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Perspective

The misallocation of climate research funding

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ABSTRACT

The window of opportunity for mitigating climate change is narrow. Limiting global warming to 1.5 °C will require rapid and deep alteration of attitudes, norms, incentives, and politics. Some of the key climate-change and energy transition puzzles are therefore in the realm of the social sciences. However, these are precisely the fields that receive least funding for climate-related research. This article analyzes a new dataset of research grants from 333 donors around the world spanning 4.3 million awards with a cumulative value of USD 1.3 trillion from 1950 to 2021. Between 1990 and 2018, the natural and technical sciences received 770% more funding than the social sciences for research on issues related to climate change. Only 0.12% of all research funding was spent on the social science of climate mitigation.

1. Introduction

The natural science of climate change, starting with early discoveries in the nineteenth century and bolstered by large investments over the last three decades, is mature and well established. Thus, 97% of climate scientists agree about the basics of anthropogenic climate change [1], and the Intergovernmental Panel on Climate Change has concluded that it is “extremely likely” that human influence is the dominant cause of ongoing global warming [2].

In tandem with growing knowledge about climate change, a set of technological mitigation options has been widely endorsed, including energy efficiency, wind and solar power, electrification of transport, and reforestation. Moreover, the cost of these solutions is falling rapidly through expanding economies of scale and incremental technological improvements [3]. For instance, from 1975 to 2012, the cost of solar panels fell by over 99%, and since then it has continued to fall [4].

However, one of the most urgent unsolved puzzles is how to get people to act on what they know, that is to say, how to alter society to mitigate climate change [5–7]. Because there is a limited carbon budget, the speed of reductions in annual greenhouse gas emissions is also critical [8,9]. Limiting global warming to 1.5 °C will require reaching 80% zero-emission energy by 2030 and 100% by 2050 [10]. While the impact of climate change and society's adaptation to it will unfold over decades and centuries, there is only a narrow window of opportunity for mitigation. Mitigation is therefore an urgent priority [11,12].

Despite progress in some areas, ongoing changes are too shallow and too slow to reach such targets. Solar, wind, geothermal, and modern bioenergy combined still make up only 6.7% of the world's total final energy consumption [13]. Meanwhile, in the decade from 2007 to 2017, oil, gas, and coal production grew by 13%, 25% and 8%, respectively and, consequently, CO_2 emissions grew by almost 11% [14]. During the same period, three times more money was spent on oil, gas, and coal facilities than on all forms of renewable energy infrastructure, including hydropower and biofuels [15]. Deforestation and population growth also continue at a high pace [16].

Human habits are difficult to change; doing so requires altering attitudes, norms, incentives, ethics, and politics at the personal, community, and national levels [17]. Therefore, some of the key climate-change puzzles are in the realm of the social sciences broadly defined: anthropology, economics, education, international relations, human geography, development studies, legal studies, media studies, political science, psychology, and sociology [18]. Yet, as we find here, these are precisely the fields that receive least funding for climate research.

Others have made similar points before, but they have lacked comprehensive data to back them up [17,19–22]. To make our case, we therefore analyzed a new dataset of research grants from 1950 to 2021 spanning 4.3 million awards with a cumulative budget of USD 1.3 trillion. This includes funding awarded by 333 organizations, mostly national research councils, from 37 countries, including all major member states of the Organization of Economic Cooperation and Development (OECD) as well as Brazil, China, India, and Russia. The data were obtained by mining the new dimensions.ai database (see further information in the appendices). We examined the share of overall

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research funding that went to research on decarbonization and climate-related topics, the share of this funding that went to the social sciences, and lastly the share of this funding that went to mitigation-related research.

2. Estimating funding allocations

There is no straightforward way to identify funding related to climate change research within such a large volume of data, so we developed alternative search strings: a short string with 9 climate-related keywords, such as “climate change” and “global warming”, and a long string with 89 keywords, all combined with the Boolean operator “OR” and applied to the titles and summaries of all research grants (see the full search strings in the appendices). By using two search strings, we were able to draw up lower and upper boundaries of the possible ranges of funding granted to different fields of research (see Fig. 1), a more cautious approach than trying to make an exact estimate. The two research strings can also be useful methodological tools for future research.

A limitation of our dataset is that it only covers competitive research grants. Much researching funding, for example in China, France, and Germany, is still distributed in the form of basic grants and other non-competitive allocations where it can be difficult to know what research topics the funding was spent on. This limitation of our data should be acknowledged, while emphasizing that our aim is to map the prioritization of funding that is purposively allocated to climate research. Such funding reflects the intentions and priorities of policymakers and may be better than non-competitive funding for supporting policy-relevant and dynamic research. Furthermore, as noted in the literature, competitive research funding is a powerful tool for influencing the general research agenda [23,24].

3. The paucity of social science

Our data support several findings. The first is that hardly any social science research was conducted on climate change before 1990. We therefore truncated the data pre-1990 for the rest of our analysis.

The second observation is how little funding has gone into research on climate change overall since 1990, regardless of discipline. Depending on which search string one uses, climate research accounted for between 2.38 and 4.59% of the total amount of research funding during the period from 1990 to 2018. The higher estimate errs on the high side: very few projects that are really about climate change would not include any of the 89 keywords in the long search string, whereas numerous projects that happen to mention one of those words may not really be about climate change.

Third, out of the funding for climate research, the social sciences received a small share (see Fig. 1). From 1990 to 2018, the natural and physical sciences received a total of USD 40 billion compared to only USD 4.6 billion for the social sciences and humanities (based on the means of the short and long search string results). In other words, according to our estimates, the natural and technical sciences received around 770% more funding than the social sciences and humanities for research on climate change. Furthermore, the countries that spent the most on social science climate research in absolute terms according to Table 1—the UK, the USA, and Germany—in fact spent between 500% and 1200% more on climate research in the natural and technical sciences (based on the long search string).

However, even these numbers do not tell the whole story. Within the social sciences, there is also much research that is climate-related but not about climate change mitigation, for example research on adaptation to climate change, how to manage extreme weather events and recover from disasters, or the effects of past climate change on ancient civilizations. While this research is valuable, it does not tackle head-on the most urgent question: how to change society to mitigate climate change right now.

To determine how much social science research is specifically about the *mitigation* of climate change, we drew a random sample of 1500 climate change-related social science grants from our data using the short search string and assessed each of them. This led to our fourth and most important observation: a mere USD 393 million of funding went to social science research on the mitigation of climate change, equivalent to 5.21% of all funding for climate change research and 0.12% of all research funding.

4. The need to balance natural and social science research

Natural and technical climate-related research is important. There is still a need to better understand the physical causes, trajectory, and impact of climate change, as well as the technological means of mitigation. However, there is a striking imbalance between the growing knowledge about climate change and mitigation technologies and the failure to mobilize people to contribute to mitigation efforts. This indicates that research resources are not distributed optimally.

