## Pew Research Center

# Americans Value U.S. Role as Scientific Leader, but 38\% Say Country Is Losing Ground Globally 

Widening partisan divide over scientists' place in policy debates BY Brian Kennedy, Alec Tyson and Cary Funk

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RECOMMENDED CITATION
Pew Research Center, October 2022, "Americans Value U.S. Role as
Scientific Leader, but 38\% Say Country Is Losing Ground Globally"

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## How we did this

Pew Research Center conducted this study to understand how Americans view science and their levels of confidence in groups and institutions in society, including scientists and medical scientists. For this analysis, we surveyed 10,588 U.S. adults from Sept. 13-18, 2022.

Everyone who took part in the survey is a member of the Center's American Trends Panel (ATP), an online survey panel that is recruited through national, random sampling of residential addresses. This way, nearly all U.S. adults have a chance of selection. The survey is weighted to be representative of the U.S. adult population by gender, race, ethnicity, partisan affiliation, education and other categories. Read more about the ATP's methodology.

Here are the questions used for this report, along with responses, and its methodology.

# Americans Value U.S. Role as Scientific Leader, but 38\% Say Country Is Losing Ground Globally 

## Widening partisan divide over scientists' place in policy debates

Large majorities of Americans value government investments in the scientific enterprise and consider it important for the United States to be a world leader in scientific achievement. However, on the heels of a global coronavirus outbreak that put scientific research and understanding in the spotlight, few believe the pace of scientific development in the U.S. surpasses that of other countries around the world. Just $14 \%$ think the U.S. is gaining ground on other countries in its scientific achievements. A larger share (38\%) thinks the U.S. is losing ground, and $47 \%$ say it is staying in about the same place relative to other countries.

Republicans and Democrats express a shared sense that the U.S. is largely failing to gain ground in global scientific advances. Recent congressional action has included provisions to address U.S. competitiveness in scientific and technological fields, including a bill that provides tax incentives for manufacturing computer chips in the U.S. and additional money for scientific and technological research into areas such as artificial intelligence and quantum computing.

But while partisans share concerns about U.S. global standing in science, they differ in their views of the role for scientists in the policy arena, with Republicans offering much more skeptical views than Democrats. These differences over the public role for scientists are wider today than before the coronavirus outbreak, which has frequently found Republicans and Democrats at odds over science-related questions including the health threat posed by the coronavirus, the appropriate policy response to the outbreak and the effectiveness of mask wearing and COVID-19 vaccines.

A majority of Republicans and independents who lean to the GOP (70\%), believe that scientists should stay out of public policy debates and focus instead on establishing sound scientific facts. Republicans also express doubts about scientists' judgment and decision-making: Just 24\% believe scientific experts are usually better than other people at making good policy decisions about scientific issues.

Democrats and independents who lean to the Democratic
Party offer far more positive views of scientists' policy abilities. Two-thirds of Democrats believe that scientists should take an active role in science-related policy debates, and $55 \%$ believe that scientists usually make better decisions about science policy issues than other people. In addition, $64 \%$ believe that scientists currently do not have enough sway in public policy debates.

The survey of 10,588 U.S. adults conducted from Sept. 13 to 18 finds that the public continues to hold scientists and medical scientists in high regard relative to other prominent groups and institutions. Overall, $28 \%$ have a great deal of confidence in scientists to act in the best interests of the public, while another $49 \%$ say they have a fair amount of confidence. Ratings of medical scientists are similar. For both groups, public views are about the same as they were in December 2021.

Ratings of scientists and medical scientists continue to be more positive than those of a number of other groups and institutions, including police officers and K-12 public school principals. Public confidence in elected officials to act in the public's interests remains the lowest of the nine groups asked about in the survey.

Confidence in scientists differs across a range of traits and characteristics within the general public. Partisan affiliation is among the biggest factors, with Democrats expressing higher confidence than Republicans. But other factors such as race, ethnicity and education also play a role.

## A large majority of Democrats

( $89 \%$ ) say they have at least a fair amount of confidence in scientists to act in the public's best interests, including $41 \%$ who say they have a great deal of confidence. By comparison, $63 \%$ of Republicans have at least a fair amount of confidence in scientists (including just $15 \%$ who have a great deal).

There are notable differences in views within both party groups, especially when it comes to the Democratic coalition. White Democrats (52\%) are much more likely than Hispanic (26\%) and

Black Democrats (25\%) to express strong trust in scientists, saying they have a great deal of confidence in them to act in the public's interests. Democrats with a college degree are more likely than Democrats who have not graduated from college to say they have a great deal of confidence in scientists to act in the public's interests ( $53 \%$ vs. $34 \%$ ).

Differences in views within the GOP tend to be more modest than those among Democrats. Still, there are notable differences, especially by political ideology: $45 \%$ of conservative Republicans say they have not too much or no confidence at all in scientists; among moderate and liberal Republicans, significantly fewer (22\%) express this low level of trust. In addition, Republicans ages 50 and older are less trusting of scientists than younger Republicans, especially those 18 to 29.

## Confidence in scientists steady over past year, lower than early in the coronavirus outbreak

Roughly three-in-ten Americans register the strongest level of confidence in scientists to act in the public's interests ( $28 \%$ a great deal) while at least threequarters - $77 \%$ - have at least a fair amount of confidence in scientists. The $23 \%$ remainder has not too much or no confidence in scientists to act in the public's interests.

Americans' confidence in scientists has changed little since last year and remains below the high point expressed early in the coronavirus outbreak. Public confidence has also been largely steady over the last year for other prominent groups and institutions, such as police officers and business leaders.

Public confidence in medical scientists is similar to that of scientists generally. Eight-in-ten Americans have at least a fair amount of confidence in this group to act in the public's interests, including $30 \%$ who have a great deal of confidence. (Half of survey respondents were asked about their confidence in "medical scientists" and the other half were asked about their confidence in "scientists.")

