

The academic response to COVID-19

A survey report

October 2020

Contents

	Foreword	03
	Executive summary	04
Chapter 1	How has the pandemic affected researchers?	05
Chapter 2	Perceptions of the political response	14
Chapter 3	Impact on research funding	18
Chapter 4	Attitudes to publishing and sharing research	26
Chapter 5	How can researchers contribute?	35
Chapter 6	Mitigating future disasters	42
	Next steps	49
	Methodology	50
	About Frontiers	52

Foreword

COVID-19 has posed an unprecedented challenge to the international scientific community. Along with the disruption faced by most of the world's population – lockdown, remote working, isolation and anxiety – many researchers have felt an added pressure to understand, cure and mitigate the virus.

Science has been thrust into the spotlight.

However, there is limited insight into what impact COVID-19 has had on researchers, their work and the implications for science. Frontiers designed this survey to capture the international academic response to, and effects of, the pandemic. In one of the largest academic surveys ever conducted, more than 25,000 members of our academic community participated, representing diverse countries, roles, and areas of research.

We have been truly inspired by how the research community has mobilized to work together and, in many cases, volunteer their expertise to collaborate

on novel solutions to the crisis. Despite concerns around future funding, the scientific community is pragmatically considering how to prepare for and mitigate future crises, including the key challenge of our time - **climate change**.

Frontiers' mission to make science open, so we can live healthy lives on a healthy planet, has never been more important than it is today. It has never been more crucial to share research results and data quickly and openly.

Science saves lives. And **open science** will get us there faster.

I would like to thank everyone who participated, and for their ongoing commitment and dedication to science, uniting against COVID-19 and on a common mission to make science open.

Dr. Kamila Markram
CEO and co-founder,
Frontiers



Executive summary



25,307
total respondents



152
countries represented



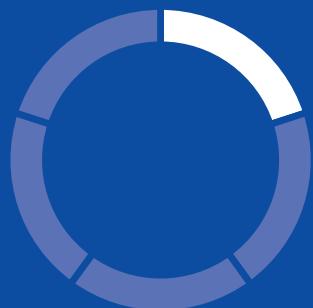
Conducted in
May and June 2020

- 1 Despite the massive disruption, researchers' day to day work has **not been significantly affected by COVID-19** at the time of the survey, with many able to continue their professional role throughout.
- 2 Many researchers expressed that policy makers **had not sufficiently taken scientific advice into account** to mitigate the pandemic.
- 3 Nearly half of the researchers surveyed fear that the pandemic will have a **long-lasting effect on funding**.
- 4 Researchers ask that policy makers invest **more funding into basic research**, and better ways for science to advise policy and decision making.
- 5 The pandemic has encouraged many **to reconsider how they share their work** with researchers more likely to publish open access, share their data and use preprint servers.
- 6 **Most researchers want to contribute to task forces**, primarily with research into the virus itself or through interdisciplinary knowledge-sharing.
- 7 There is concern about future pandemics, but **researchers are equally concerned about climate change**, which we can prepare for and mitigate with the help of science.
- 8 Researchers stress the **importance of learning from the COVID-19 pandemic**, allowing us to become more resilient in the future.

Chapter 1

How has the pandemic affected researchers?

Key findings



Many researchers had managed to adapt and continue working throughout – **only one in five said their role had changed completely** or they have been unable to work.



There is a large variation in the respondents' perception of **disruption depending on their country location** – particularly in terms of support they receive to help them work at home.



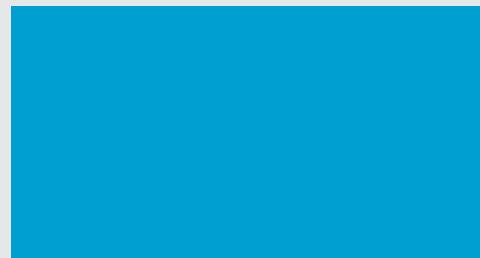
Optimism about a return to normal was high, with nearly **three-quarters** projecting that their professional activities will go **back to normal within a year** once the pandemic is under control.

The majority of researchers have been able to continue working

One fifth reported a fundamental change in their professional lives due to the pandemic. However, around four in five reported either that their work is unaffected, or that they have managed to adapt working practices to perform their role and maintain a level of continuity.

It's an inconvenience, but I am managing to perform the majority of my tasks

70%



My role has changed completely or I am no longer able to perform my work function

20%



My working processes are unaffected

10%



Figure 1

24,894 respondents

How has the pandemic affected the way you work?

South American countries report the most disruption to their work

The largest share of respondents to say COVID-19 has not affected their work processes came from South Korea; more than one in five said their work was unaffected by the pandemic.

South American countries appear to have been hardest hit, with almost a third of respondents from Argentina, Chile and Brazil reporting that their working practices have been affected.

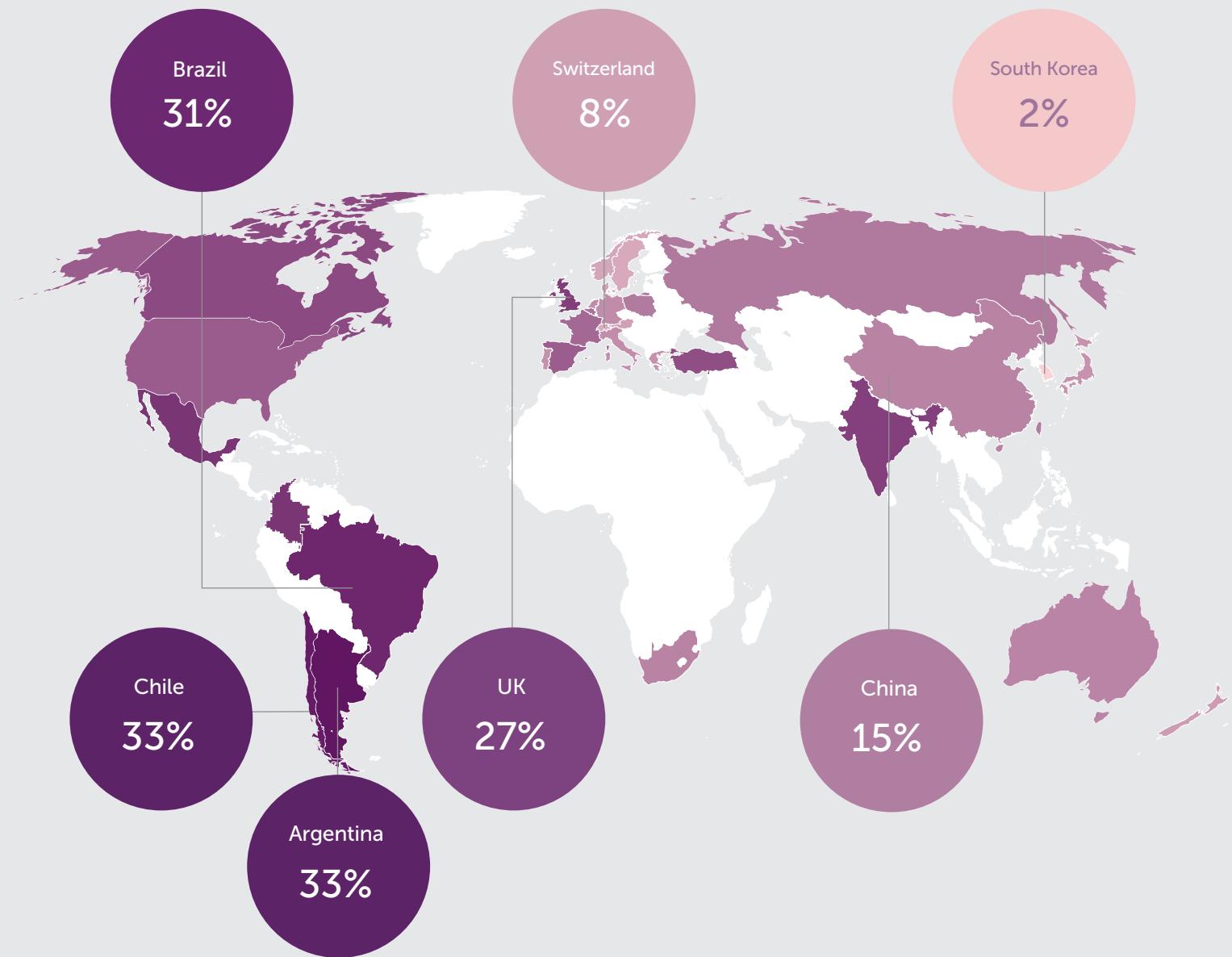


Figure 2

24,894 respondents

I am no longer able to perform my work, or my role has changed completely.

Countries in white did not reach the minimum reporting size for this question.



Writing papers for publication has been the most common task during the pandemic

Three-quarters reported that they are writing papers for publication - a task which can more readily be performed remotely. The fact that researchers can continue with activities suitable for working from home – including writing papers and online teaching – helps to explain why the reported level of adaptation and continuity during the pandemic is high.



Figure 3

24,918 respondents

What are you currently working on?

Respondents were asked to select tasks from a suggested list and could select more than one option.

Most countries believe their organization is prepared for remote working

Researchers are positive about the support they've received allowing them to work remotely, although there is a geographical split.

As many as three quarters in Sweden and New Zealand say their organization is sufficiently prepared for remote working, compared to fewer than two fifths in Argentina and Brazil.

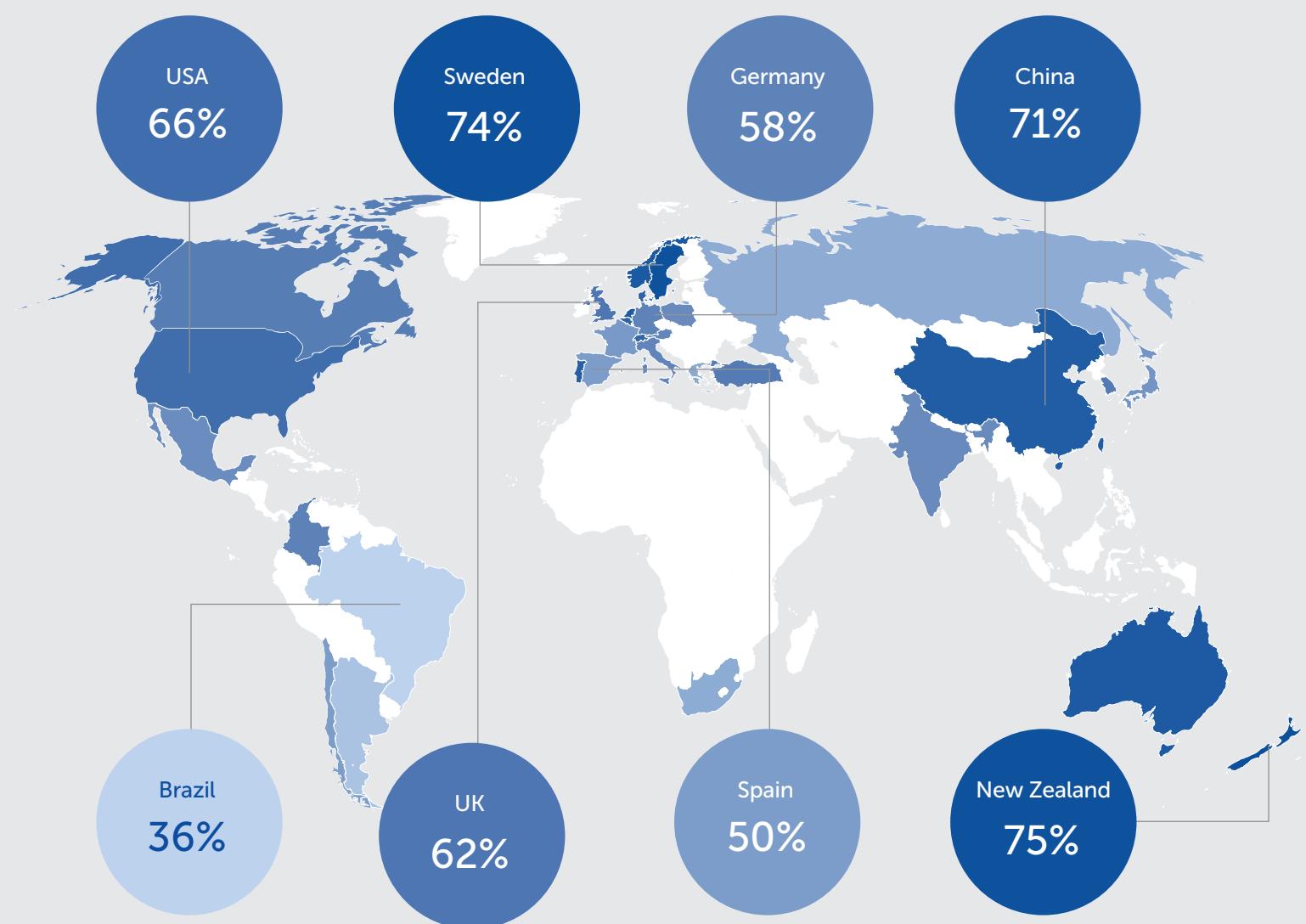


Figure 4

22,790 respondents

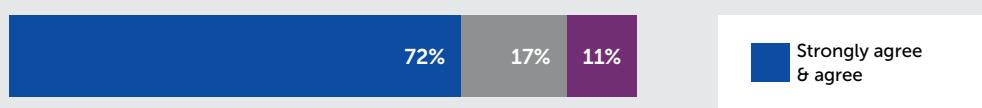
I believe my institution or organization is adequately prepared to work remotely.