One might argue that the natural sciences need more funding because they employ more people or require more expensive equipment and materials. However, such arguments easily become circular. The numbers of researchers in different fields is as much a consequence as a cause of the availability of funding and there could simply be more high-cost research projects in the natural sciences because more funding is available for them. It would also be possible to spend large amounts of funding on social science research, for example nationally representative surveys of large numbers of countries, large-scale multi-location field experiments, the design and monitoring of living laboratories, or human coding of large volumes of text or video as a basis for machine-learning. It is therefore difficult to argue that the natural sciences are inherently more expensive. In any case, in our data there is not a significant difference between the average size of climate research projects in the natural and social sciences; in fact, the social science projects tend to be slightly larger.

One might also argue that the social sciences get less funding because they come up with fewer interesting ideas and solutions. But many social science ideas and solutions related to the mitigation of climate change have already been put forth, such as climate clubs, carbon taxes, or grassroots mobilization [25,26]. The question is whether sufficient research funding is available to develop these and other ideas properly.

The prioritization of natural science could also be related to a perceived need to overcome climate skepticism by proving that climate change is due to human greenhouse gas emissions. However, currently, climate skepticism has almost no voice in the scientific community [20] and even fossil fuel companies acknowledge anthropogenic climate change. There remains significant climate skepticism among laypeople, including prominent politicians; however, this is not a natural science problem but one of communication, vested interests, and politics—again the realm of the social sciences.

5. Solutions for advancing social science

Once one realizes how little funding is spent on the social science of climate mitigation, and the related social science side of energy studies, the question arises as to how the situation can be improved. Our main answer to this question is to spread awareness of how little funding is actually going into this field of research, and to contrast it with its urgency.

While our data and analysis cannot explain *why* funding is distributed the way it is, or exactly *how* it should be distributed, they still support some simple but important policy lessons which we present in the next subsections.

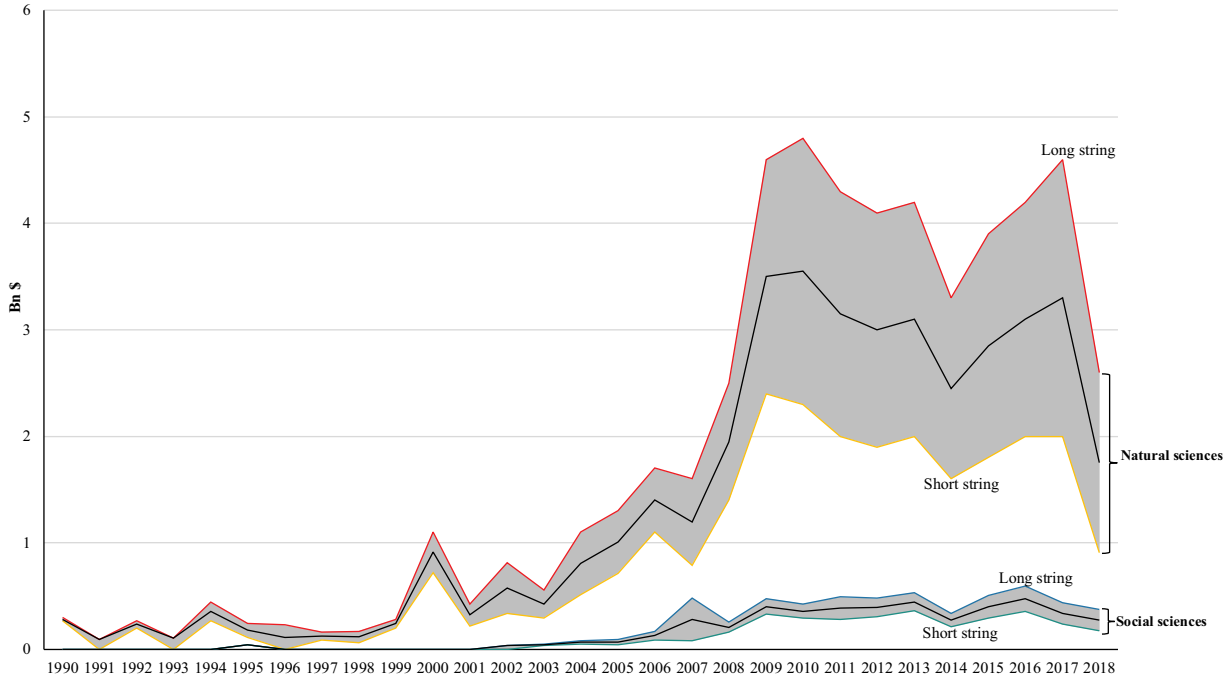

Fig. 1. Funding for climate research in the natural and technical sciences versus the social sciences and humanities (USD). The gray areas represent ranges of estimates derived from short and long search strings.

5.1. Funding for climate mitigation needs to match the magnitude of the threat

Funding agencies need to better secure and prioritize funding for climate change mitigation, across all disciplines. Global annual damages from climate change have already surpassed USD 10 to 40 billion from storm surge alone, and it could surpass USD 100 trillion over the next 80 years [27]. Funding for research on climate mitigation should be increased to address the magnitude of this threat and take into account the narrow window of opportunity for dealing with it.

Such research efforts cannot necessarily be guaranteed to reduce or contain the extent or distribution of climate change impacts, and we also fully appreciate that the magnitude of required research investment is almost unparalleled. By comparison, the entire cost of the United States space shuttle program, up until 2011 was estimated to cost USD 196 billion [28,29]. But individual research programs have been known to reach into the billions of dollars annually, with the United States federal government spending USD 34.8 billion per year on HIV/AIDS research and treatment in 2019 [30]. If similar efforts were invested into energy and climate social science, they could yield substantial dividends worldwide. A first important step could be a rigorous funding gaps and scoping analysis to determine precisely how much funding is needed, and for which challenges, themes, or problems.

Table 1.
Top countries and funding bodies supporting social science climate research (based on the long search string, USD).

A. By country			B. By funding body		
Country	**Projects**	**Bn $**	**Organization**	**Projects**	**Bn $**
UK	1414	2.1	European Commission	1087	2.6
US	2979	1.8	US National Science Foundation, Directorate for Education & Human Resources	412	0.460
Germany	747	1.7	UK Engineering and Physical Sciences Research Council	197	0.38
France	464	1.6	Research Council of Norway	563	0.36
Spain	367	1.4	US National Science Foundation, Directorate for Social, Behavioral & Econ. Sciences	720	0.18
Netherlands	488	1.2	US National Science Foundation, Office of the Director	75	0.18
Italy	423	1.2	European Research Council	69	0.16
Belgium	448	1.1	US National Science Foundation, Directorate for Geosciences	347	0.15
Sweden	656	0.9	US National Science Foundation, Directorate for Engineering	225	0.13
Norway	700	0.85	US National Institute of Food and Agriculture	517	0.11

Source: Compiled by the authors.

