?

**Dame Nancy Rothwell:** On the basis of those who have accepted and applied for visas and accommodation, no. Time may tell; it may have an impact. Interestingly, in speaking to our Chinese consul general he put forward the view that in terms of international relations students are wonderful ambassadors. They travel to countries, experience different points of view, and go back and share them. I was quite enlightened to hear him say that.

At the moment we have seen no downturn—quite the opposite, and huge efforts in transport from China. I have greater worry about some other regions around the world that could impact adversely on the diversity of



our international student body, which we have all been trying to increase of late. For example, transport from other parts of the far east, India and central and South America is going to be much more difficult than it is from China.

**Q27 Graham Stringer:** I guess the removal of the student number control will impact universities very differently. Can you give us some indication about how that will impact both funding and research?

**Sir Anton Muscatelli:** It is an interesting issue. The student number controls were introduced in discussion with DFE. There was some concern at the time of disruption to international students that there might be a rather difficult period around clearing—whether there was too much competition between universities for home students—but, as has been pointed out, because of what has happened through centre-assessed grades and, across the four nations, additional higher grades our numbers have increased. My own university has had about 600 to 700 more home students than we anticipated.

The student number controls were rightly removed in that circumstance when CAGs were introduced in A-levels and the SQA put in teacher-assessed grades in Scotland, but it will be interesting to see whether any universities in the UK find themselves disadvantaged by what happened. I think it has been a reasonable outcome.

However, there is an impact on our teaching loads, in particular in research-intensives. Two or three schools in my own university and, I am sure, in faculties in many other universities are being heavily impacted, because that increase in student demand was not evenly spread. There are particular disciplines under tremendous strain, and it is impossible for us to gear up operations simply by hiring more staff in a matter of weeks. That is not how universities operate.

**Q28 Graham Stringer:** Are you thinking particularly about medicine and some of the sciences that need a lot of expensive kit?

**Sir Anton Muscatelli:** In medicine and areas like computing, physics and chemistry it is much more difficult. However, I do not want to underestimate the impact on areas like law schools. They are not labs, but if suddenly you have 20% or 30% more students you very quickly have to gear up if you are supporting these students through small-group teaching like seminars, as would happen in my university. I have to say it has been quite an impact.

**Dame Nancy Rothwell:** I am sure you are all very well aware that once we have made an offer to a student, if they achieve that grade, we are under a legal obligation to accept them, which means that, even though many of us filled our places before the centre-assessed grades came in, we had to take them, if we possibly could do so. Medicine and dentistry are somewhat separate because they rely on clinical placements, which is



not necessarily within our gift, but, as Anton said, in certain disciplines we have to take more students than we would otherwise.

If those subjects have international students and they go down, that will not be a problem, but many of those subjects, like law, physics and computer science, do not have particularly high numbers of international students, and then you add to that social distancing and having to find extra spaces and extra staff, so it is creating pressure. It is also putting pressure on research active staff. In several of our disciplines we have cancelled research leave because of the need for teaching.

- Q29 **Graham Stringer:** You have been through a difficult time and you will not know quite what happens for another three to seven weeks or so, but you are offering a very different product to students from the one you offered 12 months ago. Do you all feel comfortable about asking for the same fee for that different product?

**Professor Buckingham:** I will start with that and my colleagues will want to chip in. It is important to recognise that the teaching we are offering this year is certainly different. It has taken an enormous amount of time, effort and investment from staff and universities to transfer face-to-face teaching to online teaching. Doing the type of teaching we are offering this year is very different from setting up a traditional online course, which thousands of students do from all over the world. Much of the virtual work that we will be doing with students will be in small groups; it will be highly interactive and it will make use of very sophisticated technology—simulation and things like that—and we will be providing to students the wrap-around support they will need.

We are very conscious that these students have been through an extraordinarily difficult time of their lives; they have been really disrupted over the past six months. We are very concerned about their mental health and wellbeing and every university is investing very significantly in those areas to support students.

We call student fees tuition fees but that is a misnomer; they are university fees and they pay for the totality of the university experience, not just the teaching.

- Q30 **Chair:** Will the student experience be as good this year as normal, Professor Buckingham?

**Professor Buckingham:** It will be different. It is difficult to say what is good and bad. I think it will be different, but universities are working very hard to make sure that it is a good experience for the students. Of course, it will be different. If they have to go through social distancing and a lot of the teaching is online it will be a different experience, but we are doing our very best to make sure it is a truly broad educational experience and that when these students graduate they will have the same range of knowledge, skills and aptitudes as other students. Their



social lives will be very different—the things that I am sure we all enjoyed at university simply will not be possible for this cohort of students.