0% 50% 100%

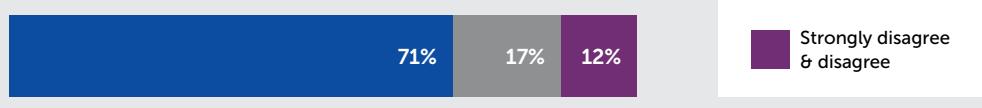
Countries in white did not reach the minimum reporting size for this question.

Most researchers are positive about the support they've received from their organization

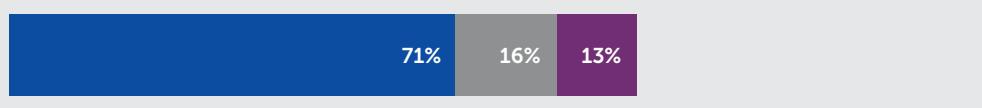
My institution / organization is supporting me during the COVID-19 pandemic



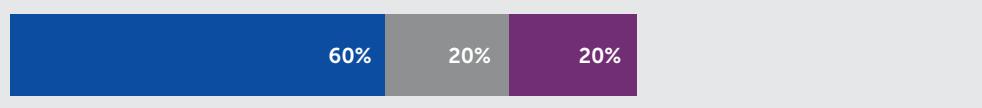
I have confidence in my institution/organization's ability to navigate through the COVID-19 pandemic



I believe my institution / organization is taking appropriate steps to minimize disruption during this time



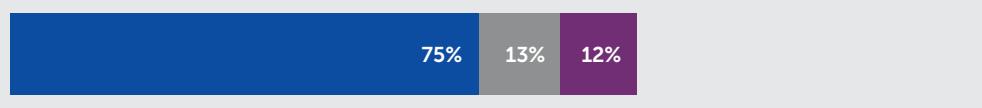
I believe my institution / organization is adequately prepared to work remotely



The leaders at my institution / organization are appropriately visible/accessible during the COVID-19 pandemic



I am receiving timely communications from my institution/organization about the COVID-19 pandemic



I believe the leaders at my institution/organization have made effective decisions regarding the COVID-19 pandemic

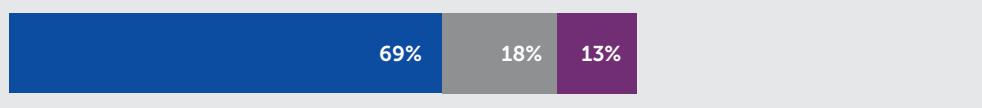


Figure 5

22,790 respondents

Researchers predict a return to normal working practices within a year after the pandemic is under control

Almost three quarters of researchers predict a return to normal working practices within a year. Among those, over a third are optimistic that professional activities will be back to normal in four months or less.

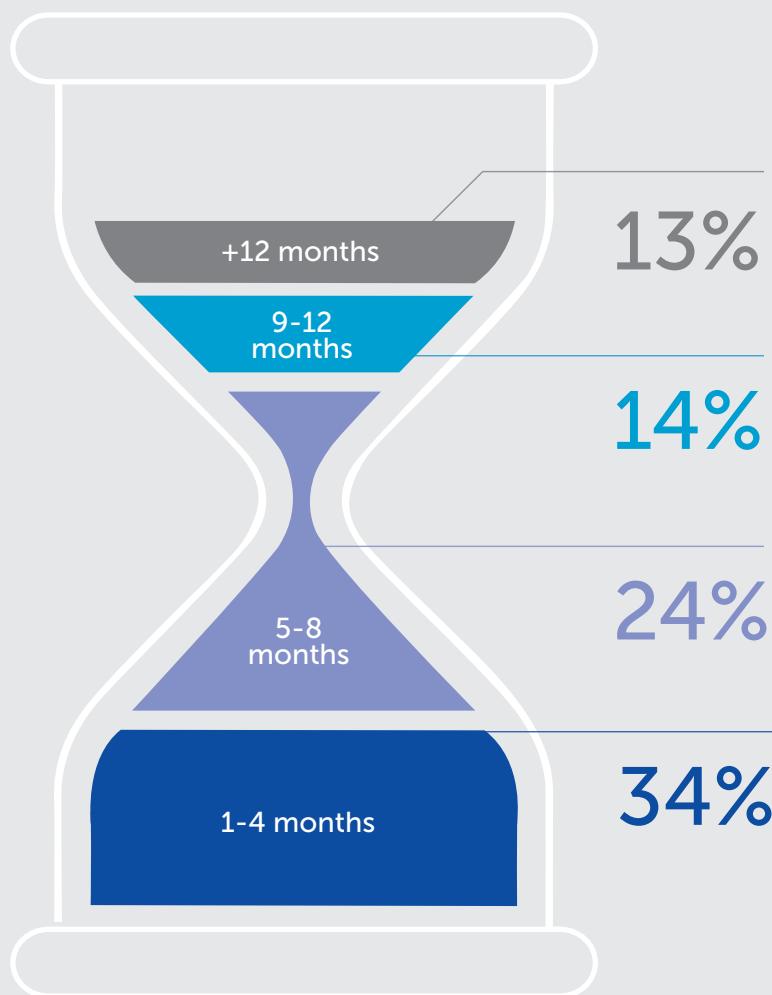


Figure 6

20,607 respondents

How long will it take for professional activities to go back to normal once the pandemic is under control?

“

Internet access is essential during the current situation: I can continue my work only because I have the internet. One major threat that institutions might want to prepare for is an internet shortage.

European countries tend to be optimistic about a fast return to normality

The countries that responded with the most optimism for a fast return to normality include China - the first country to be impacted by the pandemic.

There is more pessimism in predominantly English-speaking countries including the UK, Australia and New Zealand.

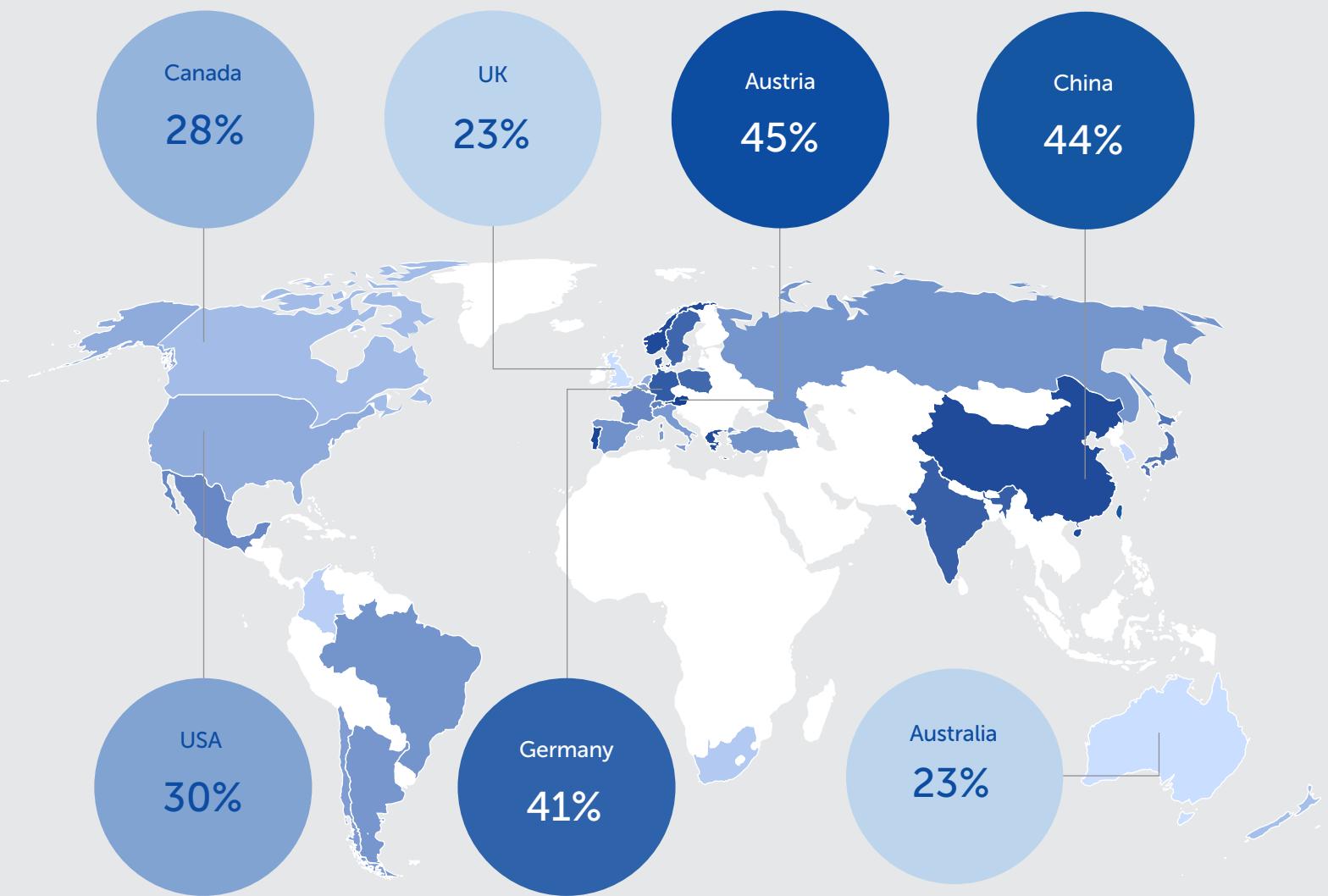


Figure 7

20,607 respondents

I expect professional activities to return to normal within 1 - 4 months once the pandemic is under control.

0% 50% 100%

Countries in white did not reach the minimum reporting size for this question.

Expert commentary



Prof. Xia Li

Huazhong
Agricultural University,
Wuhan, China

The coronavirus pandemic has created delays and slowed down the scientific process. Field experiments were affected because researchers were unable to record or manage data and lab materials were lost because no one could go in to take care of them.

What surprised me most is the speed at which the pandemic took hold. However, if we learn to deal with it more efficiently, scientifically, and collaboratively, we can mitigate the profound impact it has had on so many lives.

Academic institutions must make a concerted effort to implement stringent response policies. Most importantly, the actions taken by institutions should be scientifically sound, whilst ensuring that researchers and students feel safe both psychologically and physically in their working environment.

Since our labs re-opened, we have shared a collective awareness and understanding of the urgency regarding protection. Wearing masks and social distancing has become the norm and we are optimistic that working life can resume under these new conditions.

“

Academic institutions must make a concerted effort to implement stringent and dynamically adjusted response policies.

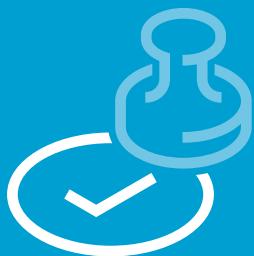
Chapter 2

Perceptions of the political response

Key findings



When asked if they believe policy makers had sufficiently considered scientific advice, **opinion differed** significantly according to country, with respondents from the **US** least likely to agree.



Researchers in **New Zealand** were **more likely** to think scientific advice **had been considered**. At the time of the survey New Zealand had mitigated the spread of COVID-19 particularly well.

Some countries show a significantly higher level of satisfaction with policy makers' use of scientific advice

Researchers in New Zealand have the highest satisfaction levels, with most agreeing that their policy makers had taken scientific advice into account.

The majority of researchers in the USA, Brazil, Chile and the UK disagreed and did not feel that policy

makers had listened to scientific advise.

It is important to recognize these results reflect respondents' perceptions of whether they believe the advice had been followed; answers may have been influenced by many political and social factors.