Trust in the military is on par with that for medical scientists and scientists. The share of Americans with a great deal of confidence in the military is up 4 percentage points since 2021. Public trust in the other groups and institutions asked about in the survey is lower. Majorities in the U.S. hold negative views of journalists, business leaders and elected officials, in line with confidence ratings of these groups from last year. Just $28 \%$ of U.S. adults say they have at least a fair amount of confidence in elected officials to act in

## Americans' trust in scientists steady over past year

\% of U.S. adults who have $\qquad$ of confidence in scientists to act in the best interests of the public

\% of U.S. adults who have $\qquad$ of confidence in the following groups to act in the best interests of the public


Note: Respondents who did not give an answer are not shown. Source: Survey conducted Sept. 13-18, 2022.
"Americans Value U.S. Role as Scientific Leader, but 38\% Say Country Is Losing Ground Globally"
PEW RESEARCH CENTER the public's interests, and $71 \%$ have little or no confidence in them to do so.

## Majorities of U.S. adults express at least some confidence in scientists and medical scientists, but ratings remain lower than early in the coronavirus outbreak

\% of U.S. adults who have $\qquad$ of confidence in the following groups to act in the best interests of the public

- A great deal A fair amount Not too much/No confidence at all


[^0]
## Trust in scientists remains higher among Democrats, especially those who are college graduates

Democrats continue to express more trust than Republicans in scientists and medical scientists to act in the best interests of the public. Partisan differences over trust in scientists widened after the coronavirus outbreak, especially as of December 2021, and have been stable since then.

In the new survey, $41 \%$ of Democrats and those who lean Democratic have a great deal of confidence in scientists, though nearly all (89\%) have at least a fair amount of confidence in scientists. Just one-in-ten Democrats have a negative view of scientists.

A much smaller share of Republicans and Republican leaners express a strong level of confidence in scientists (15\%), though a majority (63\%) express at least a fair amount of confidence in scientists to act in the public's interests. Another 36\% have little or no confidence in scientists.

## Democrats continue to express higher confidence in scientists than Republicans

\% of U.S. adults who have $\qquad$ of confidence in scientists to act in the best interests of the public


Jun Feb Dec Jan Apr Nov Dec Sep Jun Feb Dec Jan Apr Nov Dec Sep '16 '18 '18 '19 '20 '20 '21 '22 '16 '18 '18 '19 '20 '20 '21 '22

Note: Respondents who did not give an answer are not shown.
Source: Survey conducted Sept. 13-18, 2022.
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Similarly, Democrats are far more likely than Republicans to express strong confidence in medical scientists to act in the public's best interests. See Appendix for details.

Trust in scientists tends to be higher among college graduates than those with less education, consistent with past Center surveys.

However, such differences are primarily limited to Democrats and independents who lean Democratic. Among Republicans and GOP leaners, college graduates and those with less education are equally likely to have a great deal of confidence in scientists ( $15 \%$ each).

Among Democrats with a college degree or more education, $53 \%$ have a great deal of confidence in scientists. In comparison, $34 \%$ of Democrats with some college or less education have a great deal of confidence in scientists.

## College-educated Democrats express higher confidence in scientists

\% of U.S. adults who have __ of confidence in scientists to act in the best interests of the public


Note: Respondents who gave other responses or did not give an answer are not shown. Source: Survey conducted Sept. 13-18, 2022.
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This data is in line with the idea that party affiliation offers a strong anchor point for people's views and, in some cases, can outweigh the tendency for those with higher education to express more support for and trust in scientists. Past Center surveys have also found education and science knowledge levels to be closely tied with views on climate and energy issues among Democrats, but not Republicans.

There are also larger education differences among Democrats than Republicans when it comes to levels of trust in medical scientists. See Appendix for details.

People who describe themselves as knowing a lot about what scientists do are more inclined to have high levels of confidence in scientists: $43 \%$ of this group has a great deal of confidence in
scientists, compared with $26 \%$ who say they know a little and $14 \%$ who say they know nothing at all about what scientists do.

## Confidence in scientists remains lower among Black and Hispanic Democrats compared with White Democrats

Among the general public, levels of trust in scientists are similar among White, Black and Hispanic adults. These overall similarities are driven in part by the partisan profiles of the three groups and the growing influence partisanship has on ratings of scientists. (A large majority of Black adults identify with or lean to the Democratic Party, as do roughly two-thirds of Hispanic adults; White adults are more evenly divided in their identification and tilt
toward the GOP.)

The impact of race and ethnicity plays out differently for Democrats and Republicans.

White Democrats (52\%) are much more likely than Hispanic (26\%) and Black Democrats (25\%) to say they have a great deal of confidence in scientists to act in the best interests of the public.

Just 12\% of White Republicans have a great deal of confidence in scientists to act in the public's interests (far lower than the $52 \%$ of White Democrats who say this).

The current survey does not have sufficient sample size to analyze the views of Black Republicans or Hispanic Republicans. A 2021 Center survey found $19 \%$ of Hispanic

## About three-in-ten Americans have a great deal of confidence in scientists

\% of U.S. adults who have __ of confidence in scientists to act in the best interests of the public


Among Rep/lean Rep ...
White 12
Black*

Hispanic*

* The sample sizes for Black and Hispanic adults who identify with or lean to the Republican Party are too small for analysis.
Note: Respondents who gave other responses or did not give an answer are not shown. White and Black adults include those who report being only one race and are not Hispanic. Hispanics are of any race.
Source: Survey conducted Sept. 13-18, 2022.
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and $12 \%$ of White Republicans expressed the strongest level of trust in scientists.

There are similar differences by party, race and ethnicity when it comes to confidence in medical scientists. See Appendix for details.