Q31 **Chair:** Do you think there is any case for a reduction in fees this year to provide some recognition, or a reasonable gesture, that students will not be able to have as many face-to-face teaching sessions?

**Professor Buckingham:** No, I do not because, if anything, the cost to the university is greater in delivering this type of teaching because of the investment it has had to make to support the students.

Q32 **Carol Monaghan:** I want to talk about the Government response, but maybe I could go back a step to start with. We heard that one of the issues with international students was the visa application. Is there anything the Government should be doing to make that a more straightforward application?

**Dame Nancy Rothwell:** They have probably done quite a lot. The visa offices were closed in many countries because of Covid. We are hearing now that the backlog is being cleared by, I hope, more resources going into UKVI. There is a limitation in the USA with regard to the UK.

Q33 **Carol Monaghan:** At the start of July the Secretary of State for BEIS, Alok Sharma, made a statement that the Government intend to increase R&D funding to 2.4% of GDP by 2027. Has anyone done their sums about what that means given that GDP appears to be suffering a major hit?

**Sir Anton Muscatelli:** What was helpful in the Government's announcement was that, although the intention is to increase investment to 2.4% of GDP, they mentioned the sum of £22 billion per year, so it is an absolute sum, which is very helpful in the context of the GDP figures, as you rightly say, being rather volatile over the next couple of years. That has been hugely helpful.

What we would be pressing for as a research intensive is to look at exactly how that works in terms of the full economic cost funding of research. That goes back to the earlier discussion. It is really important that we do not rely on a cross-subsidy. We may not be able, given that investment, to reach full economic costing on UKRI or NIHR-funded research, but we need to get closer to 100%.

We started off around 2004-05 with a commitment to go to 80%, and that has now been eroded to 72%. As Nancy mentioned, for biomedical charities full economic cost recovery tends to be 60% or below, so we need to plug that gap.

One important element is the amount of that total research pot that the Government put into the so-called QR block grant funding. That block grant funding used to be about 80% of research council funding; it is now around 72%—I need to check my figures. The ratio between QR and research council funding is now closer to about 55%. That is a big concern. We need to get that closer to where we were back in 2007,



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which was over 80% of research council funding; otherwise, it is impossible for us to match the research project funding that we do with that additional element.

Let me give two very brief examples.

**Chair:** Briefly, if you would, Sir Anton.

**Sir Anton Muscatelli:** If you look at the vaccine research taking place in Oxford and the Centre for Virus Research in Glasgow that supports some of that activity and the repurposing around Covid, a lot of the investment that we as a university put into that centre has been driven by QR, or the equivalent in Scotland. It is really important that that second element of dual support funding is sustained on the back of what is happening through increases in research council funding.

**Professor Buckingham:** QR has been almost flat for 10 years and the differential is becoming quite significant. As Anton said, it is absolutely critical. If we want to be agile and invest in key research areas, QR is the mechanism that enables us to do that. It is really important that it is sustained and grown.

**Chair:** For those who perhaps do not understand the difference, QR is the money that comes straight to universities for them to allocate, versus money through the research councils that goes in return for bids for particular programmes of work.

Q34 **Carol Monaghan:** Sir Anton, in considering the sustainability of the research base in Scotland, is there anything that would be helpful in terms of UK-wide development when looking at research funding in the landscape?

**Sir Anton Muscatelli:** We need to look at a variety of things. There needs to be very close collaboration between the four nations and devolved Administrations around this landscape. It is a shared responsibility, so when decisions are taken on investments by research councils, ARPA or other mechanisms we need to make sure it all fits together; otherwise, it is not an even, competitive landscape.

I did a report for the Scottish Government on this. We need to look again at the proportion that comes through block grants, which is the equivalent of QR in Scotland, and through UK research councils to make sure Scotland remains competitive in this area. The same would apply in Wales and Northern Ireland.

The other area of big concern in Scotland is that similar mechanisms exist in UK health research. For instance, in England we have NIHR research, but only some of those programmes are carried out in Scotland. I think there is a need to look at all of this to make sure that the four nations all contribute to the UK research landscape.

Q35 **Zarah Sultana:** Some of the Government support that has already been



announced in the form of quality-related and tuition-free funding has been brought forward. Is that just kicking the can down the road, and will it simply cause funding shortfalls to reappear in the future?