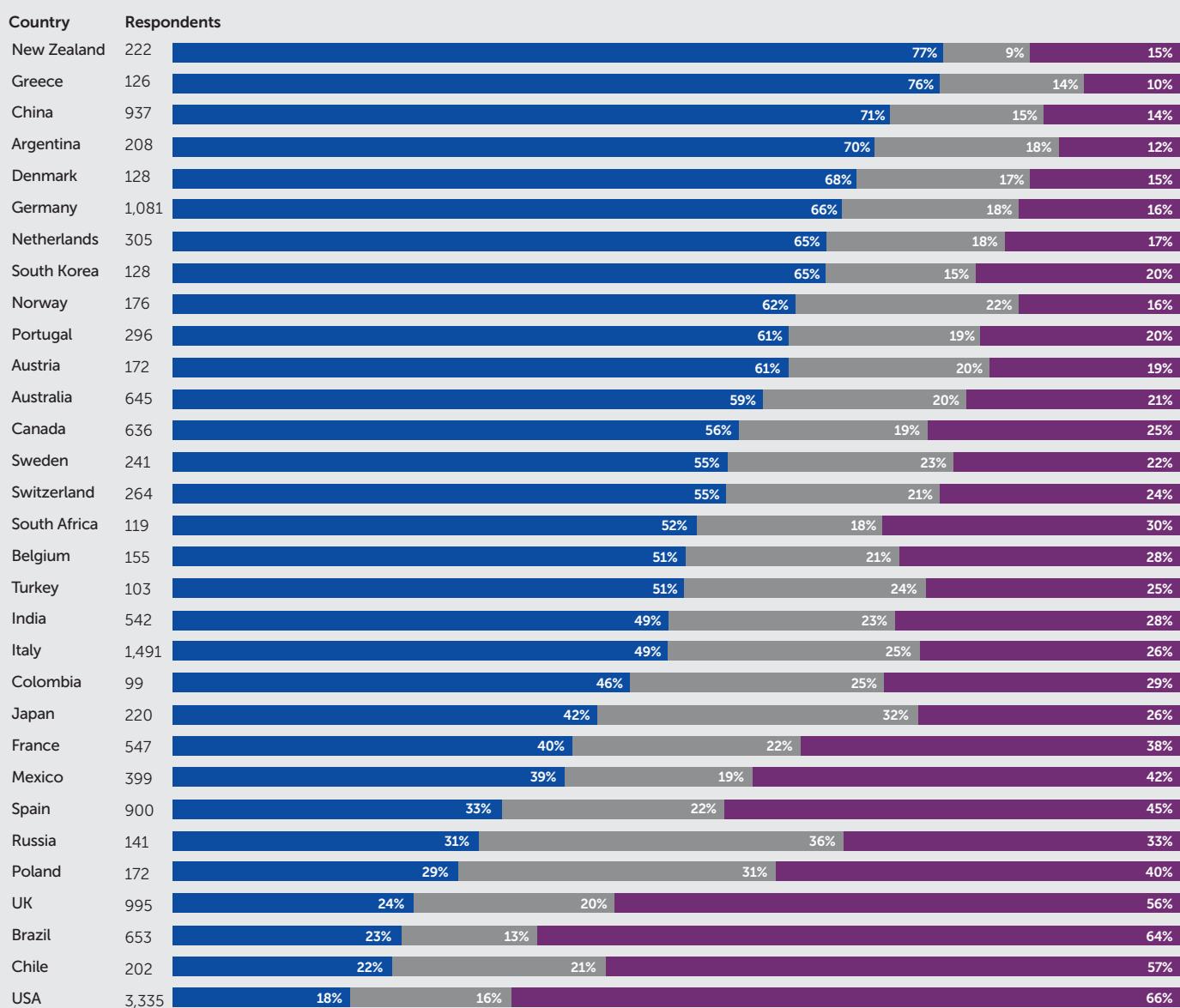


Figure 8

20,694 respondents

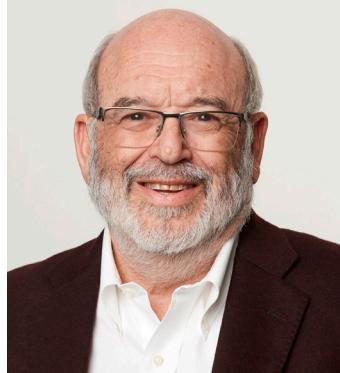
I agree that policy makers have taken scientific advice into account.

Agree & strongly agree Neither agree nor disagree Disagree & strongly disagree

“

COVID-19 has brought the world to its knees. Global collaboration, cooperation and fair governance are key. It's time to leave competition behind and work together as one human family.

Expert commentary



**Prof. Sir
Peter Gluckman**

Chair, International
Network for
Government Science
Advice

We're living in a unique time, where science and science advice is on the front pages of the newspapers. And while most scientists get their information from media commentary, with no more insight than anyone else, we are learning a lot about how science advice and policy works.

While we do not know what advice was given and if it was used, this data suggests more comfort in those countries that are coping well – those who took early lockdown decisions, have had similar previous experience, for example with SARS, and who recognised science as key to pandemic management decision making.

Scientific advice will only succeed if policy makers are receptive to it.

“

Scientific
advice will
only succeed
if policy
makers are
receptive to it.

Chapter 3

Impact on research funding

Key findings



Countries in Central and South America report seeing the **biggest impact to funding**, with most researchers reporting cuts during the pandemic.



Most respondents are concerned that there will be a **long-term effect** on the funding available to them.



Even during this public health crisis, scientists ask policy makers for **sufficient, stable funding** for basic research to tackle future and ongoing challenges.

The immediate effects on funding are unclear, but very few researchers report an increase

One third of researchers reported that the funding available in their field had not been affected either way by COVID-19. This suggests that the widely-reported surge in research funding levels has been concentrated in a few specific areas.



Funding has been redirected from my area: **less is available**



Funding has increased in my area: **more is available**

25%

6%



There have been **no changes to the amount** of funding available



I don't know

33%

35%

Figure 9

22,496 respondents

How has funding in your research area been affected since the pandemic?

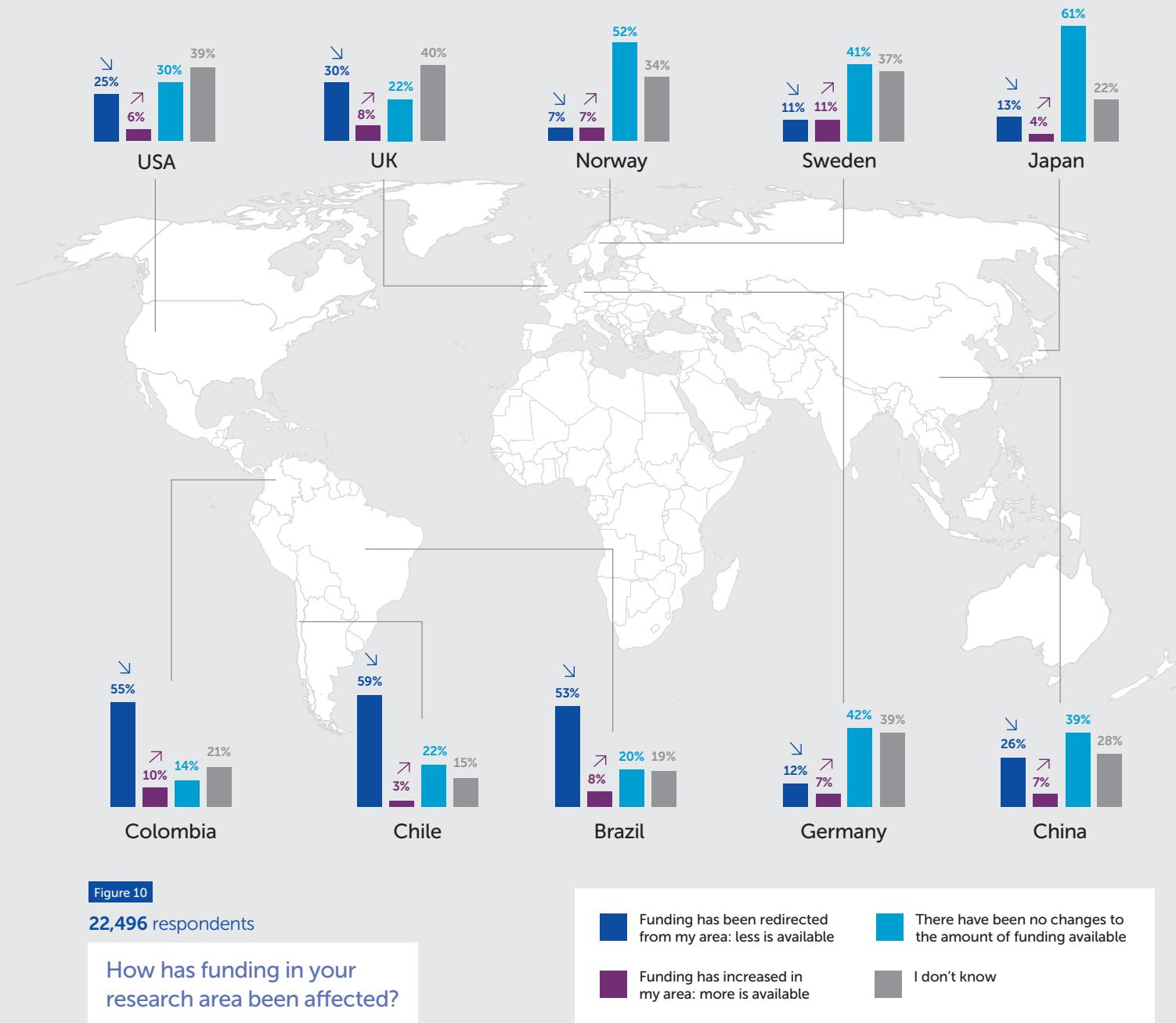
Distinct geographical patterns emerge relating to the impact on research funding

Researchers in countries with independent, well-funded research systems report fewest cuts to funding and a high level of stability. This group includes European countries and those with highly advanced innovation systems, like Japan. In fact, Japan shows the most stable picture with over 60% reporting no change to funding. These countries also tend to have robust investment in science; at least 3% of their GDP.

Another cluster including Chile, Brazil and Colombia have a substantially higher share of reported cuts than

increases, suggesting a net decrease in funding. These countries typically have strong research systems, but vulnerable public sector economies and more direct involvement in research policy from government.

In scientific powerhouses like the US, the UK and China, respondents reported significant disruption. Almost a third of the UK's respondents said funding had decreased, while only 8% reported an increase.



Concern about the long-term impact on funding is widespread in the research community

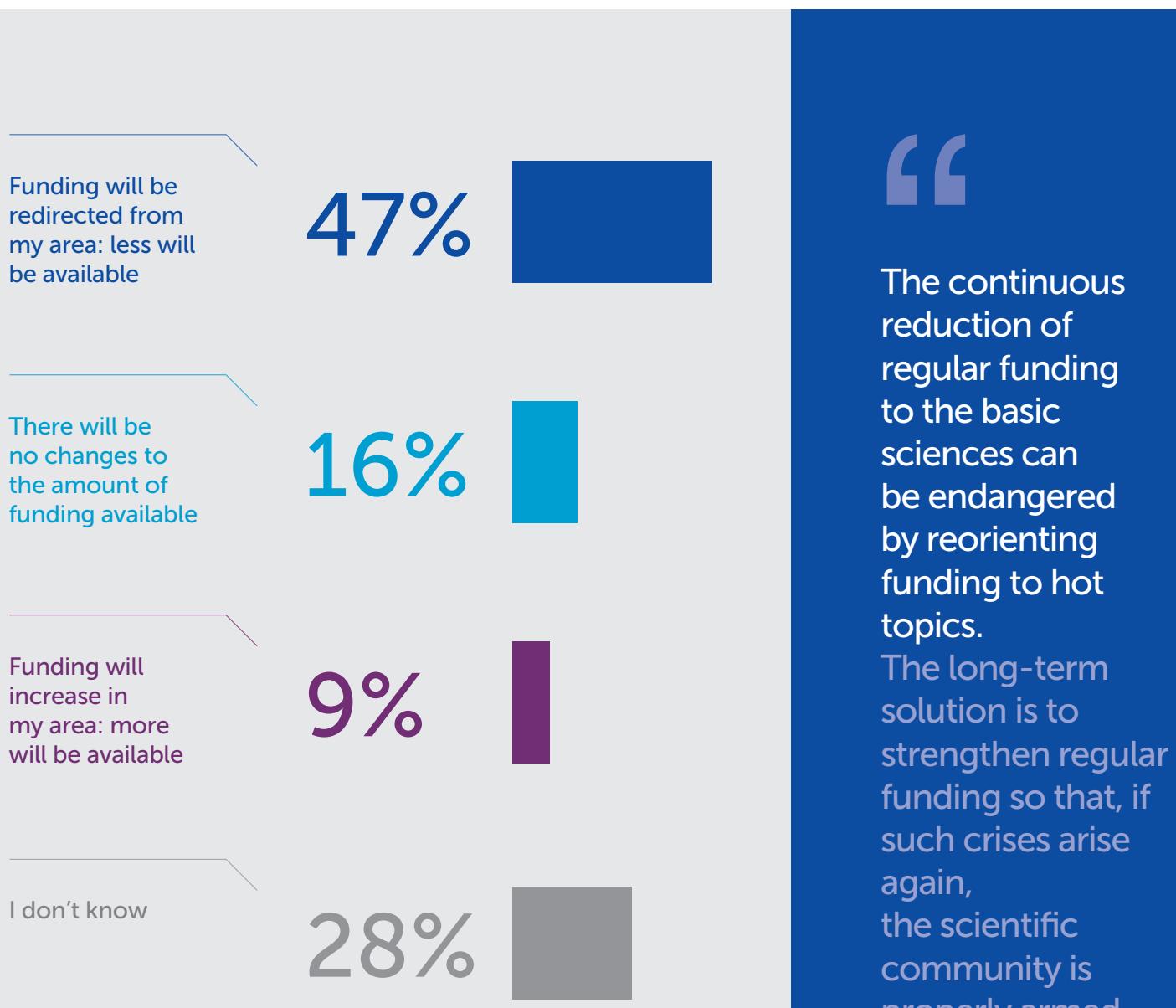


Figure 11

22,496 respondents

How do you think funding in your research area will be affected in the future?

Optimism about future funding shows geographical clustering of responses

Researchers from a group of countries with strong, stable funding mechanisms are the most confident about future funding. The outlook is less optimistic in the UK and US where at least half of researchers expect the funding available to them to be reduced.