## Americans are about evenly divided over whether scientists should take an active role in policy debates

The public has mixed views about the degree to which scientists should participate in policy debates over scientific issues and the impact scientists have on such debates. Differences between Republicans and Democrats on these questions have widened since 2020.

Americans are now roughly divided over whether scientists should take an active role in policy debates about scientific issues (48\%) or should, instead, focus on establishing scientific facts and stay out of policy debates (51\%).

The share of Americans saying that scientists should play an active role in policy is down 12 percentage points since May 2020.

The change in views is more pronounced among Republicans and those who lean toward the GOP. Among this group, seven-in-ten now say scientists should stay out of policy debates and focus on establishing sound scientific facts. Far fewer Republicans (29\%) now say scientists should take an active role in scientific policy debates, down from $43 \%$ in May 2020.

Democrats and Democratic leaners side with the position

## Decline in share of Americans saying scientists should play an active role in policy debates

\% of U.S. adults who say scientists should ___ when it comes to public policy debates about scientific issues


Note: Respondents who did not give an answer are not shown.
Source: Survey conducted Sept. 13-18, 2022.
"Americans Value U.S. Role as Scientific Leader, but 38\% Say Country Is Losing Ground Globally"

PEW RESEARCH CENTER that scientists should have an active role in policy debates, by a margin of $66 \%$ to $34 \%$. The share of Democrats who say scientists should take an active role in policy debates is down from $75 \%$ in May 2020.

Partisans also tend to differ in their perceptions of scientists' influence on policy debates today.

Overall, $45 \%$ of Americans say that scientists do not have enough influence on policy matters, while $19 \%$ say scientists have too much influence. About one-third say scientists have about the right amount of influence in policy debates (35\%).

More than six-in-ten Democrats (64\%) believe that scientists do not have enough influence on policy today. In contrast, $36 \%$ of Republicans think scientists have too much influence on public policy debates, while a smaller share (24\%) believe scientists have too little influence.

## Partisan divides in views of scientists' influence on public policy

\% of U.S. adults who say scientists have ___ influence in public policy debates

|  | U.S. <br> adults | Rep/ <br> lean Rep | Dem/ <br> lean Dem |
| :---: | :---: | :---: | :---: |
| Too much | 19 |  | 5 |
| About the right <br> amount | 35 |  |  |
| Not enough | 45 | 36 |  |

Note: Respondents who did not give an answer are not shown. Source: Survey conducted Sept. 13-18, 2022.
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## Democrats and Republicans continue to differ in views of scientists' policy judgments

The survey also asked Americans to evaluate the quality of scientific experts' policy decisions about scientific issues. About four-in-ten Americans (41\%) consider scientific experts to be usually better at making good policy decisions than other people, $47 \%$ say scientists are neither better nor worse and $10 \%$ say scientists usually make worse decisions than other people.

The share of Americans who say scientific experts are usually better than other people at making good policy decisions is down 6 percentage points since May 2020 (from $47 \%$ to $41 \%$ ).

Among Republicans, most say scientific experts are neither better nor worse (58\%) than other people at making good policy decisions. Just $24 \%$ of Republicans think scientists' policy judgments are usually better than other people's, while $17 \%$ say their judgments are usually worse.

## Share of Americans who think scientists make better policy decisions declines

$\%$ of U.S. adults who say scientific experts are __ than other people at making good policy decisions about scientific issues


Note: Respondents who did not give an answer are not shown.
Source: Survey conducted Sept. 13-18, 2022.
"Americans Value U.S. Role as Scientific Leader, but 38\% Say Country Is Losing Ground Globally"

PEW RESEARCH CENTER remainder (38\%) says scientists' judgments are neither better nor worse than those of other people and $5 \%$ say scientists' judgments are usually worse.

Americans are evenly divided over the role of the public's voice in science-related policy matters. About half of U.S. adults say that public opinion should play an important role guiding policy decisions about scientific issues (49\%), and the same share (49\%) say public opinion should not.

The share of Americans who say public opinion should have an important role guiding policy decisions about scientific issues is up 6 points from May 2020 - early in the coronavirus outbreak - but down from a high of $54 \%$ in 2019.

Republicans are more likely than Democrats to say public opinion should play an important role ( $57 \%$ vs. $44 \%$ ). The share of Republicans who say public opinion should play an important role is up 9 points since May 2020.

Americans with more education are less likely to say public opinion should play an important role guiding policy decisions about scientific issues. Four-in-ten adults with a postgraduate degree think public opinion should play an important role, compared with $54 \%$ of U.S. adults with a high school degree or less education.

## Americans divided over public opinion's role in science policy

$\%$ of U.S. adults who say public opinion__ play an important role to guide policy decisions about scientific issues


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## Most Americans see government investments in scientific research as worthwhile, but few see gains for U.S. achievements in science

Most Americans see value for society from the government's investments in scientific research and consider it important that the United States is a world leader in scientific achievement. The predominant sense, however, is that the U.S. is either holding steady or losing ground in science compared with other countries.

About eight-in-ten Americans (81\%) say government investments in scientific research aimed at advancing knowledge are usually worthwhile for society over time, while only $18 \%$ say government investments in basic science research are not worth the investment.

## Most Democrats and Republicans say government investments in scientific research are worthwhile

```
% of U.S. adults who say government investments in scientific research aimed at advancing knowledge are usually ...
```



Note: Respondents who did not give an answer are not shown. Source: Survey conducted Sept. 13-18, 2022.
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Majorities across other demographic and educational groups say government investments in scientific research are worthwhile for society over time.

## A large majority of Americans think being a world leader in science is important, but few see the U.S. gaining ground

When asked how important it is for the U.S. to be a world leader in scientific achievements, $54 \%$ of Americans say it is very important and $37 \%$ say this is somewhat important. Just 8\% say it is not too or not at all important that the U.S. is a world leader in scientific achievement.