**Professor Buckingham:** That is a very fair question. Having funds brought forward to enable us to deal with cash-flow problems for some universities in the past academic year has been very helpful, because when the campuses effectively closed down it meant we closed our residencies and lost a whole load of income streams. Therefore, having some funds brought forward to enable us to deal with those situations was helpful. As you rightly say, once we have had the funds we have spent them.

The issue is the same with loans to help people in the short term. If you have a loan you have to pay it back. While it might help with the immediate cash-flow problems, unless you have solved your problem very quickly you are just kicking the can down the road.

Q36 **Zarah Sultana:** Many years ago I worked part time in retail to support myself as a student.

**Chair:** Not as many as some of us, Zarah!

**Zarah Sultana:** With the shutdown of the UK economy in March we saw the precarious existence of students who were also working part time. Many constituents were concerned about how they would pay their rent and so forth. These students work much harder than those who have family support, and this inequality has existed for a long time in higher education.

With the need for students to remain in bubbles, what measures can universities and the Government put in place to help students from low-income backgrounds, who rely on this extra income, make ends meet without risking their health?

**Dame Nancy Rothwell:** Like most universities, we very quickly set up a student hardship fund for those who lost jobs, often supported by many donors within and outside the university, and all of us offer significant additional bursaries for those students. At virtually every university, if students had to go home we let them off the rent in our residencies.

One of the outcomes of the changes in A-levels this year for most universities, certainly for mine, is that there are many more students from disadvantaged backgrounds. I do not have the final numbers yet, but it looks to be up a lot. On the one hand, that is really good; on the other hand, we will have to make sure they do well.

Q37 **Zarah Sultana:** That ties in with my second question about the digital divide and how Covid-19 has shone a light on this across age, backgrounds and geographical locations. The digital divide does not just mean not having access to wi-fi; it is the ability to pay for it. Do you believe there is enough hardship provision within universities to support



students who often would use university libraries for wi-fi and printing and might not be able to do so and tackle this digital divide?

**Professor Buckingham:** It is very challenging. It is not just about access to wi-fi; it is having the laptop or computer to do the work. Many universities have provided funds. We have laptop loan schemes for students to make sure they have access to the technology they require, and we have done a lot of things in the past academic year to be flexible with students to enable them to delay things in order to be able to come on campus, but it is a problem and there is a big challenge ahead.

As Nancy rightly says, it is great that we have far more students from under-privileged backgrounds joining us. We have a big task to do to make sure there is true equality of opportunity. As you say, the problem with jobs and part-time jobs is very real.

One of the things Universities UK has been campaigning for over a long time is a return to full maintenance grants as opposed to maintenance loans. We will continue to campaign for that.

**Sir Anton Muscatelli:** Julia has covered most of this. I was going to mention laptop loan schemes. My university has invested in many thousands of additional laptops to deal with that.

I would echo what Julia said about the importance of reviewing the whole grant scheme and whether additional grants may be appropriate. A lot depends on how quickly this pandemic is resolved. If it lasts two to three years, we will see considerable hardship among young people.

Q38 **Zarah Sultana:** My last question is about job losses that we have seen at universities in recent months, in particular casualised teaching staff. That will have an impact on the ability of universities to deliver socially distanced in-person teaching. What work are the Russell Group, Universities UK and other organisations in the sector doing potentially to reverse those job losses if the international student numbers are what universities hope they are and the domestic numbers are also quite high, in particular those employed on precarious terms?

**Dame Nancy Rothwell:** Obviously, we will reverse if the numbers go up. In many of our universities most of the people who were on so-called precarious contracts were on research contracts of a fixed term. Most research is funded for three years, four years or five years. When it comes to an end the contract ends.

Under normal circumstances, very often they would go on to another contract or job. Sadly, with Covid that has not been happening, so we have not been shedding lots of staff just to save money; there have not been other roles for them to go to, but obviously we will take on more staff if we have more students.

**Professor Buckingham:** I think Nancy has covered the point. However, I would say that many of our researchers aspire to move on to academic



posts. I was looking at some data in *Research Professional* earlier this week. The number of academic posts advertised on the website jobs.ac.uk, which is where academic jobs tend to be advertised, is about two thirds of what it was this time last year, so it looks as though universities are not filling posts. They may not necessarily be cutting posts in making staff redundant, but it does look as though they are not filling them. That will have a knock-on effect particularly on early career researchers who are hoping to transition into academic posts. I think that is a concern. I do not know where those drops are within the sector; I know only the overall numbers.

**Q39 Mark Logan:** I am conscious of time, so I have a very quick question. What is your response to the Government's July 2020 R&D road map and the impact their proposals could have on university research funding?