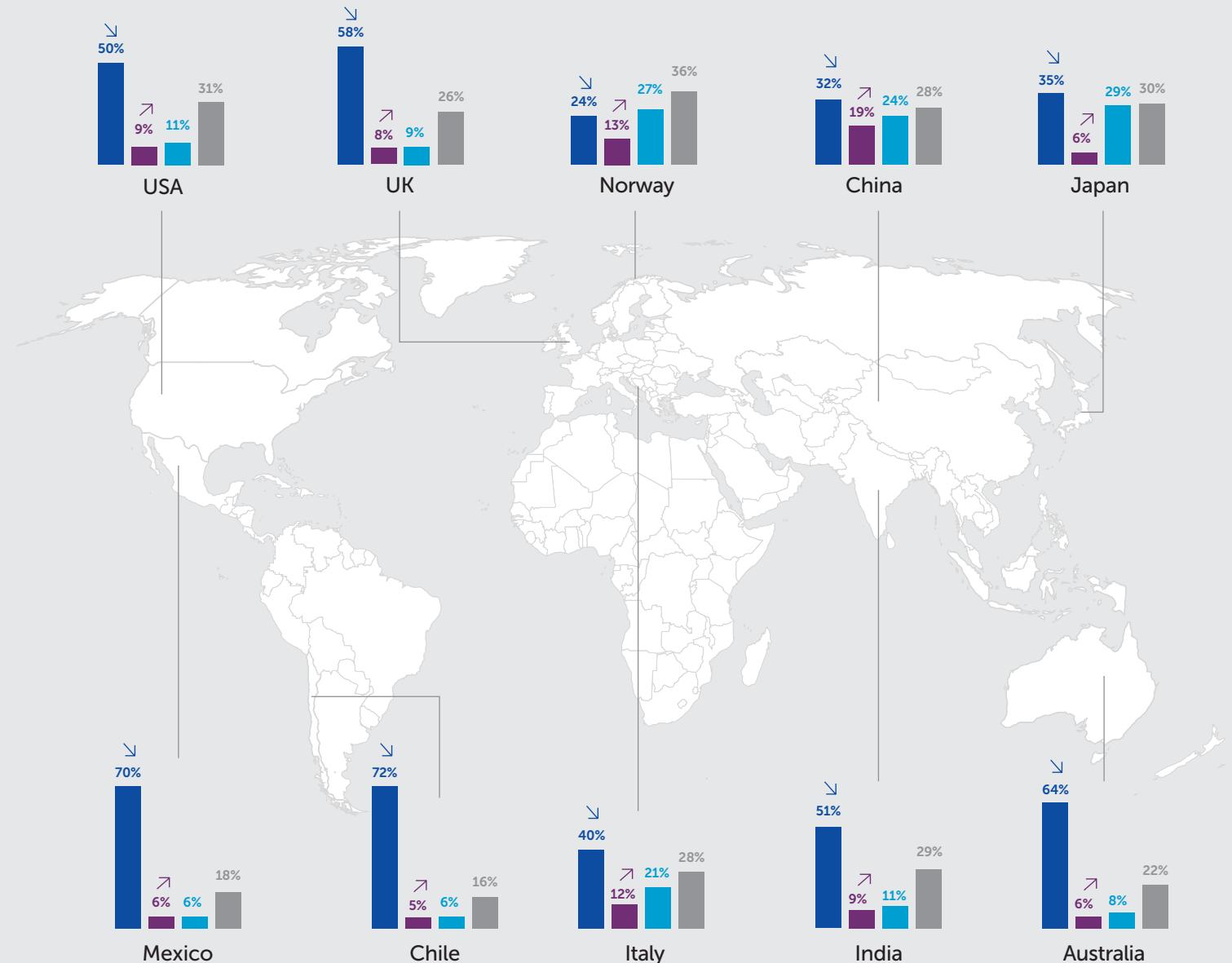


Figure 12

22,264 respondents

How has funding in your research area been affected?

█ Funding will be redirected from my area: less will be available

█ There will be no changes to the amount of funding available

█ Funding will increase in my area: more will be available

█ I don't know

Environmental and geological scientists express the most concerns about future funding

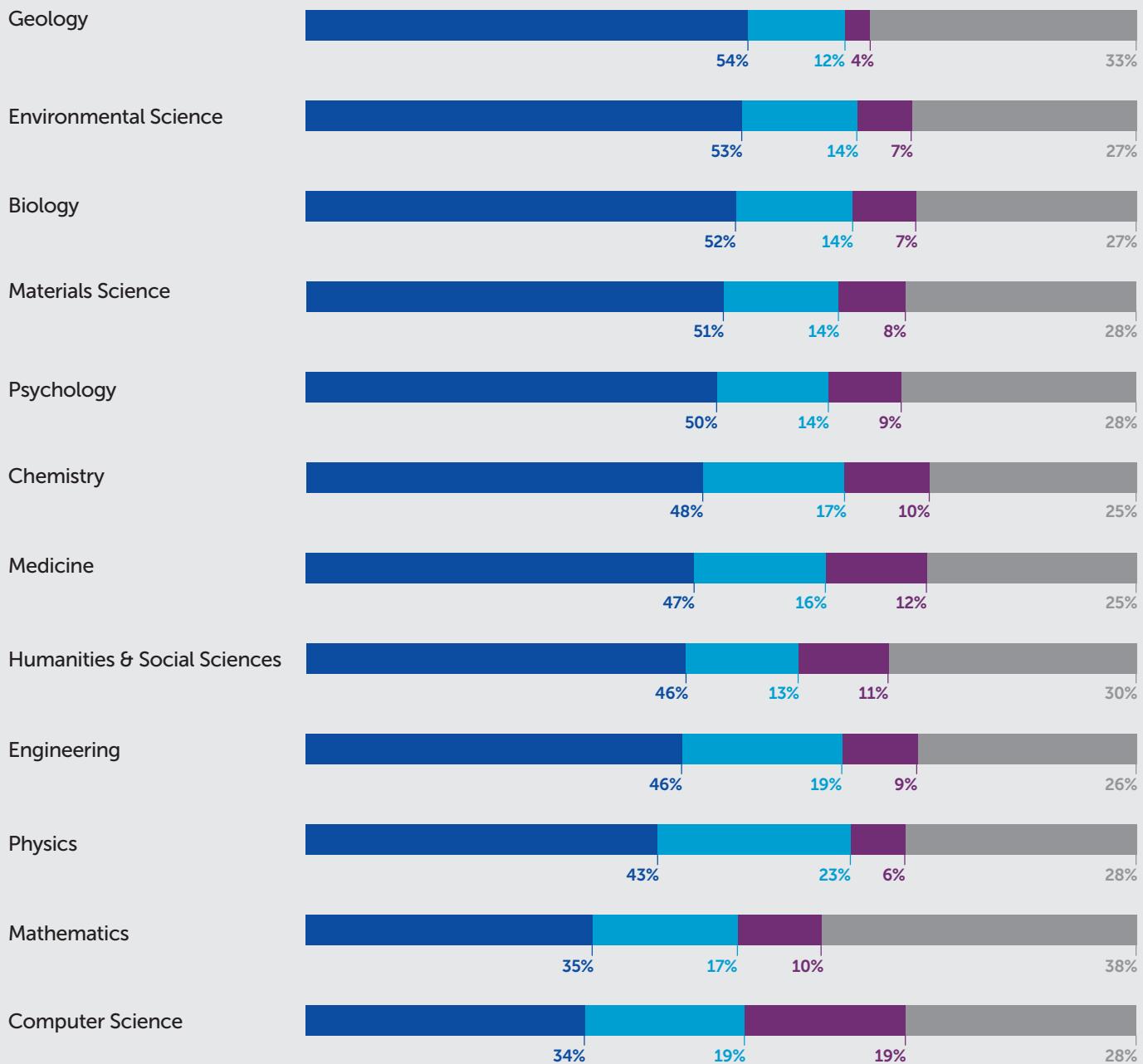


Figure 13

22,264 respondents

How do you think funding in your research area will be affected in the future?

- █ Funding will be redirected from my area: less will be available
- █ There will be no changes to the amount of funding available
- █ Funding will increase in my area: more will be available
- █ I don't know

Academics are most likely to request more investment in basic research from policy makers

Top three requests for policy makers:

1. More investment in basic research
2. Better ways for science to advise policy and decision-making
3. More investment for applied research

The strong call for basic research is noteworthy in a survey conducted during an international health emergency. It shows an expression of the need - even in an acute pandemic - to support the long-term goals and infrastructures of research institutions.

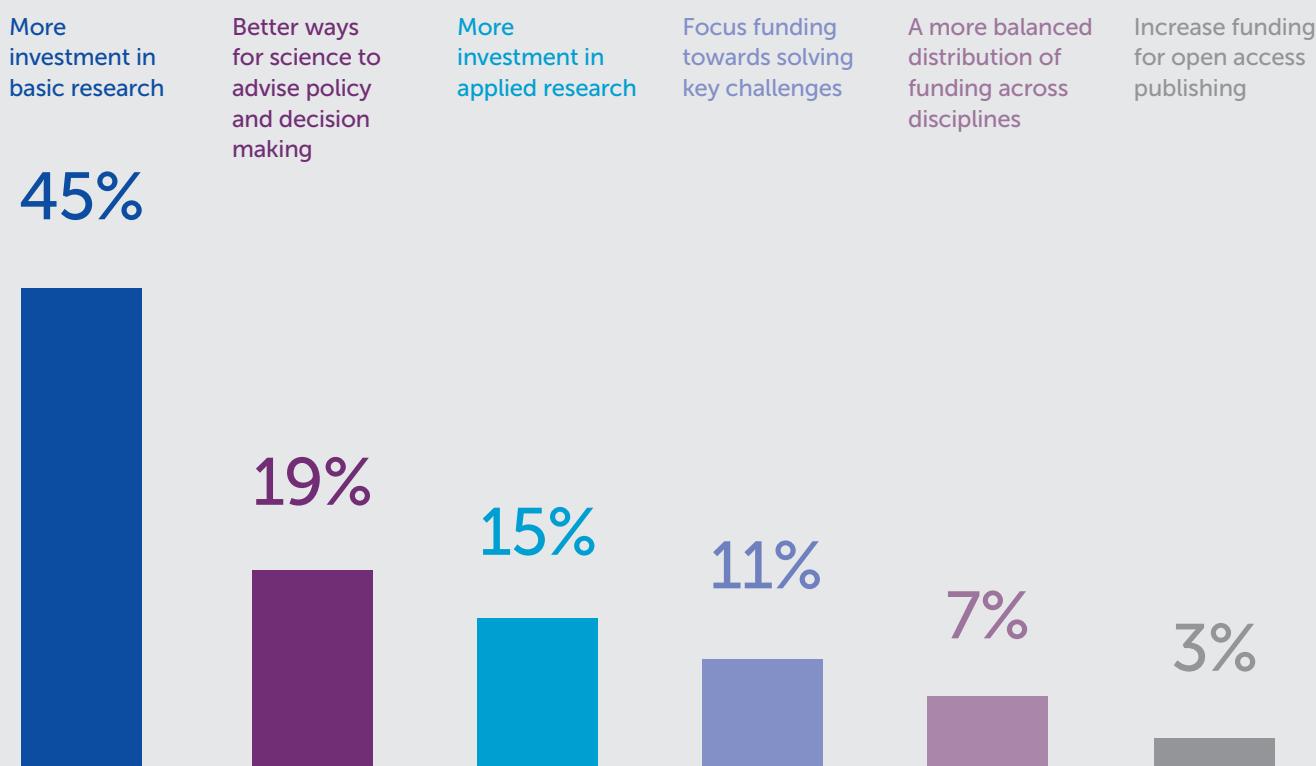


Figure 14

17,785 respondents

What do academics need most from policy makers to address the challenges we face today and in the future?

Respondents were asked to rank suggested policy interventions in order of priority from 1 to 5. The graph shows the percentage to rank each intervention as their highest priority.

Expert commentary



Prof. James Wilsdon

Professor of Research Policy at the University of Sheffield
Director of the Research on Research Institute

It's useful to see how researchers are perceiving and experiencing the effects of COVID-19 on funding priorities. But we're still at an early stage in understanding such effects, which are likely to come in waves.

We've already seen the first wave - a vital injection of investment to virology, epidemiology, vaccines, and therapeutics. A second wave - of support for research on the wider effects - is now getting under way. But the likely force of the third wave - longer-term shifts in the priorities of funders - is far less certain. This will be determined as much by the wider economic outlook as by changes to the balance of disciplinary and thematic priorities. We may see the focus extending into broader investment in resilience across a range of economic, social, health and environmental systems and vulnerabilities.

If this crisis teaches us anything, it should be the importance of investing in wider preparedness and resilience. We need to avoid a lurch into the 'Covid-isation' of research systems, if it comes at the expense of other areas which may be the source of the next crisis, or the one after that.

“

If this crisis teaches us anything, it should be the importance of investing in wider preparedness and resilience

Chapter 4

Attitudes to publishing and sharing research

Key findings



44% of respondents are more likely to **publish in an open access journal** as a result of the pandemic.



45% of respondents will consider **sharing their data in the future**, with those most likely in Mexico, Chile, India and Brazil.



29% of respondents are more likely to **deposit their work on a preprint server** following the pandemic, including almost half of the researchers in India and China.

Nearly half of respondents are more likely to share data or publish in an open access journal

Half of respondents said COVID-19 will not change how they publish nor share their work. Given that the question is being addressed to members of Frontiers' community, which has a bias towards open access, a large percentage of 'no change' responses to this question is an expected outcome.