Older Americans, men and those with a college degree or more education are especially likely to consider it very important for the U.S. to be a world leader in scientific achievements.

## 54\% of Americans think it is very important the U.S. is a world leader in scientific achievements

\% of U.S. adults who say that when thinking about all the important goals for the country, it is __ for the U.S. to be a world leader in scientific achievements



Note: Respondents who did not give an answer are not shown.
Source: Survey conducted Sept. 13-18, 2022.
"Americans Value U.S. Role as Scientific Leader, but 38\% Say Country Is Losing Ground Globally"

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But when asked to think about America's place compared with other countries, only $14 \%$ of the public thinks the U.S. is gaining ground in scientific achievements, while a larger share says the U.S. is losing ground (38\%). Almost half (47\%) say the U.S. is staying in about the same place when it comes to scientific achievements.

As is the case with views on the goal of being a world leader in science, assessments of where the U.S. actually stands globally are widely shared across party, educational and demographic groups.

Larger shares of men and those with a postgraduate degree consider the U.S. to be losing ground in science

Few Americans think the U.S. is gaining ground in science compared with other countries
\% of U.S. adults who say that when it comes to scientific achievements, the United States is $\qquad$ compared with other countries around the world


Note: Respondents who did not give an answer are not shown.
Source: Survey conducted Sept. 13-18, 2022.
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PEW RESEARCH CENTER compared with other countries. Republicans are somewhat more inclined than Democrats to see the U.S. as losing ground to other countries in scientific achievements ( $42 \%$ vs. $36 \%$ ).

## Acknowledgments

This report is made possible by The Pew Charitable Trusts. It is a collaborative effort based on the input and analysis of the following individuals. Find related reports online at:
pewresearch.org/science.

## Primary research team

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In addition, the project benefited greatly from the guidance of the Pew Research Center methodology team: Courtney Kennedy, Andrew Mercer, Ashley Amaya, Dorene Asare-Marfo, Dana Popky, Nick Hatley and Arnold Lau.

## Methodology

## The American Trends Panel survey methodology

## Overview

The American Trends Panel (ATP), created by Pew Research Center, is a nationally representative panel of randomly selected U.S. adults. Panelists participate via self-administered web surveys. Panelists who do not have internet access at home are provided with a tablet and wireless internet connection. Interviews are conducted in both English and Spanish. The panel is being managed by Ipsos.

Data in this report is drawn from the panel wave conducted from Sept. 13 to 18, 2022. A total of 10,588 panelists responded out of 11,687 who were sampled, for a response rate of $91 \%$. The cumulative response rate accounting for nonresponse to the recruitment surveys and attrition is $3 \%$. The break-off rate among panelists who logged on to the survey and completed at least one item is $1 \%$. The margin of sampling error for the full sample of 10,588 respondents is plus or minus 1.5 percentage points.

## Panel recruitment

The ATP was created in 2014, with the first cohort of panelists invited to join the panel at the end of a large, national, landline and cellphone random-digit-dial survey that was conducted in both English and Spanish. Two additional recruitments were conducted using the same method in 2015 and 2017, respectively. Across these three surveys, a total of 19,718 adults were invited to join the ATP, of whom 9,942 (50\%) agreed to participate.

In August 2018, the ATP
switched from telephone to

American Trends Panel recruitment surveys

| Recruitment dates | Mode | Invited | Joined | Active panelists remaining |
| :---: | :---: | :---: | :---: | :---: |
| Jan. 23 to March 16, 2014 | Landline/ cell RDD | 9,809 | 5,338 | 1,504 |
| Aug. 27 to Oct. 4, 2015 | Landline/ cell RDD | 6,004 | 2,976 | 882 |
| April 25 to June 4, 2017 | Landline/ cell RDD | 3,905 | 1,628 | 434 |
| Aug. 8 to Oct. 31, 2018 | ABS | 9,396 | 8,778 | 4,121 |
| Aug. 19 to Nov. 30, 2019 | ABS | 5,900 | 4,720 | 1,478 |
| June 1 to July 19, 2020; <br> Feb. 10 to March 31, 2021 | ABS | 3,197 | 2,812 | 1,543 |
| May 29 to July 7, 2021 <br> Sept. 16 to Nov. 1, 2021 | ABS | 1,329 | 1,162 | 790 |
| May 24 to July 6, 2022 | ABS | 2,724 | 2,324 | 1,390 |
|  | Total | 42,264 | 29,738 | 12,142 |

Note: Approximately once per year, panelists who have not participated in multiple consecutive waves or who did not complete an annual profiling survey are removed from the panel. Panelists also become inactive if they ask to be removed from the panel. The 2022 recruitment survey was ongoing at the time W114 was conducted. The counts reflect completed recruitment interviews up through July 6, 2022.

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address-based recruitment. Invitations were sent to a stratified, random sample of households selected from the U.S. Postal Service's Delivery Sequence File. Sampled households receive mailings asking a randomly selected adult to complete a survey online. A question at the end of the survey asks if the respondent is willing to join the ATP. In 2020 and 2021 another stage was added to the recruitment. Households that did not respond to the online survey were sent a paper version of the questionnaire, $\$ 5$ and a postage-paid return envelope. A subset of the adults who returned the paper version of the survey were invited to join the ATP. This subset of adults received a follow-up mailing with a $\$ 10$ pre-incentive and invitation to join the ATP.

Across the five address-based recruitments, a total of 22,546 adults were invited to join the ATP, of whom 19,796 agreed to join the panel and completed an initial profile survey. In each household, one adult was selected and asked to go online to complete a survey, at the end of which they were invited to join the panel. Of the 29,738 individuals who have ever joined the ATP, 12,142 remained active panelists and continued to receive survey invitations at the time this survey was conducted.