5.2. Improved funding transparency and coordination

There is a need for better global coordination and oversight of funding for climate research. Our data provide an unprecedented overview of funding for climate research, yet they cover only a fraction of global research funding, much of which is distributed through non-competitive base grants for universities. The lack of oversight can cause significant overlaps in funding in some research areas, while other areas are neglected.

As a concrete fix to this problem, more research financing organizations need to make their portfolios available online with standardized tags for such things as project title, summary, and discipline. Better oversight could be facilitated by the United Nations Framework Convention on Climate Change, or United Nations Educational, Scientific and Cultural Organization, or a coalition of the willing, and could help increase the efficiency of the climate research effort. Some countries, especially those that have been critical of recent IPCC reports, such as Russia and Saudi Arabia, might not be willing to join such an effort, but such actors tend not to fund large sums of energy and climate mitigation research anyway, so their exclusion would not necessarily thwart progress.

Greater transparency of global research funding would give researchers and policymakers a better understanding of what is in the pipeline and help them efficiently allocate time and funding. It could reduce redundancy and serve as a mechanism for research teams to identify synergies and possible collaborators.

5.3. More rigorous social science research

While more funding is needed for social research on climate change, the social sciences also need to rise to the challenge. Firstly, social scientists need to do a better job of ensuring rigor and validity in their research. In their survey of the field of sustainability, for instance, Brandt et al. noted that methods were often chosen based on familiarity or specialization of the researchers involved, rather than their suitability for a given research question [31]. Moreover, in an examination of 15 years of energy research (1999–2013), it was found that almost one-third (29%) of 4,444 studies examined had no research design—or method—whatsoever [32]. Hamilton et al. similarly note that in the domain of energy efficiency and buildings, “analysis is often limited to small datasets and results are not applicable more broadly due to an absence of context or baselines” [33].

Secondly, some social science research is wishy-washy, lacking an understanding of the natural sciences and the physical world [34]. Some is caught up in obscure theoretical debates—one assessment identified no less than 96 theories deemed relevant to the fairly narrow topic of the social acceptance of new technologies [35]. Much social science deals with very small groups of people or sample sizes that are difficult to generalize from [36], and that may not be of much relevance for the large-scale mitigation of climate change.

Universities or the research councils often funding them could require remedial training in methods for all social science researchers and also mandate that such training be continuous, similar to what the legal profession does with its Continuing Legal Education (CLE) requirements. According to CLE requirements, all practicing attorneys must maintain their professional certification on a continual basis even after they pass the bar.

Fixing the weaknesses of the social sciences will not be done in a day, but it is nonetheless important to start this work so that they can strengthen their real contribution to reducing greenhouse gas emissions if more funding becomes available.

5.4. Better alignment with emissions sources and trends

Also within the social sciences themselves, there is a failure to prioritize truly problem-solving research on the most burning mitigation issues. Some of the funding for climate change-related social science research follows the thematic logic of natural science funding, which does not necessarily fit the social sciences.

For example, there has been a significant amount of climate-related social science research on the Arctic [37]. For climate research in the natural sciences, the polar regions are key, both as the world's “thermometer” and because they are the locus of much of the ice melting that drives sea level rise. For the social science of climate mitigation, the poles are less important because that is not where most emissions come from nor where carbon sinks are located.

Attempts to change the priorities of social science research funding will likely encounter resistance from some entrenched interests, but the academic community has already been fairly progressive at promoting gender diversity in research (fighting patriarchy), highlighting the value of trans-disciplinary research designs (fighting dogmatism and elitism), or arguing in favor of open access publishing regimes (fighting restrictions on information from publishers). This creates a series of precedents for challenging incumbent ways of thinking.

5.5. Do not lose sight of climate change as a global challenge

Although global solutions obviously also depend on understanding the microlevel, it is surprising how little social science research goes straight for the really big issues. Will the Paris Agreement work? What are the concrete suggestions for an alternative and more binding global solution? How could households be convinced to adopt low-carbon lifestyles? How can decarbonization be promoted across cultures and market economies as diverse as China, Russia, Saudi Arabia, Singapore, and the United Kingdom?

Part of the solution could be to organize future research efforts not around disciplines, but around urgent puzzles, which are themselves linked to pressing social challenges related to climate change mitigation and energy systems. This challenges-based approach to research has been relatively successful in other domains, notably national defense (the Defense Advanced Research Projects Agency, or DARPA) [38] and business (Mission Innovation) [39].

However, the problem, challenge, or mission-based approach is only just emerging as a platform to organizing energy and climate research. One example is the Global Challenges Research Fund in the United Kingdom, which asked “How can sustainable development be achieved for all while addressing global climate change?” The European Commission's Horizon 2020 framework program also structured its research agenda around questions such as “How can Europe achieve a resource, water efficient and climate change resilient economy and society?” and “In what way does social innovation contribute to making energy more secure, sustainable and affordable?” Putting research into the context of challenging questions in this manner can promote focused but interdisciplinary social science work and is an approach that could be replicated by other national, regional, and global funding bodies. One reason why there are not more such calls may be entrenched disciplinary divides, anchored in organizational structures. These will need to be tackled directly by leaders within universities—presidents, provosts, deans, vice deans, pro-vice chancellors, faculty senate members, department chairs, and tenure and promotion committees.

6. Conclusion

The funding of climate research appears to be based on the assumption that if natural scientists work out the causes, impacts, and technological remedies of climate change, then politicians, officials, and citizens will spontaneously change their behavior to tackle the problem. The past decades have shown that this assumption does not hold.

Although the natural and technical sciences often generate results that are, or are perceived to be, clearer and more concrete than the social sciences, they cannot handle issue areas—such as attitudes, norms, incentives, and politics—that are intrinsically social.

The solutions are to make more funding available for social science research on climate mitigation; improve global research funding coordination and transparency; prioritize and align key questions within the social sciences and increase the rigorousness of social science research. Framing climate change more as a global social challenge that cuts across disciplines will expand the scope of research, its ability to offer critical insights, and its social legitimacy among a broader base of stakeholders.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper, apart from being social scientists and therefore having an interest in increased funding for social science.

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Appendices A-H

A. Methodological and empirical specifications

Data were gathered from 11 Dec. 2018 to 20 Jan. 2019 by scraping the dimensions.ai database. Dimensions.ai uses a reverse-engineering technique based on machine learning, where a corpus of manually coded grants are examined and the manual codes applied are reproduced by the algorithm. This is then checked against actual codes, and changes are made to improve the algorithm. This makes it possible to classify very large numbers of research projects efficiently. Funding sums are automatically adjusted for the average exchange rate of the relevant year.

All our searches were done in titles and abstracts.