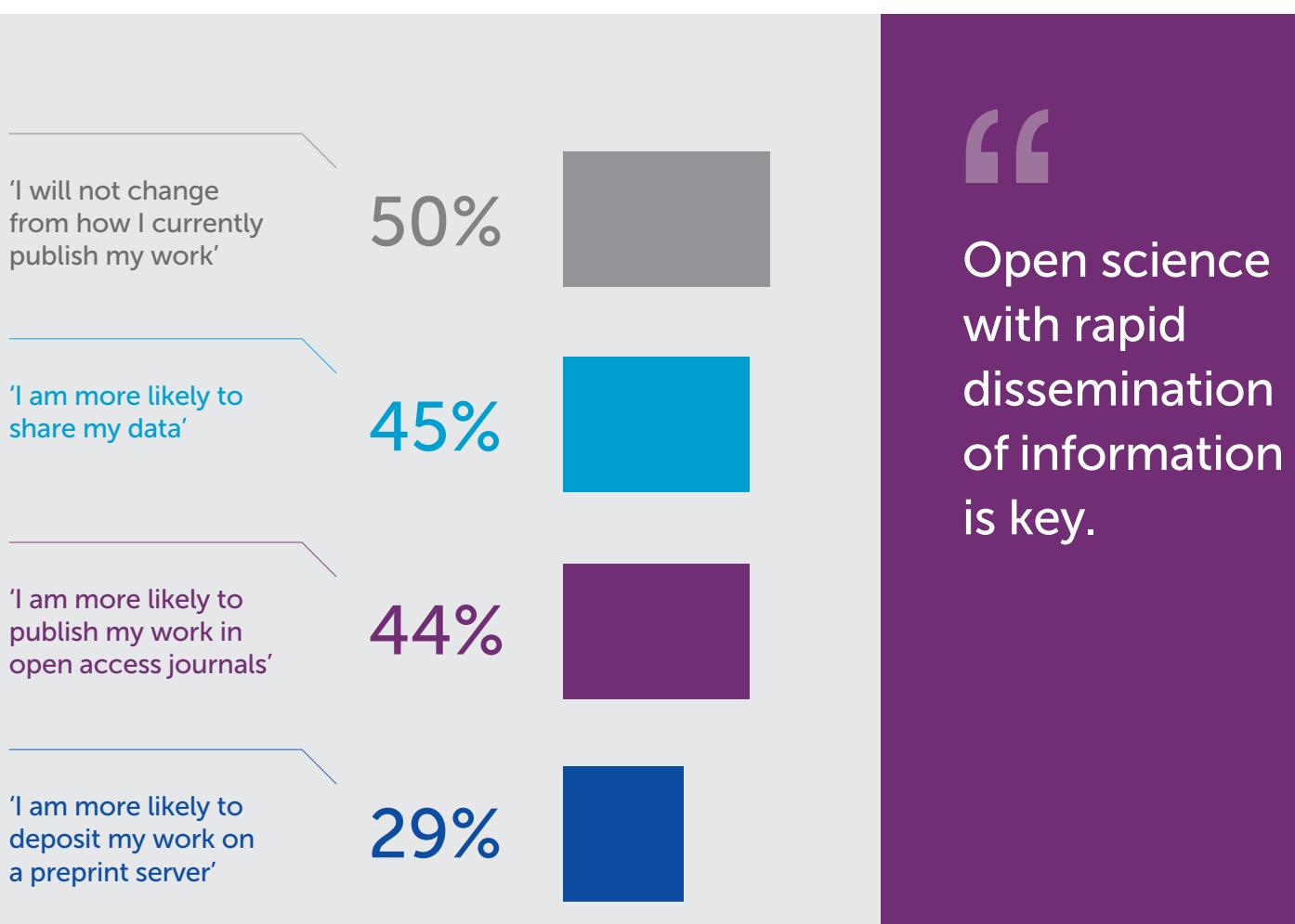


Figure 15

18,575 respondents

How has the COVID-19 pandemic changed the way you will publish and share your work in the future?

Respondents were asked to select from suggested statements and could respond positively to more than one statement.

Cultural differences play a part in whether researchers are now more likely to publish in open access journals

It is researchers in predominantly non-English speaking countries who are more likely to publish open access, including South American countries, India and China.

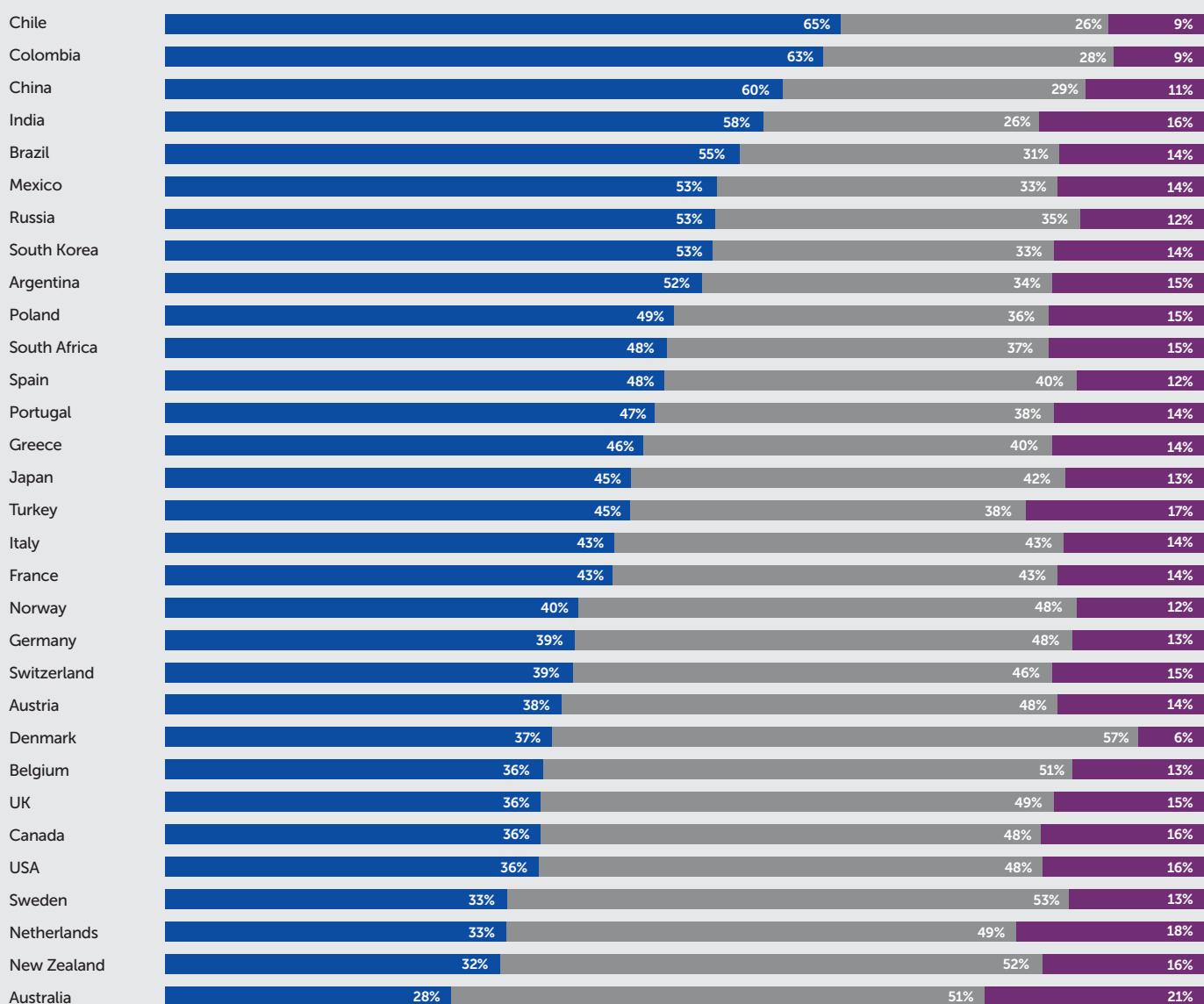


Figure 16

18,575 respondents

I am more likely to publish my work in open access journals.

 Agree & strongly agree Neither agree nor disagree Disagree & strongly disagree

Countries listed reached the minimum reporting size for this question.

PhD students are the most likely to move towards publishing in open access journals

More than half of PhD students (54%) said they are more likely to publish in open access journals as a result of COVID-19. Across all career stages, respondents who disagreed that they were more likely to publish in open access journals were in the minority. The results may be affected by the bias towards open access within the Frontiers community.

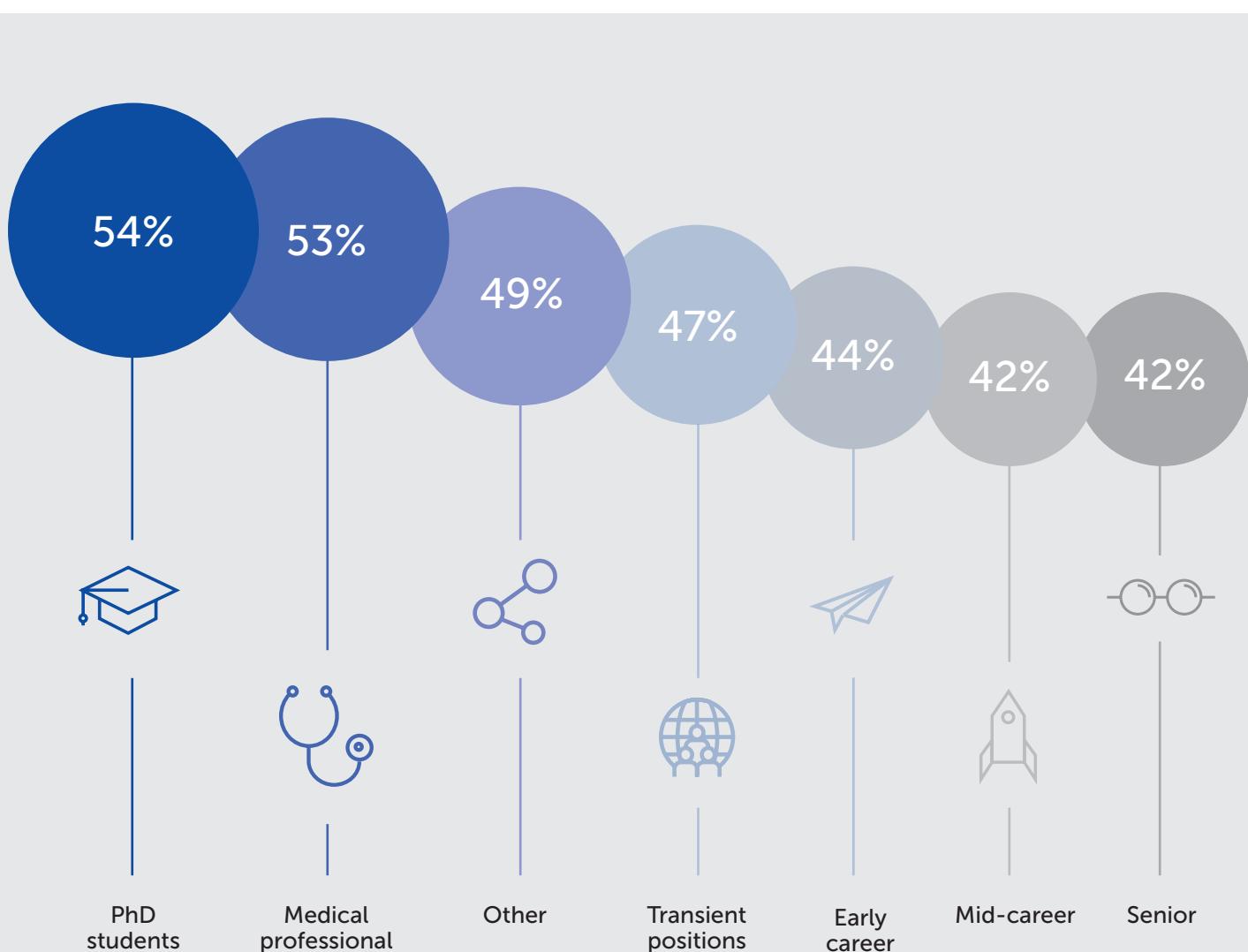


Figure 17

18,575 respondents

Respondents who agree they are more likely to publish in open access journals.

Researchers were asked to select their academic role/title. Titles were then grouped into categories for visual simplification.

“

We will face big challenges and changes in the years to come. Open science and researcher cooperation are essential.

Attitudes to sharing data vary significantly across geographical locations

When it comes to sharing data, again there was significant variance by country. Over two thirds of those in Mexico agreed with this statement - more than double the level of several countries including the Netherlands, Sweden, and Norway.