The U.S. Postal Service's Delivery Sequence File has been estimated to cover as much as $98 \%$ of the population, although some studies suggest that the coverage could be in the low $90 \%$ range. ${ }^{1}$ The American Trends Panel never uses breakout routers or chains that direct respondents to additional surveys.

## Sample design

The overall target population for this survey was noninstitutionalized persons ages 18 and older, living in the U.S., including Alaska and Hawaii. It featured a stratified random sample from the ATP in which panelists were sampled at rates designed to ensure that the share of respondents in each stratum is proportional to its share of the U.S. adult population to the greatest extent possible. Respondent weights are adjusted to account for differential probabilities of selection as described in the Weighting section below.

## Questionnaire development and testing

The questionnaire was developed by Pew Research Center in consultation with Ipsos. The web program was rigorously tested on both PC and mobile devices by the Ipsos project management team and Pew Research Center researchers. The Ipsos project management team also populated test data that was analyzed in SPSS to ensure the logic and randomizations were working as intended before launching the survey.

[^2]
## Incentives

All respondents were offered a post-paid incentive for their participation. Respondents could choose to receive the post-paid incentive in the form of a check or a gift code to Amazon.com or could choose to decline the incentive. Incentive amounts ranged from $\$ 5$ to $\$ 20$ depending on whether the respondent belongs to a part of the population that is harder or easier to reach. Differential incentive amounts were designed to increase panel survey participation among groups that traditionally have low survey response propensities.

## Data collection protocol

The data collection field period for this survey was Sept. 13-18, 2022. Postcard notifications were mailed to all ATP panelists with a known residential address on Sept. 12.

Invitations were sent out in two separate launches: Soft Launch and Full Launch. Sixty panelists were included in the Soft Launch, which began with an initial invitation sent on Sept. 13. The ATP panelists chosen for the initial Soft Launch were known responders who had completed previous ATP surveys within one day of receiving their invitation. All remaining English- and Spanishspeaking panelists were included in the Full Launch and were also sent an invitation on Sept. 13.

All panelists with an email address received an email invitation and up to two email reminders if they did not respond to the survey. All ATP panelists that consented to SMS messages received an SMS invitation and up to two SMS reminders.

## Invitation and reminder dates

|  | Soft Launch | Full Launch |
| :--- | :--- | :--- |
| Initial invitation | Sept. 13, 2022 | Sept. 13, 2022 |
| First reminder | Sept. 15, 2022 | Sept. 15, 2022 |
| Final reminder | Sept. 17, 2022 | Sept. 17, 2022 |

## Data quality checks

To ensure high-quality data, the Center's researchers performed data quality checks to identify any respondents showing clear patterns of satisficing. This includes checking for very high rates of leaving questions blank, as well as always selecting the first or last answer presented. As a result of this checking, five ATP respondents were removed from the survey dataset prior to weighting and analysis.

## Weighting

The ATP data is weighted in a multistep process that accounts for multiple stages of sampling and nonresponse that occur at different points in the survey process. First, each panelist begins with a base weight that reflects their probability of selection for their initial recruitment survey. These weights are then rescaled and adjusted to account for changes in the design of ATP recruitment surveys from year to year. Finally, the weights are calibrated to align with the population benchmarks in the accompanying table to correct for nonresponse to recruitment surveys and panel attrition. If only a subsample of panelists was invited to participate in the wave, this weight is adjusted to account for any differential probabilities of selection.

## Weighting dimensions

| Variable | Benchmark source |
| :---: | :---: |
| Age (detailed) | 2019 American Community Survey (ACS) |
| Age $x$ Gender |  |
| Education x Gender |  |
| Education x Age |  |
| Race/Ethnicity x Education |  |
| Born inside vs. outside the U.S. among Hispanics and Asian Americans |  |
| Years lived in the U.S. |  |
| Census region x Metro/Non-metro | 2020 CPS March Supplement |
| Volunteerism | 2021 American Trends Panel Annual Profile Survey/2019 CPS Volunteering \& Civic Life Supplement |
| Voter registration | 2018 CPS Voting and Registration Supplement |
| Party affiliation | 2021 National Public Opinion |
| Frequency of internet use | Reference Survey (NPORS) |
| Religious affiliation |  |
| Additional weighting dimensions applied within Black adults |  |
| Age | 2019 American Community Survey (ACS) |
| Gender |  |
| Education |  |
| Hispanic ethnicity |  |
| Voter registration | 2018 CPS Voting and Registration Supplement |
| Party affiliation | 2021 National Public Opinion |
| Religious affiliation | Reference Survey (NPORS) |
| Note: Estimates from the ACS are based on noninstitutionalized adults. Voter registration is calculated using procedures from Hur, Achen (2013) and rescaled to include the total U.S. adult population. Volunteerism is estimated using a model to account for potential changes in volunteering behavior due to the coronavirus outbreak that began in February 2020. |  |
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Among the panelists who completed the survey, this weight is then calibrated again to align with the population benchmarks identified in the accompanying table and trimmed at the 1st and 99th percentiles to reduce the loss
in precision stemming from variance in the weights. Sampling errors and tests of statistical significance take into account the effect of weighting.

The following table shows the unweighted sample sizes and the error attributable to sampling that would be expected at the $95 \%$ level of confidence for different groups in the survey.

| Margins of error | Unweighted <br> sample size <br> 10,588 | Margin of error in <br> percentage points <br> $+/-1.5$ |
| :--- | :---: | :---: |
| U.S. adults | 4,634 | $+/-2.3$ |
| Men | 5,834 | $+/-1.9$ |
| Women | 7,185 | $+/-1.7$ |
|  | 1,178 | $+/-4.4$ |
| White | 1,397 | $+/-4.6$ |
| Black | 857 | $+/-4.5$ |
| Hispanic | 3,411 | $+/-2.5$ |
|  | 3,051 | $+/-2.5$ |
| Ages 18-29 | 3,237 | $+/-2.6$ |
| 30-49 |  |  |
| 50-64 | 4,930 | $+/-2.1$ |
| 65+ | 5,353 | $+/-2.1$ |

[^3]PEW RESEARCH CENTER

Sample sizes and sampling errors for other subgroups are available upon request. In addition to sampling error, one should bear in mind that question wording and practical difficulties in conducting surveys can introduce error or bias into the findings of opinion polls.