**Dame Nancy Rothwell:** I was involved in contributing to it, so I think it is extremely good. I did not mean to be flippant.

**Sir Anton Muscatelli:** As a research intensive, the Russell Group is very supportive of the road map. It needs to be turned into a definitive plan very quickly. It is a very high-level document at the moment. There needs to be a very quick decision on exactly where those investments are going.

To emphasise one point, the ambition for the UK to be a global player means it is really important to look at our international research funding. The UK is hugely active in that regard. At the moment we are very big participants in Horizon 2020. None of us knows whether we will be able to associate with Horizon Europe, but, if we do not do so, we need our own UK scheme to allow us to substitute for that.

We are very active in the Global Challenges Research Fund area, which allows us to create great connections across many countries in the world.

These are really important elements that need to be drawn out in whatever plan emerges from the road map.

**Q40 Chris Clarkson:** My question is initially for Dame Nancy and Professor Buckingham, but if Professor Muscatelli has anything he would like to chip in that would be interesting to hear. Given that Horizon Europe is due to start relatively soon, have your members started working on the basis they will not be participating in the scheme from the outset?

**Dame Nancy Rothwell:** Sadly, I will make an assumption that they may not be participating, but they would hope to do so. One of the things we are very anxious about is that there are some international funds. This is not just research funding, important though it is; it is about networks of collaboration, which we simply could not do as a single nation. Therefore, our staff are very concerned about losing that, in particular some of the training opportunities, if we are not in Horizon Europe.



**Professor Buckingham:** I would agree. Staff are increasingly conscious of getting involved in possible proposals because they are worried they might end up not being eligible to submit applications. There are certainly concerns.

As Nancy correctly says, the loss is not just financial; it is the networks that have been built up over many years. I think the value we have from that collaborative activity, which now extends right across Europe, is irreplaceable. If we lose that, personally I think it will be tragic for our research base. We in Universities UK are very concerned and are hoping that we will still have full association.

Q41 **Chris Clarkson:** I have noticed that several other countries like Canada and Japan have also expressed an interest. I know that organisations like the Wellcome Trust—I read its paper on this—have said it is essential for future research. I also notice that the European Commission indicated it did not think it would have a framework in place for third-party countries until 2021. Are you in contact with the European Commission? Are you having any discussions about how you will be able to join up with Horizon Europe?

**Sir Anton Muscatelli:** When I was chair of the Russell Group we had very close contact with the Commission on these issues. There are concerns at the moment around some of the mechanisms about the sharing of cost, which would mean it could be very expensive for third countries to join. This is a matter of considerable concern. We continue to make representations to the Commission to make sure that countries like the UK, Canada and Switzerland, which are outside the EU, can join on fair terms, because that international connectivity is absolutely critical. We are hugely important players in global research and have a lot to contribute, so I hope that it will provide a fair deal to third countries. If not, it is important that the UK has an alternative plan.

Q42 **Chris Clarkson:** On that basis, what would an alternative plan look like?

**Sir Anton Muscatelli:** The Smith-Reid review set out very clearly what the alternative plan could be. For instance, one could imagine that the UK would be able to produce very quickly a European Research Council equivalent around fellowships that can be held by UK researchers but can also attract researchers from elsewhere in the world and encourage collaborations.

I give one statistic to emphasise what Nancy and Julia said. If I go back 10 years, less than 15% of my institution's research publications were joined with international collaborators. That number is closer to 60% to 70%. It is absolutely crucial for the kind of research we do in the UK that, if we are to be leaders, that connectivity should be maintained.

Q43 **Katherine Fletcher:** I want to emphasise my thanks for this today. I know we are running slightly over time, but it is such an important sector. I give a genuine nod to Dame Nancy. We meet again off the back



of your engagement with the N8.

I want to address the question of funding from the private sector. I have been talking to different bodies looking to invest in embryonic ideas that come out of our great research universities. Is there any way the sector is looking to bring that funding slightly further in, especially with research elements that might have a commercial application moving forward? Is that a possibility?

**Dame Nancy Rothwell:** Absolutely. Universities individually do that, but there are also a lot of partnerships that do it, often on a geographical basis. We are in partnership with Leeds and Sheffield on a major fund. It is something that groups such as the Russell Group or Universities UK have not done collectively, but it is something where we could have more input.

**Professor Buckingham:** I agree. As we have said before, our universities are world leading in research, but we really need to be driving the development and innovation side, so any way in which we can work more closely with private investors and build that side would be welcomed. We just need to do more of it.