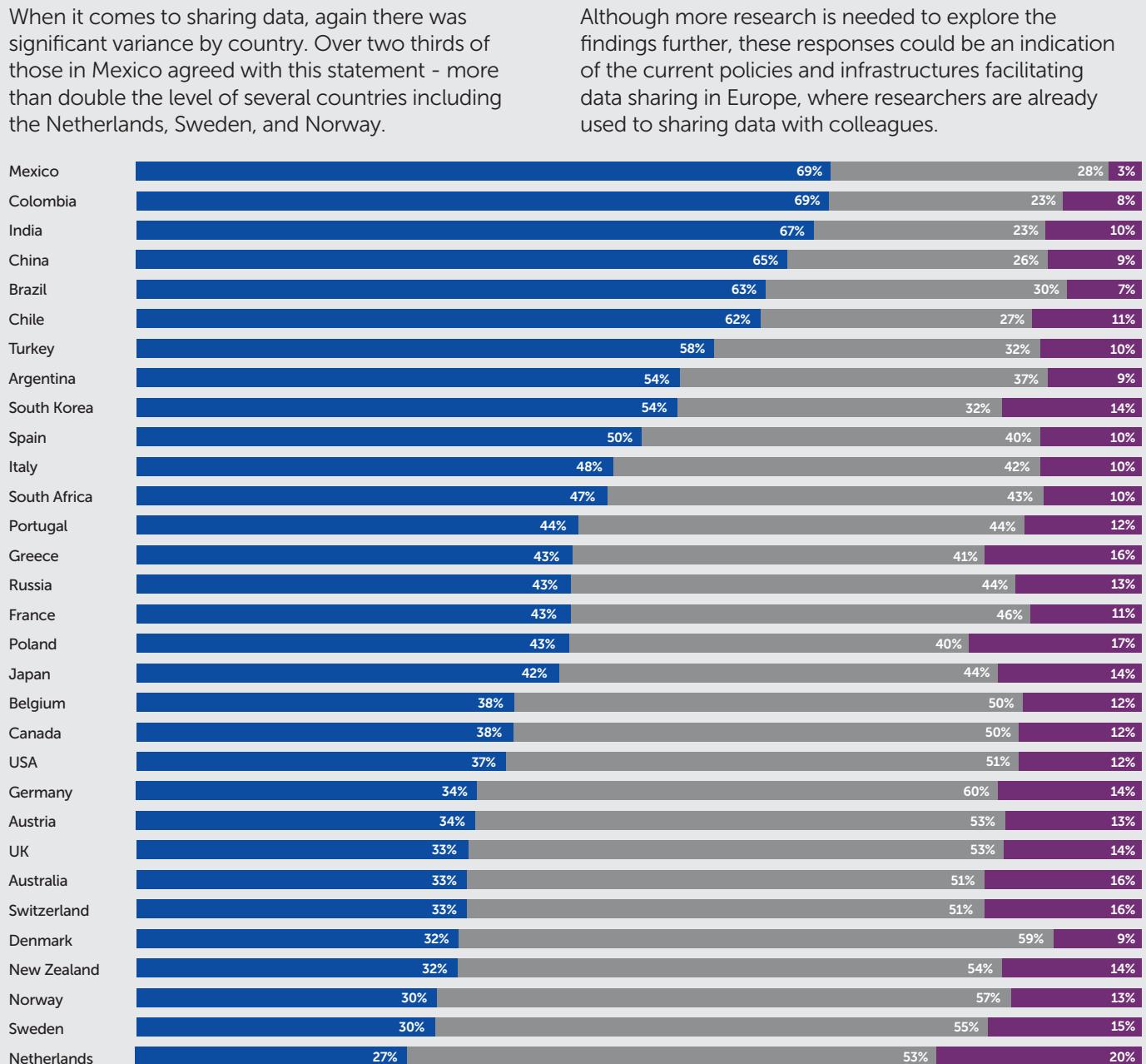


Figure 18

18,575 respondents

I am more likely to share my data.

Agree & strongly agree Neither agree nor disagree Disagree & strongly disagree

Countries listed reached the minimum reporting size for this question.

Medical professionals and PhD students are the most likely to move towards sharing data in the future

The responses by career stage relating to sharing data follows a similar pattern to the responses about publishing in open access journals, with PhD students and medical professionals most likely to share their data in the future.

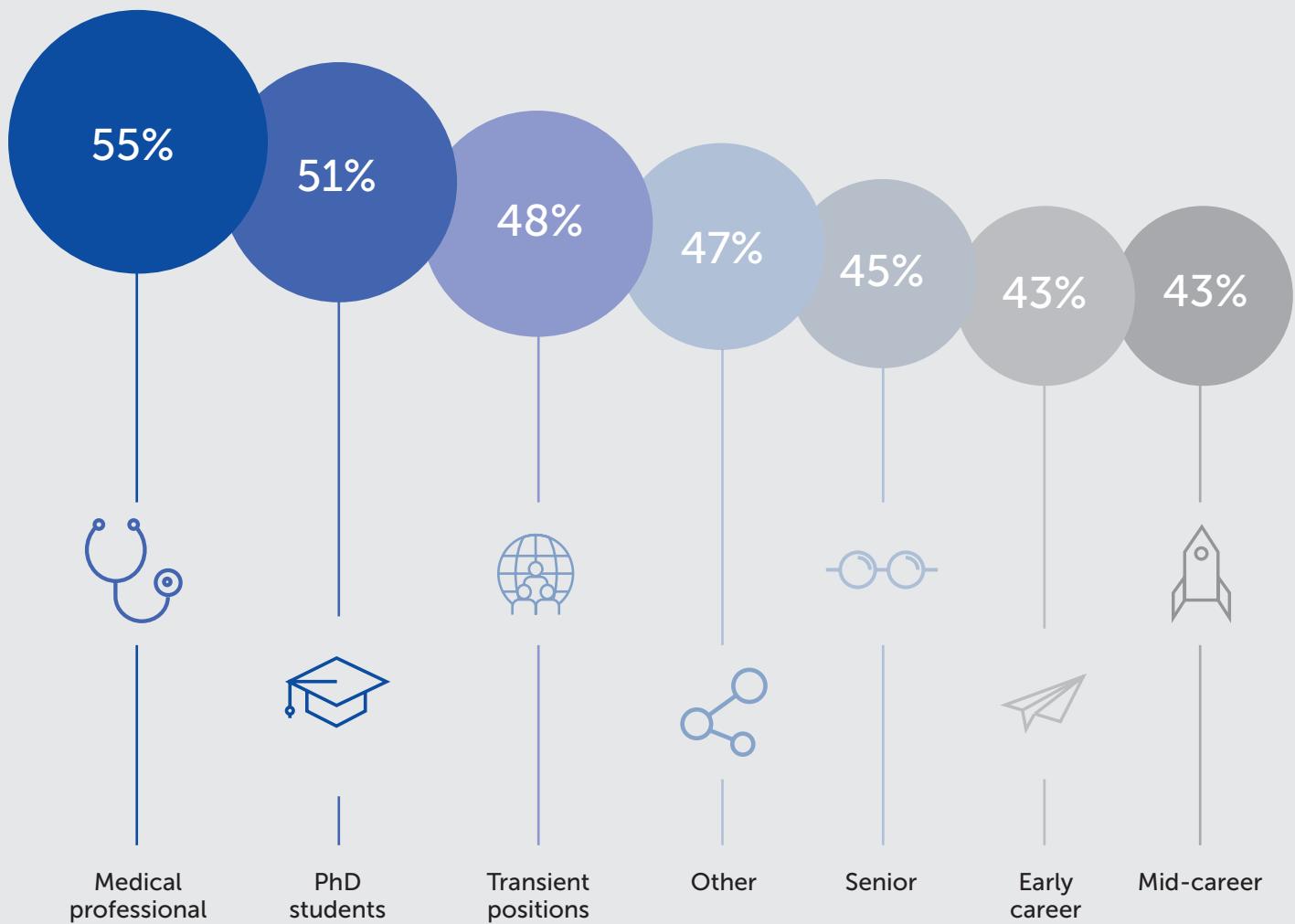


Figure 19

18,575 respondents

Respondents who agree they are more likely to share their data.

Researchers were asked to select their academic role/title. Titles were then grouped into categories for visual simplification.

In some countries, almost half of researchers are more likely to deposit work on a preprint server

Preprint servers are growing in popularity as researchers seek a rapid way to share their work. Almost half of respondents in China, for instance, are more likely to use a preprint server as a result of the pandemic.

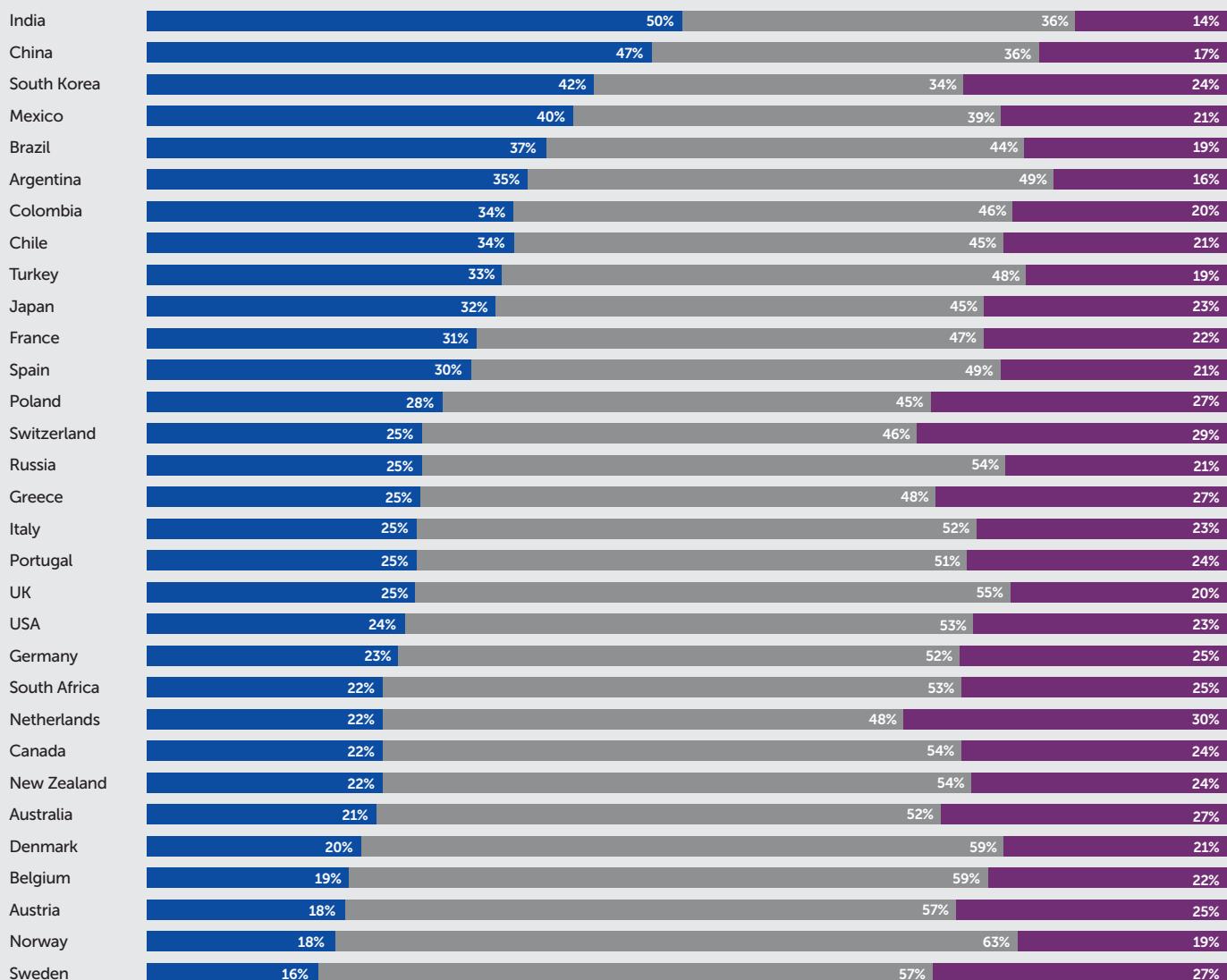


Figure 20

18,575 respondents

I am more likely to deposit my work on a preprint server.

Agree & strongly agree Neither agree nor disagree Disagree & strongly disagree

Countries listed reached the minimum reporting size for this question.

Expert commentary



Prof. Faith Osier

President of
the International
Union of
Immunological
Societies

The scientific research community needs access to accurate, validated information and data if we are to respond quickly during a pandemic. Robust scientific solutions need a body of sound, holistic evidence and there isn't time to let this accrue when the pressure to find a solution quickly and safely is so intense.

Peer-review is an imperative mechanism for validating scientific research. With so much research published in such a short space of time, the pressure to get results 'out there' during the pandemic has been immense, hence the rapid growth of pre-print publications. However, to rush is to threaten quality - and, in turn, public confidence in science. Despite the pressure to provide answers, the scientific community must proceed as it always has - thoroughly and with rigor.

The coronavirus pandemic has given the public better insight and understanding into how the scientific process works, which is a good thing. There is a greater level of recognition that no single research paper can provide a magic answer overnight.

“

The coronavirus pandemic has given the public a better insight and understanding into how the scientific process works

Chapter 5

How can researchers contribute to the global challenges we face?

Key findings



Two thirds of respondents feel that **more should be done** in terms of mobilizing the academic community to form response task forces.



South American countries show the **highest level** of commitment to contributing **towards task forces**.

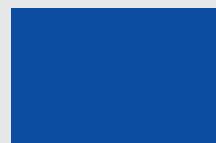


More than 40% are already **directly involved** in additional activities relating to **COVID-19**, including treatment, patient care and research.

Half of researchers believe the current efforts to mobilize task forces are not enough

This is already happening, and no further action is needed

17%



This is already happening but it's not enough

50%



This is not happening but should be happening

16%



This should not happen

3%



I don't know

14%



Figure 21

21,741 respondents

Should we mobilize academic communities and create task forces to address the new challenges we face?

Most researchers state they can contribute to creating task forces, with the highest levels of commitment coming from South America

We see significant variance by country. A cluster of central and South American countries showed exceptionally high levels of commitment.

Nine in ten of those from Colombia and Brazil said they or their organization could contribute to creating task forces. Only a third from Japan felt the same.