## Dispositions and response rates

| Final dispositions | AAPOR code | Total |
| :--- | :---: | :---: |
| Completed interview | 1.1 | 10,588 |
| Logged on to survey; broke off | 2.12 | 128 |
| Logged on to survey; did not complete any items | 2.1121 | 62 |
| Never logged on (implicit refusal) | 2.11 | 901 |
| Survey completed after close of the field period | 2.27 | 3 |
| Completed interview but was removed for data quality |  | 5 |
| Screened out | I | 0 |
| Total panelists in the survey | P | $\mathbf{1 1 , 6 8 7}$ |
| Completed interviews | R | 10,588 |
| Partial interviews | NC | 0 |
| Refusals | O | 1,096 |
| Non-contact | UH | 3 |
| Other | UO | 0 |
| Unknown household | NE | 0 |
| Unknown other |  | 0 |
| Not eligible |  | 0 |
| Total |  | $\mathbf{1 1 , 6 8 7}$ |
| AAPOR RR1 $=1 /(\mathrm{l}+\mathrm{P}+\mathrm{R}+\mathrm{NC}+\mathrm{O}+\mathrm{UH}+\mathrm{UO})$ | $91 \%$ |  |


| Cumulative response rate | Total |
| :--- | :---: |
| Weighted response rate to recruitment surveys <br> \% of recruitment survey respondents who agreed to <br> join the panel, among those invited <br> \% of those agreeing to join who were active panelists <br> at start of Wave 114 | $10 \%$ |
| Response rate to Wave 114 survey | $70 \%$ |
| Cumulative response rate | $41 \%$ |

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## Appendix: Detailed charts and tables

## Democrats are more likely than Republicans to have a great deal of confidence in medical scientists

\% of U.S. adults who have $\qquad$ of confidence in medical scientists to act in the best interests of the public


[^4]College-educated Democrats are particularly likely to have a great deal of confidence in medical scientists
\% of U.S. adults who have $\qquad$ of confidence in medical scientists to act in the best interests of the public


## Among Democrats, differences by race and ethnicity in views of medical scientists

\% of U.S. adults who have $\qquad$ of confidence in medical scientists to act in the best interests of the public


Among Rep/lean Rep ...


Black*

## Hispanic*

* The sample sizes for Black and Hispanic adults who identify with or lean to the Republican Party are too small for analysis.
Note: Respondents who gave other responses or did not give an answer are not shown.
White and Black adults include those who report being only one race and are not Hispanic.
Hispanics are of any race.
Source: Survey conducted Sept. 13-18, 2022.
"Americans Value U.S. Role as Scientific Leader, but 38\% Say Country Is Losing Ground Globally"

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## Survey question wording and topline

## 2022 PEW RESEARCH CENTER'S AMERICAN TRENDS PANEL WAVE 114 - SCIENCE TOPLINE <br> SEPTEMBER 13-18, 2022 <br> $\mathrm{N}=10,588$

## ASK ALL:

CONF
How much confidence, if any, do you have in each of the following to act in the best interests of the public? [RANDOMIZE ITEMS]
a. Elected officials

Sep 13-18, 2022
Nov 30-Dec 12, 2021
Nov 18-29, 2020
Apr 20-26, 2020
Jan 7-21, 2019
Nov 27-Dec 10, 2018
Jan 29-Feb 13, 2018
May 10-Jun 6, 2016
b. Journalists

$$
\text { Sep 13-18, } 2022
$$

Nov 30-Dec 12, 2021
Nov 18-29, 2020
Apr 20-26, 2020
Nov 27-Dec 10, 2018

| A great <br> deal <br> of <br> confidence | A fair <br> amount <br> of <br> confidence | Not too <br> much <br> confidence | No <br> confidence <br> at all | No answer |
| :---: | :---: | :---: | :---: | :---: |
| 2 | 26 | 50 | 21 | $<1$ |
| 2 | 22 | 52 | 23 | $<1$ |
| 4 | 32 | 47 | 15 | 1 |
| 3 | 33 | 49 | 14 | 1 |
| 4 | 32 | 50 | 14 | $<1$ |
| 4 | 33 | 48 | 15 | $<1$ |
| 3 | 22 | 52 | 23 | $<1$ |
| 3 | 24 | 54 | 19 | 1 |

TREND FOR
COMPARISON:
The news media
Jan 7-21, 2019
Nov 27-Dec 10, 2018
Jan 29-Feb 13, 2018
May 10-Jun 6, 2016
9
10
8
5
c. The military

| Sep 13-18, 2022 | 29 |
| :--- | :--- |
| Nov 30-Dec 12, 2021 | 25 |
| Nov 18-29, 2020 | 39 |
| Apr 20-26, 2020 | 38 |
| Jan 7-21, 2019 | 36 |
| Nov 27-Dec 10, 2018 | 41 |
| Jan 29-Feb 13, 2018 | 39 |
| May 10-Jun 6, 2016 | 33 |


| 48 | 17 | 6 | $<1$ |
| :---: | :---: | :---: | :---: |
| 49 | 18 | 7 | 1 |
| 44 | 13 | 4 | $<1$ |
| 45 | 13 | 4 | $<1$ |
| 46 | 14 | 4 | $<1$ |
| 41 | 12 | 4 | 1 |
| 41 | 15 | 4 | $<1$ |
| 46 | 15 | 5 | 1 |

d. Religious leaders
Sep 13-18, 2022
Nov 30-Dec 12, 2021
Nov 18-29, 2020
Apr 20-26, 2020
Jan 7-21, 2019
Nov 27-Dec 10, 2018
Jan 29-Feb 13, 2018
May 10-Jun 6, 2016
e. Business leaders