For fields of research, dimensions.ai uses Australian and New Zealand Standard Research Classification (ANZSRC) because it has clear categories and a large corpus of manually coded grant descriptions that can be used for machine-learning purposes. ANZSR includes 157 research fields.

For a full overview of fields, see http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/1297.0Contents12008?opendocument&tabname=Summary&prodno=1297.0&issue=2008&num=&view=

In our research, all fields of research up to and including “Other built environment and design” (ANZSRC code 1299) were counted as natural and technical sciences, the rest as social sciences and humanities.

B. Handling of random sample and definition of mitigation

A random sample was drawn of 1500 social science climate change projects to identify which projects were about climate change mitigation, and which were about other things. The following definitions were applied:

(a) Mitigation – actions that reduce net carbon emissions and limit long-term climate change.
(b) Adaptation – actions that help human and natural systems to adjust to climate change.
(c) Research on new technologies, on institutional designs and on climate and impacts science, which should reduce uncertainties and facilitate future decisions.

These definitions were based on: ar4_3wg, p. 225, referring on to Richels et al., 2004; Caldeira et al., 2003; Yohe et al., 2004 [40–42].

Possible mitigation projects were found by reading through all titles and abstracts in the random sample as well as by carrying out searches for the terms “mitigat*”, “reduction”, “reduce”, “limit”, “curb”, “abate”, “emissions”, “decarbon*”.

Projects were allowed to have multiple / overlapping classifications, for example they could be classified as concerning both mitigation and adaptation.

We operated with two levels of certainty about whether projects concerned mitigation: “Mitigation” and “Maybe mitigation”. This fuzzy logic element enabled us to handle the ambivalence of some projects and ensured that the results were as balanced as possible. Both categories were included in the final count of social science mitigation grants for the article.

We did not assess whether we thought projects were good mitigation projects or not (e.g. wood pellets), just whether the people carrying out the projects present them as somehow contributing to mitigation of climate change.

Projects were not counted as mitigation projects if:

- They aimed at general enlightenment / education on climate change issues. Although enlightening people about the mechanisms behind climate change can lay the basis for mobilizing them to contribute to mitigation, it is not the same as working for mitigation per se.
- Mitigation was a small part of the project (less than 1/3 according to the assessment of the person doing coding). This also means that if research projects just seemed to be 50% about mitigation, they were counted as mitigation projects. This is one of several methodological choices that stack the data against our own arguments.

Projects on the following topics were classified as mitigation projects to ensure that our “mitigation” category was broad enough to capture all possible mitigation projects and again to stack the data against our own arguments: climate justice, a just energy transition, the consequences of mitigation, the financial consequences of mitigation, co-benefits of mitigation

After a pilot run of 300 projects categorized by the lead author, the rest of the random sample of 1500 was categorized by two research assistants. Projects they were in doubt about were discussed in plenary sessions.

C. Search string development

The purpose of the search strings was to capture all research projects related to climate change in the database. If one simply searches for "climate change" one will miss many projects focused on narrow climate change sub-topics

We harvested possible keywords from several sources:

- word frequency analysis of IPCC reports
- climate vocabularies and dictionaries:
  - https://www.bbc.com/news/science-environment-11833685
  - https://en.wikipedia.org/wiki/Glossary_of_climate_change
  - https://climatechange.ucdavis.edu/science/climate-change-definitions/
  - https://www.slhd.nsw.gov.au/concord/sustainability/content/pdf/climatechangeglossary.pdf

Each keyword was pre-tested separately and the most reliable ones were included in our search strings.

To be on the safe side, we developed two search strings: a short one with a small number of safe terms that are clearly relevant for climate change and neutral vis-à-vis social and natural sciences, and a long, comprehensive one to capture the broader range of projects including fields that are not directly about climate change, but directly relevant for it.

We sought to balance the number of keywords related to the natural and social sciences, to avoid biasing our results. The long search string is helpful in this regard as it is so comprehensive that there are very few climate-related projects of any kind that evade it.

The long search string includes both more words related to climate change and words related to other topics that are highly relevant for climate change, for example "renewable energy". This is because climate change is the main driver for the development of renewable energy and cutting GHG emissions by changing energy production and consumption is one of the main ways to mitigate climate change. As we are particularly interested in mitigation in our analysis, it makes sense to include such key mitigation components in the long search string.

As natural science is the starting point and foundation for concern over climate change, many natural science terms are also used in descriptions of social science projects (but we still classify those projects as social science). There are also many words that occur in both natural science and social research. Thus, there is a considerable overlap between the vocabularies, which helps reduce the risk of bias somewhat.

An advantage of the long string is that each word becomes less decisive, as there are so many other words and many of them will occur together in a given project description. Thus, the difference in search results due to addition or removal of one word is small.

D. Short search string

"climate change" OR "climate mitigation" OR "climate adaptation" OR "global warming" OR "greenhouse effect" OR "greenhouse gas" OR "GHG" OR "CO2 emissions" OR "climate policy"

E. Long search string

"climate change" OR "climate mitigation" OR "climate adaptation" OR "global warming" OR "greenhouse effect" OR "greenhouse gas" OR "GHG" OR "CO2 emissions" OR "decarbonization" OR "decarbonization" OR "climate policy" OR "UNFCCC" OR "United Nations Framework Convention on Climate Change" OR "Intergovernmental Panel on Climate Change" OR "IPCC" OR "Kyoto Protocol" OR "Paris Agreement" OR "nationally determined contribution" OR "INDC" OR "Bali roadmap" OR "climate negotiation" OR "climate action" OR "climate justice" OR "climate ethics" OR "climate skeptic" OR "climate sceptic" OR "climate denial" OR "climate denier" OR "climate migration" OR "climate refugees" OR "cap and trade" OR "emissions trading" OR "carbon finance" OR "carbon credit" OR "carbon tax" OR "carbon market" OR "carbon bubble" OR "CO2 equivalent" OR "carbon sequestration" OR "geological sequestration" OR "carbon capture and storage" OR "carbon sink" OR "radiative forcing" OR "climate feedback" OR "sea level rise" OR "anthropogenic aerosols" OR "carbon footprint" OR "carbon offset" OR "carbon neutral" OR "carbon intensity" OR "carbon price" OR "mitigation potential" OR "climate feedback" OR "climate model" OR "ocean acidification" OR "carbon cycle" OR "climate feedback" OR "climate sensitivity" OR "climate model" OR "carbon uptake" OR "CO2 concentration" OR "coral bleaching" OR "Greenland ice sheet" OR "Arctic sea ice" OR "ice core" OR "ice loss" OR "geoengineering" OR "renewable energy" OR "renewables" OR "wind turbine" OR "solar power" OR "geothermal energy" OR "landfill gas" OR "biofuel" OR "bioenergy" OR "tidal power" OR "solar power" OR "photovoltaic" OR "heat pump" OR "distributed generation" OR "passive house" OR "smart grid" OR "smart energy" OR "microgrid" OR "feed-in tariff" OR "grid storage" OR "demand response" OR "electric vehicle" OR "electric mobility"