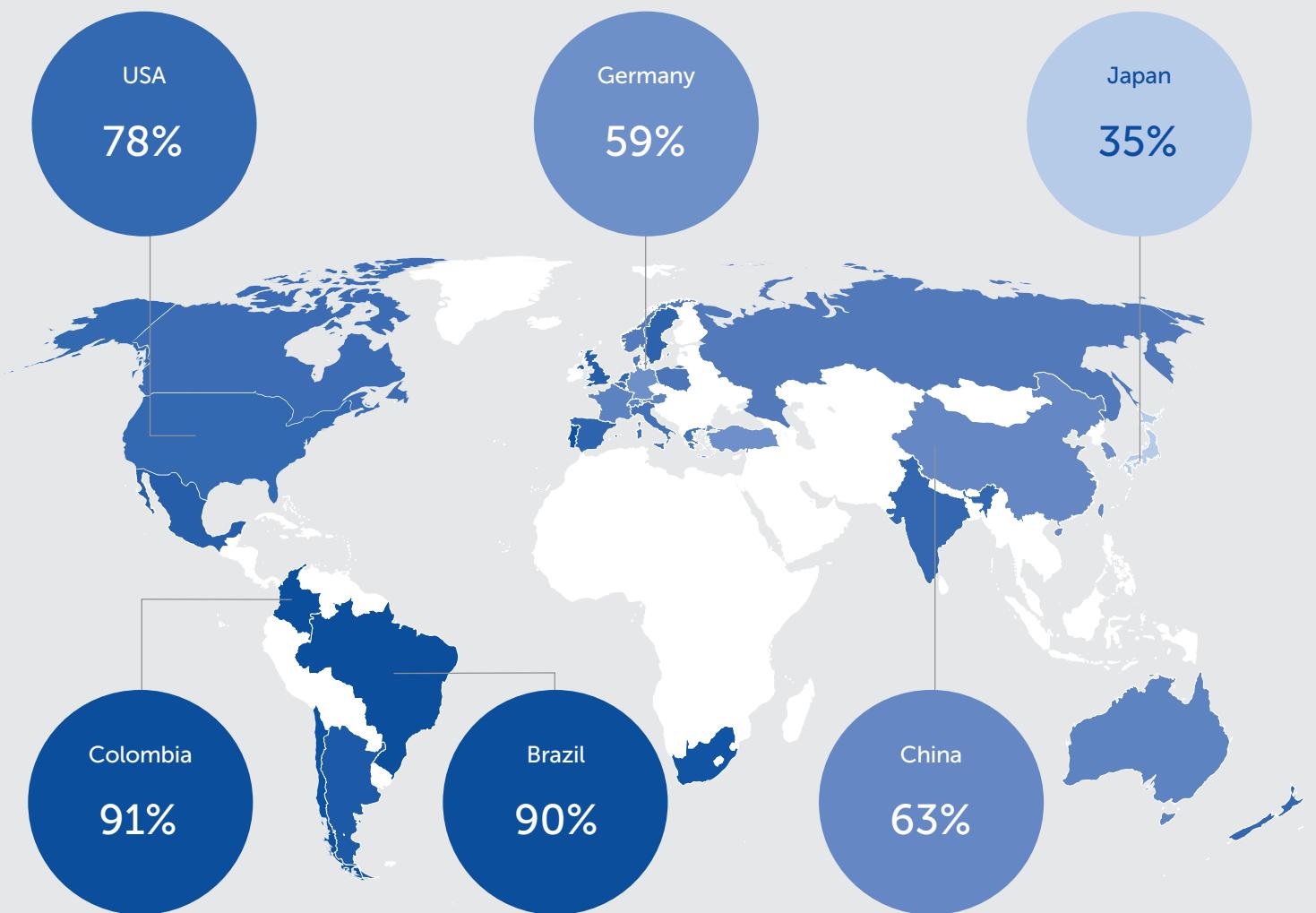


Figure 22

7,587 respondents

The percentage of respondents who stated that they or their organization could contribute to creating task forces.

0% 50% 100%

Countries in white did not reach the minimum reporting size for this question.

A quarter of researchers suggested they could contribute through interdisciplinary expertise sharing

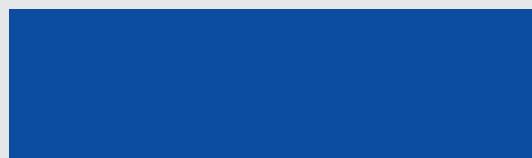
A significant number suggested contributing towards COVID-19 treatment and research. Other respondents mentioned advising policy, developing PPE and providing mental health support.



The re-purposing of labs is a meaningful approach to mitigate the pandemic

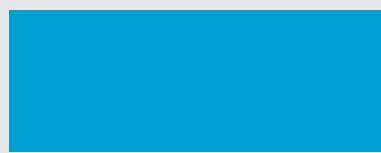
This is already
happening, and no
further action is needed

26%



This is already
happening but it's
not enough

19%



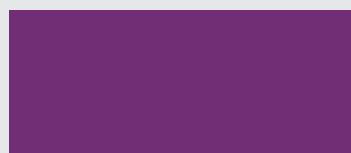
This is not happening
but should be
happening

9%



This should
not happen

18%



I don't know

28%

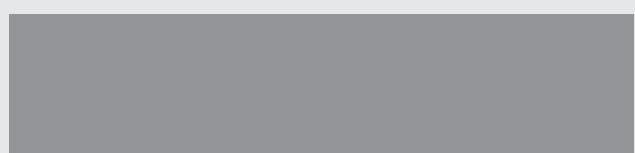


Figure 24

20,928 respondents

Should labs be re-purposed to address the new challenges we face with COVID-19?

Researchers suggest labs could be repurposed for COVID-19 testing and research

Other respondents suggested that labs should be made ready for future pandemics or used to develop vaccines.



COVID-19 testing



Set-up for safe work

29%



COVID-19 research (basic research, application)

16%



Infectious disease research

11%

11%

“

Many labs have capacity for testing, but this is limited currently to a few sites around the country. Additionally, many labs have both an interest and resources available to contribute directly to COVID-19 research but the lack of access to research buildings is preventing this.

“

Clinical psychology and other mental health fields are needed for research regarding effects on children confined in homes where there is neglect, abuse, or domestic violence.

Figure 25

3,160 respondents

What should labs be repurposed for?

Respondents were asked to provide a free-text response. Responses were checked for frequently-occurring keywords to identify key themes. Four rounds of checking a sample of responses against theme labels were performed. Individual responses may be categorized in more than one theme.

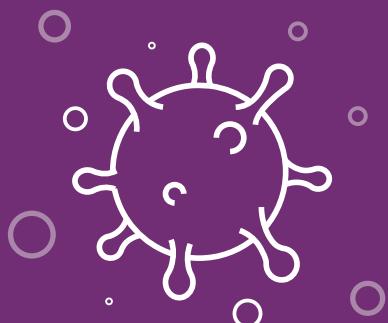
“

Laboratories should be repurposed to have better containment efficiency. The virus is a deadly and highly infectious pathogen, capable of causing health hazards, so laboratories should be upgraded for security of life of researchers and scientists.

Chapter 6

Mitigating future disasters

Key findings



The **threat of a future pandemic** was named most often as a threat that can be mitigated with proper preparation.



Climate change and **environmental concerns** were mentioned by many respondents, with some drawing parallels between the immediate action taken to mitigate COVID-19 and the kind of action needed to tackle environmental threats.



Researchers feel that ongoing involvement of scientists in decision and policy making groups will help to **mitigate socio-political threats**.

“

Science projected the threats that we are facing now.

Improved communication and education of political leaders and the public is critical to enable sound science-based preparations, to deal with both the current and future public health, financial and infrastructure threats.

Researchers list future pandemics and climate change as key threats which could be prevented with proper preparation

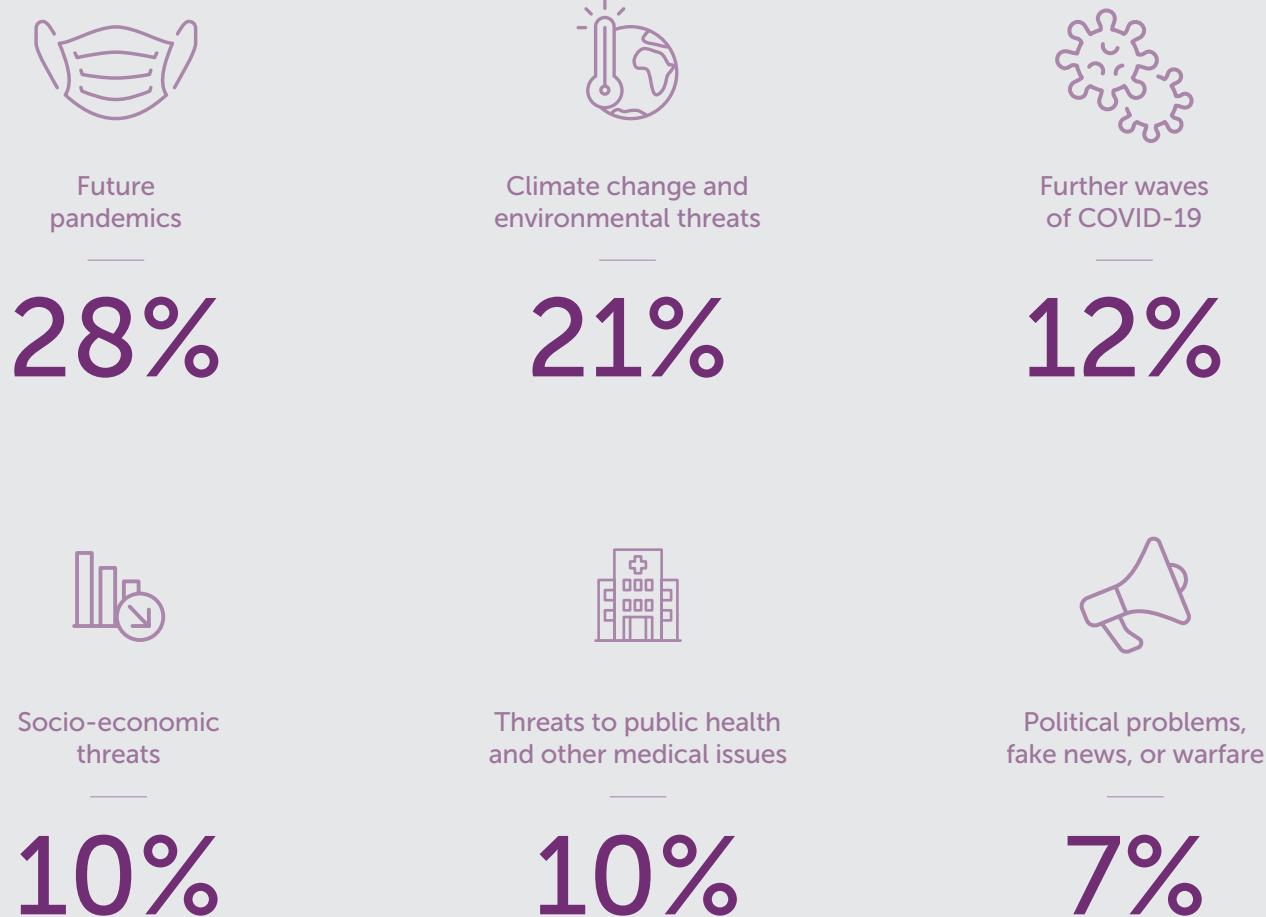


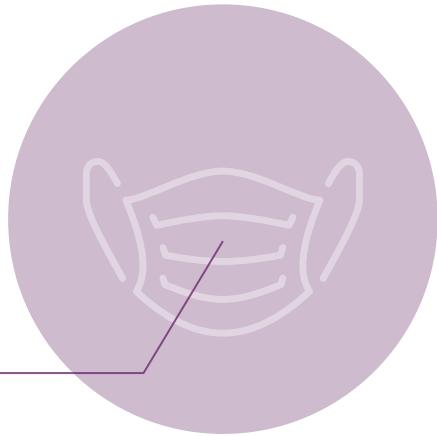
Figure 26

16,208 respondents

What future threats could be prevented if we prepare for them properly?

Respondents were asked to provide a free-text response. Responses were checked by an algorithm for frequently-occurring keywords to identify key themes. Four rounds of checking a sample of responses against theme labels were performed. Individual responses may be categorized in more than one theme.

The threat of pandemics



A future pandemic was most cited as a threat that we can prepare for and mitigate, with many respondents warning about the dangers of new viruses, vector-borne diseases, and bacterial diseases arising from antibiotic resistance. Respondents stressed the importance of learning from the current situation to prepare for future threats.

Several respondents mentioned the need to recognize the source of viral pandemics and see this as an opportunity to incentivize change in ecosystem management.

The ongoing impact of COVID-19 – including a second wave or another lockdown – was also cited often. Respondents spoke less about the danger of the disease itself and were more concerned about the broader consequences of the pandemic to lives and society.

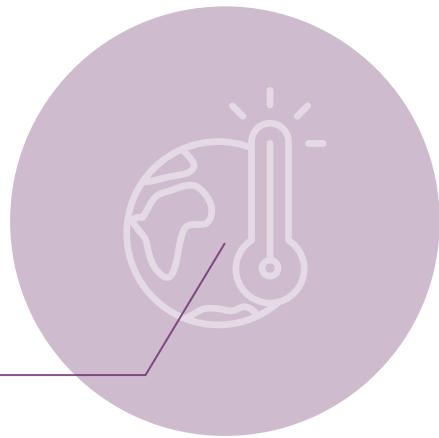
“

This pandemic is yielding many lessons that can help in abating the effect of communicable diseases and possibly help them from becoming a pandemic by quickly limiting or eliminating vector transmission.