Sep 13-18, 2022
Nov 30-Dec 12, 2021
Nov 18-29, 2020
Apr 20-26, 2020
Jan 7-21, 2019
Nov 27-Dec 10, 2018
Jan 29-Feb 13, 2018
May 10-Jun 6, 2016

## ASK FORM 1 ONLY

## [ $\mathrm{N}=5,311$ ]:

f. Medical scientists
Sep 13-18, 2022

Nov 30-Dec 12, 2021
Nov 18-29, 2020
Apr 20-26, 2020
Jan 7-21, 2019
May 10-Jun 6, 2016

## ASK FORM 2 ONLY

[ $\mathrm{N}=5,277$ ]:
g. Scientists

Sep 13-18, 2022
Nov 30-Dec 12, 2021
Nov 18-29, 2020
Apr 20-26, 2020
Jan 7-21, 2019
Nov 27-Dec 10, 2018
Jan 29-Feb 13, 2018
May 10-Jun 6, 2016
EM H

| Not too | No |
| :---: | :---: |
| much | confidence |
| confidence | at all |

No answer

| A great <br> deal <br> of <br> confidence |
| :---: |
| 12 |
| 12 |
| 15 |
| 17 |
| 13 |
| 15 |
| 9 |
| 13 |


| A fair <br> amount <br> of <br> confidence |
| :---: |
| 41 |
| 43 |
| 45 |
| 46 |
| 44 |
| 47 |
| 40 |
| 39 |

4
4
5
5
6
4
5
4

35
36
41
43
40
39
40
37

16
15 12

## 11

 12 11 16 1431
30
29
26
30
27
34
32

30
29
40
43

## 35

50
49
45
46
52
60
16
17
12
9
11
12

| 4 | $<1$ |
| :---: | :---: |
| 5 | $<1$ |
| 2 | $<1$ |
| 2 | $<1$ |
| 2 | $<1$ |
| 3 | 1 |

## CONF CONTINUED ...

i. Public school principals for grades K-12
Sep 13-18, 2022

Nov 30-Dec 12, 202114
Nov 18-29, 202021
Apr 20-26, 202028
Jan 7-21, 201921
Nov 27-Dec 10, 2018

| A great |
| :---: |
| deal |
| of |
| confidence |${ }^{2}+$


| A fair |
| :---: |
| amount |
| of |
| confidence |


| Not too | No |
| :---: | :---: |
| much | confidence |
| confidence | at all |

No answer

TREND FOR

## COMPARISON:

Public school principals and superintendents for grades $K-12$

Nov 27-Dec 10, 2018
May 10-Jun 6, 2016
22

| 53 | 23 | 8 | $<1$ |
| :---: | :---: | :---: | :---: |
| 51 | 26 | 9 | 1 |
| 54 | 19 | 6 | $<1$ |
| 55 | 14 | 3 | $<1$ |
| 56 | 18 | 4 | 1 |
| 55 | 16 | 4 | $<1$ |

13
55
17
5
1
j. Police officers

Sep 13-18, 2022
Nov 30-Dec 12, 2021
Nov 18-29, 2020
Apr 20-26, 2020
Nov 27-Dec 10, 2018

| 49 | 22 | 8 | $<1$ |
| :--- | :--- | :--- | :--- |
| 49 | 22 | 9 | $<1$ |
| 48 | 19 | 7 | $<1$ |
| 54 | 17 | 4 | $<1$ |
| 48 | 16 | 5 | $<1$ |

## OTHER QUESTION HELD FOR FUTURE RELEASE

## ASK ALL:

SCI_US1
Thinking about all the important goals for the United States, how important do you think it is for the U.S. to be a world leader in scientific achievements?

Sep 13-18,
$\underline{2022}$
54 Very important
37 Somewhat important
7 Not too important
1 Not at all important
1 No answer

## TREND FOR COMPARISON:

Pew Research Center survey conducted by telephone: Thinking about all the important goals for the United States, how important do you think it is for the United States to be a world leader in scientific achievements? Do you think it is very important, somewhat important, not too important or not at all important?

```
Oct 1-28,
    2019
        6 9 ~ V e r y ~ i m p o r t a n t
        24 Somewhat important
        3 Not too important
        3 Not at all important
        D DK/Refused
```

ASK ALL:
SCI_US2

Do you think government investments in scientific research aimed at advancing knowledge are usually... [RANDOMIZE]

## Sep 13-18,

$\underline{2022}$
81 Worthwhile investments for society over time
18 Not worth the investments
1 No answer

## TREND FOR COMPARISON:

Pew Research Center survey conducted by telephone: In your opinion, are government investments in scientific research aimed at advancing knowledge usually worthwhile for society over time, or are they not worth the investment?

| Oct 1-28, |  |
| :--- | :--- |
| $\frac{2019}{82}$ |  |
| 15 | Yes, they are worthwhile for society over time |
| 3 | No, they are not worth the investment |
| DK/Refused |  |

## TREND FOR COMPARISON:

SCI3 In your opinion, do you think government investments in the following usually pay off in the long run, or are they not worth it? [RANDOMIZE ITEMS]

| Government | Government |
| :---: | :---: |
| investments |  |
| investments |  |
| usually pay off in | usually aren't |
| the long run | worth it |

> No answer

22
1

## TREND FOR COMPARISON:

Pew Research Center survey conducted by telephone: In your opinion, do government investments in [INSERT ITEM; RANDOMIZE] usually pay off in the long run, or are they not worth it?