Q44 **Katherine Fletcher:** I look forward not only to enhancing the golden triangle but perhaps redressing the balance.

**Sir Anton Muscatelli:** There are mechanisms through the strength in places investments that are being made at the moment that do leverage quite a lot of private investment. The question is how we then scale that up. One thing I have proposed—I have proposed it for Scotland but it is applicable to any region of the UK, including many of the English regions—is to try to engender more collaborations, like the N8, which would allow that kind of greater collaboration, particularly in technology transfer and trying to seek co-investment from venture capitalists or patient capital in universities in those regions.

**Katherine Fletcher:** I am very conscious of time. Maybe patient capital is for another day.

Q45 **Graham Stringer:** One of this country's successes is that there was a net inflow of funds from Horizon 2020. If we had associate status in its replacement programme, the best we could hope for is for the flow of funds to be balanced—we get out what we put in—but there is no guarantee we would not contribute and get less out. Is that a risk, and how would you deal with that imbalance—this goes to the core of many of the debates about the European Union—particularly as it would be the EU that was the final adjudicator of any problems in this area?

**Dame Nancy Rothwell:** I think it is a risk. Clearly, the scale of any gap is really important. As we tried to stress earlier, this is not just about direct financial costs or income; it is about secondary gains. Many of the secondary gains we get come from collaboration with Europe, whether they be the UK's leading role in a new drug that is tested in trials across



Europe and is then developed in the UK, new manufacturing techniques or approaches. Clearly, there will be a point when we have to say that, given the cost to the public purse of being in Horizon Europe, if it is that big, it is probably not viable. If it was break-even, I would say it is more than worth it.

**Q46 Carol Monaghan:** You will have to excuse the sounds. I have somebody teaching at a university sitting next to me at the moment, so technology is up and running already.

On the question of Horizon Europe, or replacement funding for it, the UK Government said they would aim to replace any lost funding. How soon would universities need to get that funding, and has there been any discussion with the universities on that?

**Dame Nancy Rothwell:** Immediately.

**Sir Anton Muscatelli:** I would echo that. We have made it very clear that you would need to start making announcements around the autumn essentially about what would need to be done. If, say, a replacement for the European Research Council were to be managed by UKRI, those mechanisms would have to be put in place pretty much over the next few months.

**Professor Buckingham:** I concur with that. I think there is general concern that we are getting very close to the wire and it is urgent that we have some solutions.

**Dame Nancy Rothwell:** Otherwise, we are going to lose very talented people. Research depends ultimately on people. It needs funding, but it is about those talented people. If they come to the end of their contract and there is nothing, they will seek employment elsewhere.

**Carol Monaghan:** I think we are receiving that message loud and clear.

**Q47 Chair:** Finally, to link that to the comments you made on the road map and the move to £22 billion a year, I think I am right in saying that the likely scale of Horizon Europe is about £10 billion a year over the seven years for the whole of Europe, whereas if our domestic funding for R&D is going up from £12 billion a year to £22 billion a year there is a £10 billion increase just for the UK. Is there not a very happy solution here, in that if the money were to be put into the appropriate hands, whether it is through QR to particular universities or into a pot for universities collectively, universities in the UK could have negotiations on new arrangements with counterparts in Europe and beyond, given the buoyancy of research funding?

**Sir Anton Muscatelli:** That is an interesting scenario. If some of the money came to the universities in an unfettered way through the likes of QR, it would certainly allow us to do much more bilateral-type collaboration. Indeed, some of us are doing that in the teaching sphere with other European universities because we are anticipating the end of



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participation in schemes like Erasmus. That is certainly a scheme we could look at. The dimensions you mention are absolutely correct. If the UK increases spending to £22 billion a year, it would allow us to do quite a bit of international collaboration within that envelope.

**Dame Nancy Rothwell:** And beyond Europe.

**Professor Buckingham:** I agree with that. It is not just collaboration with European universities, which of course we do, but with European businesses. Many of us have large research programmes that involve working with supply chains right the way through Europe, as well as working with our university partners. Those will be at risk if we do not secure some funding.

**Chair:** Professor Buckingham, Sir Anton and Dame Nancy, thank you very much indeed for your time with us. These are very important matters. As you are not just heads of your own universities but leaders of the sector, may I convey on behalf of the Committee our recognition of and gratitude for the extraordinary work that has been done during the past six months on research and mobilisation to help the national medical effort, the management of last year's cohort of students and the preparation for this year's? I know it has been a very intense time and everyone across the university sector has worked incredibly hard, so perhaps we may thank them through you. Thank you very much indeed for joining us today.