“

Many research projects have been stopped without an individual evaluation of their risks and benefits. Even clinical research with severely sick patients has been stopped. Risks should be considered realistically – not only the COVID-19 infection risk, but also the risks of the anti-corona-measures.

Climate change and environmental threats



The second most referenced threat was climate change, with many calling for more drastic and immediate action, as seen in the global COVID-19 response.

Others warned that climate change will only increase the threat of new epidemics.

Researchers warned that human-driven impacts on the natural environment – deforestation, air and water pollution, land-use change and general environmental degradation – are inevitable and will worsen without a fundamental change in our relationship with the natural world. Several stated that the lockdown may have provided a catalyst for such change.

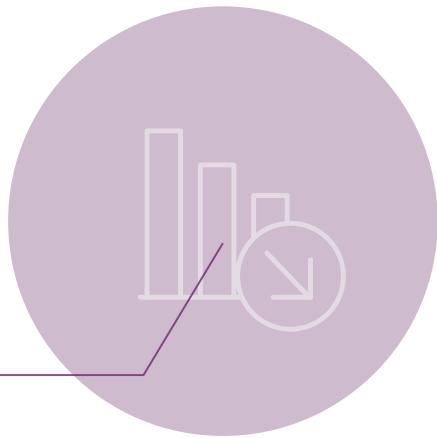
“

I'm more concerned about climate change than COVID-19. The pandemic was handled in such a manner - at least in European countries - that the actual threat was low for the majority. Similar drastic steps should be taken to prepare for much harder-to-control events, foremost climate change.

“

We are on the verge of an environmental crisis: climate change, the devastating effects of industrial farming, the destruction of the natural world will lead to future pandemics if we do not act now.

Socio-economic and political threats



Cited by nearly 10% of respondents, socio-economic threats covered an impending global recession, inequalities, and access to healthcare. Respondents warned about an economic crisis, widespread unemployment, and – closer to home – a lack of funding for vital research.

Lack of - or imbalance of - research funding was raised again here; as we saw in chapter 3, researchers are concerned about long-term effects on funding following the pandemic. Here they specifically raised concerns about funds being re-allocated to COVID-19 research disproportionately, to the detriment of other scientific research.

Almost 7% of respondents cited political problems, fake news or warfare as a future threat which could be prevented. The dangers of misinformation and populist politics were recurring themes. Ongoing, permanent involvement of scientists from different fields in decision and policy-making groups was offered as a solution.

“

Basic research has proven to be fundamental when confronting new biomedical challenges. More effort should be put by politicians, general population and fellow researchers into supporting, promoting, and valuing basic research for the knowledge it provides independently of its immediate translational application.

“

The great threat to the health of those living in poverty has been exacerbated by COVID and policy makers in the US must take steps toward universal healthcare coverage in order to maintain the health and encourage preventive care among those living in poverty.

Expert commentary



Prof. Martin Siegert

Co-Director of the
Grantham Institute
Imperial College London

A pandemic was predictable, and it was predicted - yet the world wasn't ready for it. We didn't have the mechanisms, policies nor procedures in place and governments have scrambled to make reactive decisions.

Trillions of dollars have been spent on bolstering economies. If we had spent just a fraction of that on planning - better understanding what will be needed and getting people ready for this - things could have been so much better.

There is a lesson to be learned. We must consider this inaction in the context of other threats, particularly climate change, where the cost of failing to prepare adequately will be catastrophic. The longer we leave it, the more difficult and more expensive it gets. We are not making progress quickly enough and future generations will pay the price.

“

We must consider this inaction in the context of other threats, particularly climate change

Looking to the future

Questions were raised about the future with respondents pointing towards specific areas of concern.



A future funding crisis

Almost half of researchers expressed concerns for future funding. A combination of an impending global recession and funding being routed towards pandemic-related research creates an uncertain picture. Even during this time of global crisis, researchers are very keen to let policy makers know that more - and more stable - funding is needed both for basic and applied research.



Being prepared

The overwhelming lesson to be taken is how we prepare for future crises. Again, we see a clear message that - notwithstanding the urgent need to mitigate COVID-19 - researchers don't want to lose focus on the other challenges we continue to face. Scientists are eager to continue performing their jobs and making a difference.



Tackling climate change

Climate change is named as a prevalent and urgent threat to humanity. Researchers are calling for lessons learned through our response to the COVID-19 pandemic to be applied to climate change action.

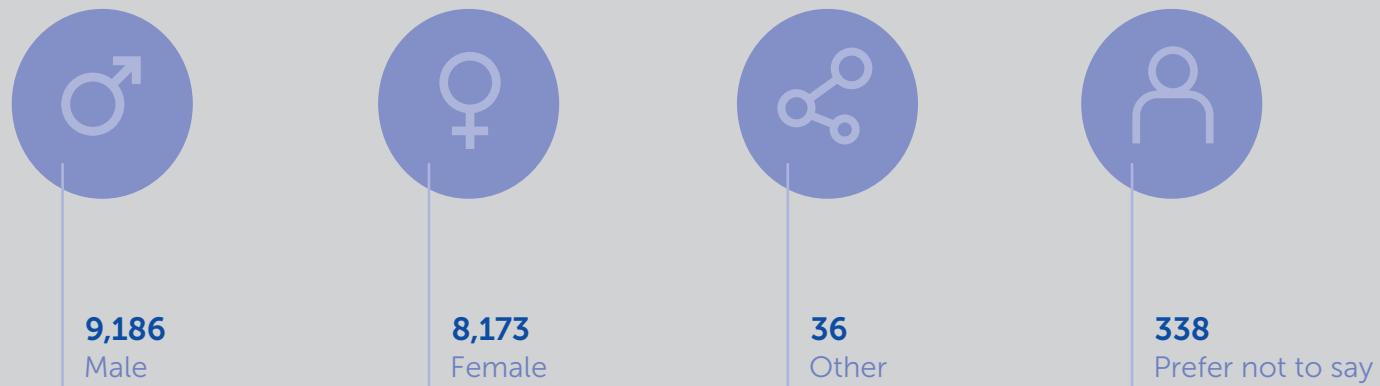
This pandemic has been shining a spotlight on science and to what extent it is used to inform government policy. When it comes to climate change, researchers are calling for more involvement and consultation in policy decisions to mitigate this crisis.

About the survey

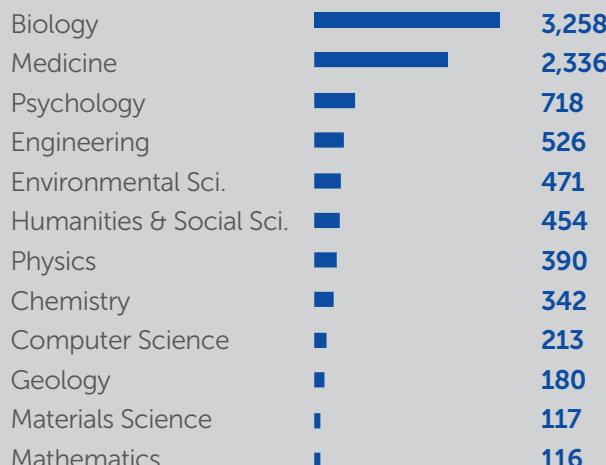
Frontiers surveyed registered members of the Frontiers community, which is made up of active researchers who have published their research with Frontiers or have acted as reviewers or editors.

The survey was conducted online using Qualtrics in May and June 2020. A total of 25,307 respondents from 152 countries answered at least one question and 17,644 completed the entire survey. The survey was fully anonymous.

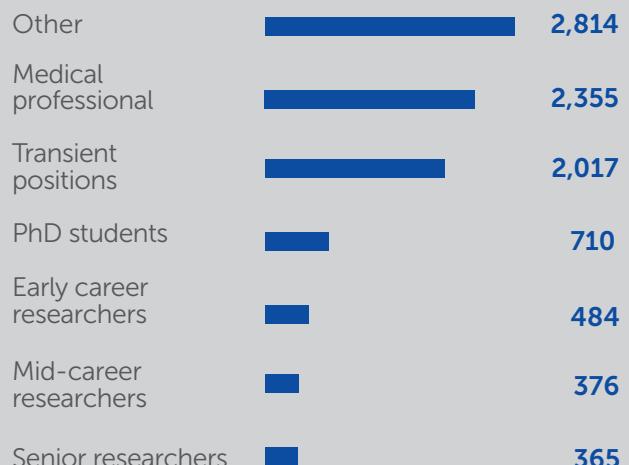
Gender



Area of study*



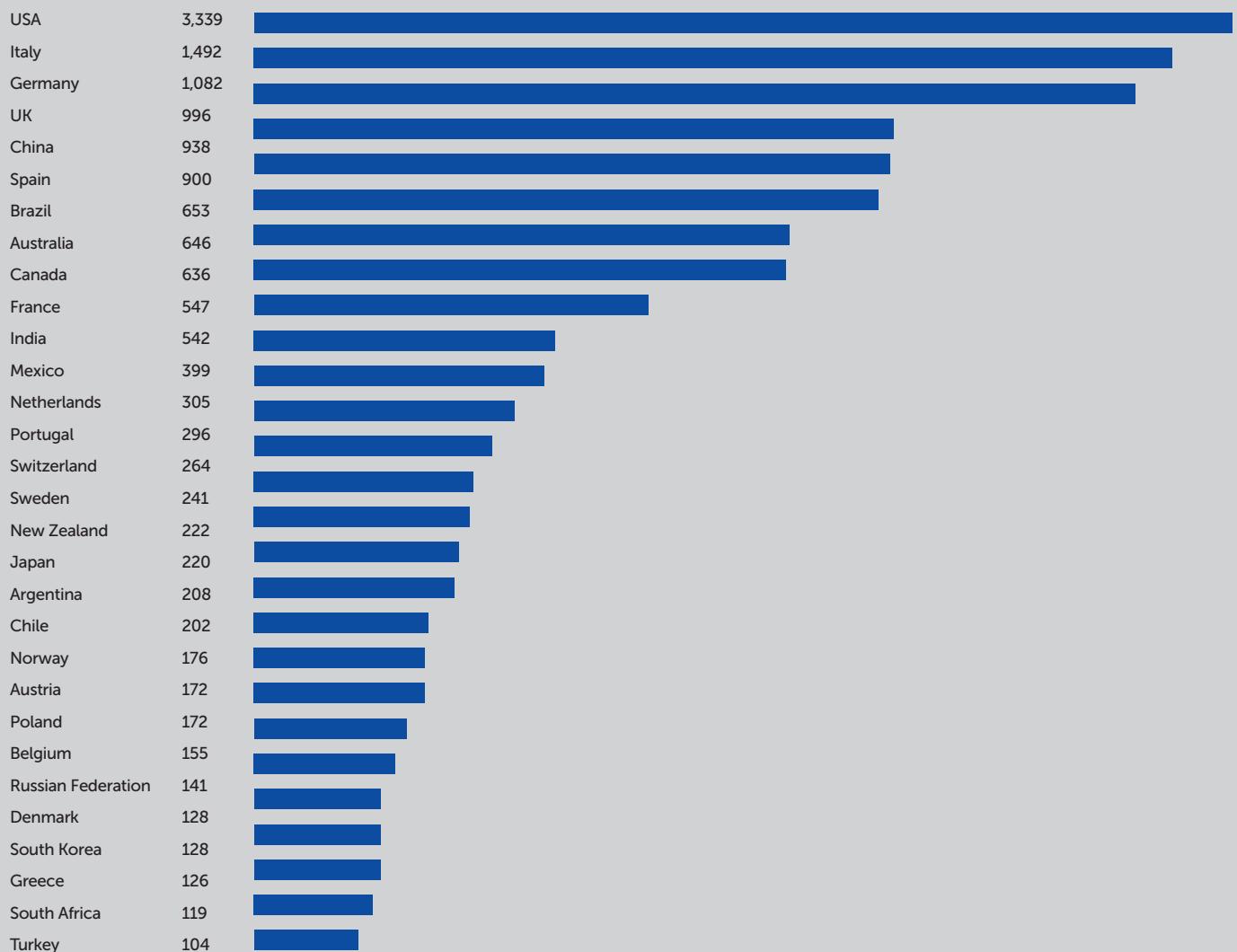
Professional role**



*Sociology, Political Science, Philosophy, History, Geography, Economics, Business and Art were grouped as 'Humanities and Social Sciences'.

**Respondents were asked to select their academic role/title. These were then grouped into categories for visual simplification.

Respondents by country



Representatives from a total of 152 countries took part. The 30 countries listed here all had more than 100 respondents and make up 88% of the 17,690 respondents who provided information about their location.

About Frontiers

Frontiers is a leading Open Access research publisher and Open Science platform on a mission to enable healthy lives on a healthy planet. We make research results openly available, and empower researchers with cutting-edge tools and technology that radically improves how science is reviewed, published and disseminated.

Currently ranked as the world's 5th most-cited scholarly publisher, we are one of the largest and fastest-growing academic publishing platforms. Headquartered in Lausanne, and with offices in London, Madrid, Seattle, Trivandrum and Beijing, over 100,000 leading academics serve as editors and reviewers on our research journals spanning more than 800 academic disciplines.





Contact us

Chantelle Rijs
Communications Director
chantelle.rijs@frontiersin.org

Frontiers
Avenue du Tribunal-Fédéral 34
1005 Lausanne, Switzerland

Follow us

-  @FrontiersIn
-  @Frontiersin
-  @frontiersin_

frontiersin.org