F. Short string coded for use via API

The dimensions.ai database we scraped our data from has a cumbersome UI. However, we were able to use URL encoding with hexadecimal numerals via the API to carry out more complex searches more transparently. Here we exemplify this with the short search string limited to the social sciences:

https://app.dimensions.ai/discover/grant?search_text=%22climate+change%22+OR+%22climate+mitigation%22+OR+%22climate+adaptation%22+OR+%22global+warming%22+OR+%22greenhouse+effect%22+OR+%22greenhouse+gas%22+OR+%22GHG%22+OR+%22CO2+emissions%22+OR+%22climate+policy%22&search_type=kws&search_field=text_search&or_facet_for=3243&or_facet_for=3253&or_facet_for=3268&or_facet_for=3283&or_facet_for=3286&or_facet_for=3292&or_facet_for=3313&or_facet_for=3320&or_facet_for=3326&or_facet_for=3335&or_facet_for=3342&or_facet_for=3358&or_facet_for=3364&or_facet_for=3373&or_facet_for=3381&or_facet_for=3389&or_facet_for=3395&or_facet_for=3403&or_facet_for=3410&or_facet_for=3416&or_facet_for=3432&or_facet_for=3443&or_facet_for=3448&or_facet_for=3460&or_facet_for=3468&or_facet_for=3484&or_facet_for=3491&or_facet_for=3494&or_facet_for=3528&or_facet_for=3561&or_facet_for=3531&or_facet_for=3537&or_facet_for=3544&or_facet_for=3549&or_facet_for=3567&or_facet_for=3570&or_facet_for=3577&or_facet_for=3591&or_facet_for=3616&or_facet_for=3626&or_facet_for=3654&or_facet_for=3657&or_facet_for=3669&or_facet_for=3675&or_facet_for=3690&or_facet_for=3693&or_facet_for=3702&or_facet_for=3714&or_facet_for=3735&or_facet_for=3744

G. Categorization of fields of research as natural or social sciences

The dimensions.ai database applies the ANZSCR classification system for fields of research—because it is suitable to the machine learning approach that dimensions.ai uses to classify research projects. We divided the ANZSCR fields into natural and technical sciences on the one hand, and social sciences and humanities on the other, as shown in the following table below. For simplicity, we just refer to natural sciences and social sciences most of the time, subsuming technical sciences and humanities under them.

Fields classified as natural and technical sciences	Fields classified as social sciences and humanities
01 Mathematical Sciences	13 Education
0101 Pure Mathematics	1301 Education Systems
0102 Applied Mathematics	1302 Curriculum and Pedagogy
0103 Numerical and Computational Mathematics	1303 Specialist Studies In Education
0104 Statistics	1399 Other Education
0105 Mathematical Physics	14 Economics
02 Physical Sciences	1401 Economic Theory
0201 Astronomical and Space Sciences	1402 Applied Economics
0202 Atomic, Molecular, Nuclear, Particle and Plasma Physics	1403 Econometrics
0203 Classical Physics	1499 Other Economics
0204 Condensed Matter Physics	15 Commerce, Management, Tourism and Services
0205 Optical Physics	1501 Accounting, Auditing and Accountability
0206 Quantum Physics	1502 Banking, Finance and Investment
0299 Other Physical Sciences	1503 Business and Management
03 Chemical Sciences	1504 Commercial Services
0301 Analytical Chemistry	1505 Marketing
0302 Inorganic Chemistry	1506 Tourism
0303 Macromolecular and Materials Chemistry	1507 Transportation and Freight Services
0304 Medicinal and Biomolecular Chemistry	16 Studies in Human Society
0305 Organic Chemistry	1601 Anthropology
0306 Physical Chemistry (incl. Structural)	1602 Criminology
0307 Theoretical and Computational Chemistry	1603 Demography
0399 Other Chemical Sciences	1604 Human Geography
04 Earth Sciences	1605 Policy and Administration
0401 Atmospheric Sciences	1606 Political Science
0402 Geochemistry	1607 Social Work
0403 Geology	1608 Sociology
0404 Geophysics	1699 Other Studies In Human Society
0405 Oceanography	17 Psychology and Cognitive Sciences
0406 Physical Geography and Environmental Geoscience	1701 Psychology
0499 Other Earth Sciences	1702 Cognitive Sciences
05 Environmental Sciences	1799 Other Psychology and Cognitive Sciences
0501 Ecological Applications	18 Law and Legal Studies
0502 Environmental Science and Management	1801 Law
0503 Soil Sciences	1899 Other Law and Legal Studies
0599 Other Environmental Sciences	19 Studies in Creative Arts and Writing
06 Biological Sciences	1901 Art Theory and Criticism
0601 Biochemistry and Cell Biology	1902 Film, Television and Digital Media
0602 Ecology	1903 Journalism and Professional Writing
0603 Evolutionary Biology	1904 Performing Arts and Creative Writing
0604 Genetics	1905 Visual Arts and Crafts
0605 Microbiology	1999 Other Studies In Creative Arts and Writing
0606 Physiology	20 Language, Communication and Culture
0607 Plant Biology	2001 Communication and Media Studies
0608 Zoology	2002 Cultural Studies
0699 Other Biological Sciences	2003 Language Studies
07 Agricultural and Veterinary Sciences	2004 Linguistics
0701 Agriculture, Land and Farm Management	2005 Literary Studies
0702 Animal Production	2099 Other Language, Communication and Culture
0703 Crop and Pasture Production	21 History and Archaeology
0704 Fisheries Sciences	2101 Archaeology
0705 Forestry Sciences	2102 Curatorial and Related Studies
0706 Horticultural Production	2103 Historical Studies
0707 Veterinary Sciences	2199 Other History and Archaeology
0799 Other Agricultural and Veterinary Sciences	22 Philosophy and Religious Studies
08 Information and Computing Sciences	2201 Applied Ethics
0801 Artificial Intelligence and Image Processing	2202 History and Philosophy of Specific Fields
0802 Computation Theory and Mathematics	2203 Philosophy
0803 Computer Software	2204 Religion and Religious Studies
0804 Data Format	2299 Other Philosophy and Religious Studies
0805 Distributed Computing	
0806 Information Systems	
0807 Library and Information Studies	
0899 Other Information and Computing Sciences	
09 Engineering	
0901 Aerospace Engineering	
0902 Automotive Engineering	
0903 Biomedical Engineering	
0904 Chemical Engineering	