| a.Yes, pay off in <br> the long run | No, aren't <br> worth it | DK/Ref <br> (VOL.) |  |
| :---: | :---: | :---: | :---: |
| Basic scientific research |  |  |  |
| Aug 15-25, 2014 | 71 | 24 | 5 |
| Apr 28-May 12, 2009 | 73 | 18 | 9 |

## ASK ALL:

| SCI_US3 | When it comes to scientific achie <br> world, do you think the United S |
| :---: | :--- |
| 2, WITH OPTION 3 ALWAYS LAL |  |
| Sep 13-18, |  |
| $\frac{2022}{14}$ | Gaining ground |
| 38 | Losing ground |
| 47 | Staying in about the same place |
| 1 | No answer |

## RANDOMIZE POLICY1/POLICY1B AND POLICY2

## ASK FORM 1 ONLY [N=5,311]:

Which of these statements comes closer to your own view, even if neither is exactly right? [RANDOMIZE]

Sep 13-18, 2022
Apr 29-May 5, 2020
Jan 7-21, 2019

| Scientists should |
| :---: |
| take an active role |
| in public policy |
| debates about |
| scientific issues |
| 48 |
| 60 |
| 60 |


| Scientists should focus on |  |
| :---: | :---: |
| establishing sound |  |
| scientific facts and stay out of public |  |
| policy debates | No answer |
| 51 | 1 |
| 39 | 2 |
| 39 | 1 |

## ASK FORM 2 ONLY [N=5,277]:

POLICY1B Do you think scientists have... [RANDOMIZE RESPONSE OPTIONS 1 \& 2, WITH 3
ALWAYS LAST]
Sep 13-18,
$\underline{2022}$
19 Too much influence in public policy debates
45 Not enough influence in public policy debates
35 About the right amount of influence in public policy debates
1 No answer

## ASK ALL:

POLICY2 Which of these statements comes closer to your own view, even if neither is exactly right? [DO NOT RANDOMIZE OPTIONS]
$\left.\begin{array}{lccc} & \begin{array}{c}\text { Public opinion should } \\ \text { NOT play an } \\ \text { important role to } \\ \text { guide policy } \\ \text { decisions about }\end{array} & \\ \text { scientific issues }\end{array}\right)$

## TREND FOR COMPARISON:

Pew Research Center survey conducted by telephone: Which of these statements best describes your views, even if neither is exactly right?

|  | Aug 15-25, |
| :--- | :---: |
| (One) Public opinion should play an important role to guide policy |  |
| decisions about scientific issues, [OR] | $\underline{2014}$ |
| (Two) Public opinion should NOT play an important role to guide | 60 |
| policy decisions about scientificis issues because these issues are too |  |
| complex for the average person to understand | 35 |
| Neither/Both (VOL.) |  |
| Don't know/Refused (VOL.) | 2 |

## ASK ALL:

POLICY3 In general, would you say scientific experts are... [DO NOT RANDOMIZE]
$\left.\begin{array}{lcccc} & \begin{array}{c}\text { Usually BETTER at } \\ \text { making good } \\ \text { policy decisions } \\ \text { about scientific }\end{array} & \begin{array}{c}\text { Usually WORSE at } \\ \text { making good } \\ \text { policy decisions } \\ \text { about scientific }\end{array} & \begin{array}{c}\text { NEITHER BETTER } \\ \text { issues than other } \\ \text { issues than other at } \\ \text { making good } \\ \text { policy decisions } \\ \text { about scientific }\end{array} & \\ \text { issues than other }\end{array}\right]$

## OTHER QUESTIONS PREVIOUSLY RELEASED OR HELD FOR FUTURE RELEASE

```
ASK FORM 1 ONLY (XFORM=1) [N=5,311]:
RQ2_F1A
    How much, if anything, do you know about what medical research scientists do?
    Sep 13-18,
    2022
        13 A lot
        64 A little
        22 Nothing at all
        1 No answer
```

TREND FOR COMPARISON:
ASK ALL:
Medical research scientists conduct research to investigate human diseases, and test methods to prevent
and treat them.

ASK ALL:
RQ2_F1A How much, if anything, do you know about what medical research scientists do?

Nov 30-Dec 12, 2021
Jan 7-21, 2019

| A lot | Nothing at <br> 13 |  |  |  | $\frac{\text { A little }}{64}$ | $\frac{\text { all }}{22}$ | $\frac{\text { No answer }}{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16 | 67 | 17 | $<1$ |  |  |  |  |

## ASK FORM 2 ONLY (XFORM=2) [N=5,277]:

RQ2_SCI How much, if anything, do you know about what scientists do?
Sep 13-18, $\underline{2022}$
21 A lot
66 A little
13 Nothing at all
1 No answer

## OTHER QUESTIONS PREVIOUSLY RELEASED


[^0]:    Note: Respondents who did not give an answer are not shown.
    Source: Survey conducted Sept. 13-18, 2022.
    "Americans Value U.S. Role as Scientific Leader, but 38\% Say Country Is Losing Ground Globally"
    pew research center

[^1]:    Note: Respondents who did not give an answer are not shown.
    Source: Survey conducted Sept. 13-18, 2022.
    "Americans Value U.S. Role as Scientific
    Leader, but 38\% Say Country Is Losing
    Ground Globally"

[^2]:    ${ }^{1}$ AAPOR Task Force on Address-based Sampling. 2016. "AAPOR Report: Address-based Sampling."

[^3]:    Note: The margins of error are reported at the $95 \%$ level of confidence and are calculated by taking into account the average design effect for each subgroup. White and Black adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Republicans and Democrats include independents and others who lean toward each of the parties.
    Source: Survey conducted Sept. 13-18, 2022.

[^4]:    Note: Respondents who did not give an answer are not shown. NA indicates data not available.
    Source: Survey conducted Sept. 13-18, 2022.
    "Americans Value U.S. Role as Scientific Leader, but 38\% Say Country Is Losing Ground Globally"

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