0905 Civil Engineering
0906 Electrical and Electronic Engineering
0907 Environmental Engineering
0908 Food Sciences
0909 Geomatic Engineering
0910 Manufacturing Engineering
0911 Maritime Engineering
0912 Materials Engineering
0913 Mechanical Engineering
0914 Resources Engineering and Extractive Metallurgy
0915 Interdisciplinary Engineering
0999 Other Engineering
10 Technology
1001 Agricultural Biotechnology
1002 Environmental Biotechnology
1003 Industrial Biotechnology
1004 Medical Biotechnology
1005 Communications Technologies
1006 Computer Hardware
1007 Nanotechnology
1099 Other Technology
11 Medical and Health Sciences
1101 Medical Biochemistry and Metabolomics
1102 Cardiorespiratory Medicine and Haematology
1103 Clinical Sciences
1104 Complementary and Alternative Medicine
1105 Dentistry
1106 Human Movement and Sports Science
1107 Immunology
1108 Medical Microbiology
1109 Neurosciences
1110 Nursing
1111 Nutrition and Dietetics
1112 Oncology and Carcinogenesis
1113 Ophthalmology and Optometry
1114 Paediatrics and Reproductive Medicine
1115 Pharmacology and Pharmaceutical Sciences
1116 Medical Physiology
1117 Public Health and Health Services
1199 Other Medical and Health Sciences
12 Built Environment and Design
1201 Architecture
1202 Building
1203 Design Practice and Management
1204 Engineering Design
1205 Urban and Regional Planning
1299 Other Built Environment and Design

H. Research funding organizations covered

Funder	Country	Grants	Available Years
Japan Society for the Promotion of Science (JSPS)	Japan	879 197	1964 – 2018
Natural Sciences and Engineering Research Council (NSERC)	Canada	279 874	1991 – 2017
National Natural Science Foundation of China (NSFC)	China	199 966	1989 – 2016
National Research Foundation (NRF)	South Africa	175 584	1950 – 2018
Russian Foundation for Basic Research (RFBR)	Russia	174 499	1993 – 2018
German Research Foundation (DFG)	Germany	116 261	1964 – 2018
European Commission (EC)	Belgium	111 993	1981 – 2019
Directorate for Mathematical & Physical Sciences (NSF MPS)	United States	91 476	1963 – 2019
Social Sciences and Humanities Research Council (SSHRC)	Canada	76 282	1998 – 2017
Directorate for Engineering (NSF ENG)	United States	72 553	1958 – 2019
Swiss National Science Foundation (SNF)	Switzerland	69 774	1975 – 2019
National Science Foundation (NSF)	United States	64 854	1952 – 2018
National Endowment for the Humanities (NEH)	United States	64 676	1953 – 2019
Directorate for Geosciences (NSF GEO)	United States	62 715	1963 – 2019
Directorate for Biological Sciences (NSF BIO)	United States	62 226	1962 – 2019
National Research Foundation of Korea (NRF)	South Korea	60 511	2009 – 2015
National Cancer Institute (NCI)	United States	60 503	1963 – 2018
Directorate for Computer & Information Science & Engineering (NSF CISE)	United States	52 963	1960 – 2019
Canadian Institutes of Health Research (CIHR)	Canada	48 776	1986 – 2018
São Paulo Research Foundation (FAPESP)	Brazil	46 865	1989 – 2019
National Institute of Allergy and Infectious Diseases (NIAID)	United States	44 987	1974 – 2019
National Heart Lung and Blood Institute (NHLBI)	United States	42 893	1963 – 2018
Directorate for Education & Human Resources (NSF GOVERNMENT)	United States	39 993	1971 – 2019
National Institute of General Medical Sciences (NIGMS)	United States	36 215	1964 – 2018
Directorate for Social, Behavioral & Economic Sciences (NSF SBE)	United States	36 040	1964 – 2019
Ministry of Science and Higher Education (MniSW)	Poland	34 072	1994 – 2018

National Aeronautics and Space Administration (NASA)	United States	32 818	1982 – 2019
National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)	United States	32 806	1964 – 2018
The Research Council of Norway (RCN)	Norway	31 701	1988 – 2018
National Institute of Neurological Disorders and Stroke (NINDS)	United States	29 278	1968 – 2018
United States Department of Health and Human Services (HHS)	United States	28 133	1982 – 2017
National Institute of Mental Health (NIMH)	United States	27 462	1972 – 2018
National Institute of Food and Agriculture (NIFA)	United States	27 427	2007 – 2017
National Health and Medical Research Council (NHMRC)	Australia	26 484	1986 – 2019
United States Department of the Navy (DON)	United States	26 296	1982 – 2018
Australian Research Council (ARC)	Australia	25 624	2001 – 2018
Council for International Exchange of Scholars (CIES)	United States	24 917	2006 – 2019
Wellcome Trust (WT)	United Kingdom	24 264	1997 – 2018
United States Department of the Air Force (DAF)	United States	23 282	1982 – 2017
National Council for Scientific and Technological Development (CNPq)	Brazil	22 988	2012 – 2018
National Institute of Child Health and Human Development (NICHD)	United States	22 955	1957 – 2019
Office of the Director (NSF OD)	United States	20 787	1957 – 2019
Engineering and Physical Sciences Research Council (EPSRC)	United Kingdom	20 350	2006 – 2019
Netherlands Organisation for Scientific Research (GOVERNMENT)	Netherlands	19 055	1993 – 2021
National Science Center (NCN)	Poland	17 356	2008 – 2018
National Institute on Aging (NIA)	United States	17 220	1975 – 2018
Belgian Federal Science Policy Office (BELSPO)	Belgium	17 070	1964 – 2018
Innovate UK (Innovate UK)	United Kingdom	17 040	1999 – 2018
Czech Science Foundation (GAČR)	Czechia	16 543	1993 – 2017
National Institute on Drug Abuse (NIDA)	United States	16 385	1971 – 2018
Congressionally Directed Medical Research Programs (CDMRP)	United States	16 218	1992 – 2017
Swedish Research Council (SRC)	Sweden	15 988	2006 – 2019
United States Department of the Army (DA)	United States	15 629	1982 – 2017
National Oceanic and Atmospheric Administration (NOAA)	United States	15 122	1996 – 2019
FWF Austrian Science Fund (FWF)	Austria	14 551	1965 – 2019
Biotechnology and Biological Sciences Research Council (BBSRC)	United Kingdom	13 666	2006 – 2019
VINNOVA (VINNOVA)	Sweden	13 636	2008 – 2019
Foundation for Science and Technology (FCT)	Portugal	12 723	1999 – 2017
National Agency for Research (ANR)	France	12 632	2007 – 2018
Department for Environment Food and Rural Affairs (DEFRA)	United Kingdom	12 490	1979 – 2018
University Grants Committee (UGC)	China	12 442	2006 – 2018
National Center for Advancing Translational Sciences (NCATS)	United States	12 361	1971 – 2018
Centers for Disease Control and Prevention (CDC)	United States	12 296	1974 – 2018
National Eye Institute (NEI)	United States	10 902	1973 – 2018
Academy of Finland (AKA)	Finland	10 762	2001 – 2018
Canada Foundation for Innovation (CFI)	Canada	10 387	1998 – 2018
Ministry of Education, Universities and Research (MIUR)	Italy	10 304	1999 – 2015
National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)	United States	10 147	1973 – 2018
United States Department of Energy (DOE)	United States	9 677	1982 – 2015
National Institute of Environmental Health Sciences (NIEHS)	United States	9 553	1974 – 2018
Fonds de Recherche du Québec – Nature et technologies (FRQNT)	Canada	9 243	2002 – 2017
European Research Council (ERC)	Belgium	9 226	2008 – 2020
Medical Research Council (MRC)	United Kingdom	9 106	1973 – 2018
Environmental Protection Agency (EPA)	United States	9 005	1982 – 2018
Ministry of Education, Science, Research and Sport of the Slovak Republic (MŠVVaŠ SR)	Slovakia	8 955	2000 – 2017
Substance Abuse and Mental Health Services Administration (SAMHSA)	United States	8 905	1974 – 2017
Research Foundation – Flanders (FWO)	Belgium	8 840	1950 – 2013
Ministry of Education Youth and Sports (MSMT)	Czechia	8 751	1991 – 2017
Israel Science Foundation (ISF)	Israel	8 474	2000 – 2018
Zhejiang Provincial Natural Science Foundation (ZJNSF)	China	8 135	2003 – 2015
National Institute of Dental and Craniofacial Research (NIDCR)	United States	8 015	1972 – 2018
Irish Research Council (IRC)	Ireland	8 005	1999 – 2018
National Institute On Alcohol Abuse and Alcoholism (NIAAA)	United States	7 983	1975 – 2019
Natural Environment Research Council (NERC)	United Kingdom	7 975	2006 – 2021
National Institute of Justice (NIJ)	United States	7 921	1992 – 2017
Hungarian Scientific Research Fund (OTKA)	Hungary	7 721	1997 – 2018
Missile Defense Agency (MDA)	United States	7 668	1984 – 2017
Economic and Social Research Council (ESRC)	United Kingdom	7 533	2006 – 2020
Fonds de Recherche du Québec – Société et culture (FRQSC)	Canada	7 393	2000 – 2018
National Institute on Deafness and Other Communication Disorders (NIDCD)	United States	7 301	1974 – 2018
Health Resources and Services Administration (HRSA)	United States	7 140	1974 – 2017
Bill & Melinda Gates Foundation (BMGF)	United States	6 994	1998 – 2018
Slovenian Research Agency (ARRS)	Slovenia	6 507	1994 – 2018
Innovation and Technology Commission (ITC)	China	6 344	1994 – 2018
Arts and Humanities Research Council (AHRC)	United Kingdom	6 250	2006 – 2019
Biological and Environmental Research (BER)	United States	6 089	1982 – 2013
Danish Ministry of Higher Education and Science (UFM)	Denmark	5 957	2003 – 2018
Office of Science (DOE SC)	United States	5 855	1985 – 2018
Defense Advanced Research Projects Agency (DARPA)	United States	5 813	1982 – 2019
International Foundation for Science (IFS)	Sweden	5 528	1974 – 2016
Fonds de Recherche du Québec – Santé (FRQS)	Canada	5 498	2000 – 2017
Swedish Research Council for Health Working Life and Welfare (FORTE)	Sweden	5 078	2008 – 2019
Agency for Healthcare Research and Quality (AHRQ)	United States	5 023	1981 – 2018
Cancer Research UK (CRUK)	United Kingdom	4 885	2001 – 2018
Science and Technology Facilities Council (STFC)	United Kingdom	4 855	2003 – 2019
National Institute of Biomedical Imaging and Bioengineering (NIBIB)	United States	4 824	1976 – 2018

Spencer Foundation (Spencer)	United States	4 617	1984 – 2018
Science Foundation Ireland (SFI)	Ireland	4 488	2001 – 2017
Ministry of Industry and Trade (MPO)	Czechia	4 414	1991 – 2017
Orthopaedic Research and Education Foundation (OREF)	United States	4 351	1956 – 2018
Ministry of Health (MZ)	Czechia	4 317	1991 – 2017
National Institute of Nursing Research (NINR)	United States	4 213	1979 – 2018
Russian Science Foundation (RSF)	Russia	4 081	2014 – 2018
Ministry of Research, Innovation and Science (MRIS)	Canada	3 922	2004 – 2017
Science and Engineering Research Board (SERB)	India	3 854	2015 – 2016
Fogarty International Center (FIC)	United States	3 749	1978 – 2018
British Heart Foundation (BHF)	United Kingdom	3 724	1991 – 2019
Ministry of Business, Innovation and Employment (MBIE)	New Zealand	3 591	2002 – 2018
National Human Genome Research Institute (NHGRI)	United States	3 522	1976 – 2018
United States Department of Veterans Affairs (DVA)	United States	3 477	2008 – 2018
National Centre for Research and Development (NCRD)	Poland	3 470	2007 – 2018
Juvenile Diabetes Research Foundation (JDRF)	United States	3 282	1997 – 2016
Swedish Energy Agency (Swedish Energy Agency)	Sweden	3 248	2007 – 2017
United States Department of Education (DoED)	United States	3 141	1982 – 2018
United States National Library of Medicine (NLM)	United States	3 137	1976 – 2018
Fisheries Research and Development Corporation (FRDC)	Australia	3 103	1971 – 2018
Academy of Sciences of the Czech Republic (ASCR)	Czechia	3 035	1992 – 2009
Estonian Research Council (ETAg)	Estonia	2 985	1996 – 2019
NIHR Evaluation Trials and Studies Coordinating Centre (NETS)	United Kingdom	2 940	1995 – 2018
National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR)	United States	2 878	1980 – 2017
Office of the Director (OD)	United States	2 868	1975 – 2018
United States Food and Drug Administration (USFDA)	United States	2 843	1980 – 2018
National Research Fund Luxembourg (FNR)	Luxembourg	2 840	2006 – 2019
Bloodwise (Bloodwise)	United Kingdom	2 731	1968 – 2019
Susan G. Komen Breast Cancer Foundation (Komen)	United States	2 650	1982 – 2018
Qatar Foundation (QF)	Qatar	2 591	2007 – 2018
Danish Agency for Science and Higher Education (DASHE)	Denmark	2 562	2013 – 2018
Alberta Innovates (AIHS)	Canada	2 522	2000 – 2018
Crohn's and Colitis Foundation (CCF)	United States	2 428	1966 – 2018
Volkswagen Foundation (VolkswagenStiftung)	Germany	2 395	2004 – 2018
Agricultural Research Service (ARS)	United States	2 349	2003 – 2016
Commonwealth Fund (TCF)	United States	2 323	1995 – 2018
United States Air Force (USAF)	United States	2 314	2014 – 2018
Telethon Foundation (Telethon)	Italy	2 261	1991 – 2017
Canadian Cancer Society (CCS)	Canada	2 253	1994 – 2018
International Human Frontier Science Program Organization (HFSP)	France	2 118	2002 – 2017
British Academy (BA)	United Kingdom	2 087	2011 – 2016
United States-Israel Binational Science Foundation (BSF)	Israel	2 033	2000 – 2017
Slovak Research and Development Agency (APVV)	Slovakia	1 933	2004 – 2016
Technology Agency of the Czech Republic (TACR)	Czechia	1 925	2011 – 2017
National Center for Complementary and Integrative Health (NCCIH)	United States	1 892	1997 – 2018
Arthritis Research UK (ARC)	United Kingdom	1 863	2005 – 2018
Michael Smith Foundation for Health Research (MSFHR)	Canada	1 849	2001 – 2019
Swedish Research Council for Environment Agricultural Sciences and Spatial Planning (FORMAS)	Sweden	1 810	2008 – 2016
United States Department of Defense (DOD)	United States	1 781	1997 – 2018
Office of the Secretary of Defense (OSD)	United States	1 771	1992 – 2018
Ministry of Education and Research (HM)	Estonia	1 770	1997 – 2018
Alfred P. Sloan Foundation	United States	1 740	2008 – 2018
United States Geological Survey (USGS)	United States	1 657	1999 – 2017
Health Research Council of New Zealand (HRC)	New Zealand	1 572	2006 – 2018
Arthritis Foundation (AF)	United States	1 545	1973 – 2018
Ministry of Agriculture (eAGRI)	Czechia	1 516	1991 – 2017
UC Discovery Grants (formerly IUCRP) (IUCRP)	United States	1 496	1997 – 2011
Department of Science and Technology (DST)	India	1 456	2004 – 2018
Royal Society (Royal Society)	United Kingdom	1 326	2003 – 2018
NIHR Central Commissioning Facility (CCF)	United Kingdom	1 321	2000 – 2018
Patient-Centered Outcomes Research Institute (PCORI)	United States	1 315	2012 – 2018
National Institutes of Health Clinical Center (CLC)	United States	1 265	1975 – 2017
Bank of Sweden Tercentenary Foundation (RJ)	Sweden	1 261	2008 – 2019
United States Army (USA)	United States	1 260	2014 – 2018
National Institute On Minority Health and Health Disparities (NIMHD)	United States	1 258	1993 – 2018
St. Baldrick's Foundation (SBF)	United States	1 224	2005 – 2019
Arnold and Mabel Beckman Foundation (Beckman)	United States	1 216	1991 – 2018
Alzheimer's Association (ALZ)	United States	1 192	2005 – 2017
Scottish Government Health and Social Care Directorates (SGHSC)	United Kingdom	1 137	2001 – 2018
Defense Threat Reduction Agency (DTRA)	United States	1 032	1982 – 2019
Craig H Neilsen Foundation (CHN)	United States	1 021	2004 – 2019
United States Department of Transportation (USDOT)	United States	1 016	1982 – 2016
California Institute for Regenerative Medicine (CIRM)	United States	989	2006 – 2017
Saskatchewan Health Research Foundation (SHRF)	Canada	948	2003 – 2019
John Templeton Foundation (Templeton)	United States	940	2011 – 2018
United States Department of Homeland Security (DHS)	United States	905	2003 – 2016
The Icelandic Centre for Research (RANNIS)	Iceland	891	2004 – 2017
Cancer Prevention and Research Institute of Texas (CPRIT)	United States	862	2010 – 2018
Research Manitoba (MHRC)	Canada	846	2010 – 2017
Heart And Stroke Foundation (HSF)	Canada	841	1999 – 2002

Ministry of Defence (MOCR)	Czechia	811	1993 – 2017
National Research Council (CNR)	Italy	799	2005 – 2015
Advanced Research Projects Agency-Energy (ARPA-E)	United States	788	2009 – 2018
NIHR Trainees Coordinating Centre (TCC)	United Kingdom	779	2004 – 2018
Ministry of Culture (MKČR)	Czechia	768	1990 – 2016
French National Cancer Institute (INCA)	France	762	2007 – 2013
Indian Council of Medical Research (ICMR)	India	736	2000 – 2014
Cancer Australia (CA)	Australia	683	2008 – 2017
Worldwide Cancer Research (AICR)	United Kingdom	673	1998 – 2017
Terry Fox Foundation (TFF)	Canada	672	1994 – 2017
University of California – Cancer Research Coordinating Committee (CRCC)	United States	664	1999 – 2018
Croatian Science Foundation (HRZZ)	Croatia	656	2014 – 2019
Royal Society of New Zealand (RSNZ)	New Zealand	639	2012 – 2017
EEA and Norway Grants (EEA Grants)	Belgium	633	2007 – 2013
Tobacco-Related Disease Research Program (University of California) (TRDRP)	United States	606	2006 – 2018
Autism Speaks (Autism Speaks)	United States	602	2006 – 2017
Nova Scotia Health Research Foundation (NSHRF)	Canada	592	2010 – 2017
Alzheimer's Drug Discovery Foundation (ADDF)	United States	589	1999 – 2018
American Association For Cancer Research (AACR)	United States	573	2006 – 2018
Asthma UK (Asthma UK)	United Kingdom	564	1978 – 2016
Breast Cancer Now (BCN)	United Kingdom	563	1998 – 2017
Ministry of the Environment of the Czech republic (MŽP)	Czechia	549	1985 – 2008
National Energy Technology Laboratory (NETL)	United States	548	1987 – 2017
Damon Runyon Cancer Research Foundation (DRCRF)	United States	542	2006 – 2017
Swedish Foundation for Strategic Research (SSF)	Sweden	538	2008 – 2016
North Carolina Biotechnology Center (NCBiotech)	United States	529	2011 – 2016
American Diabetes Association (ADA)	United States	521	2011 – 2018
National Institute for Health Research (NIHR)	United Kingdom	520	2002 – 2018
Swedish National Space Board (SNSB)	Sweden	517	2008 – 2017
James S. McDonnell Foundation (JSMF)	United States	514	1997 – 2017
Office of Nuclear Energy (NE)	United States	469	2008 – 2016
Ministère des Affaires sociales et de la Santé (DGOS)	France	461	2007 – 2013
Academy of Medical Sciences (AMS)	United Kingdom	447	2009 – 2018
Shriners Hospitals for Children – Chicago (SHC)	United States	439	2008 – 2018
Ministry of the Interior (MV)	Czechia	437	1995 – 2017
Genome Canada (Genome Canada)	Canada	416	2001 – 2018
Administration for Children and Families (ACF)	United States	396	2003 – 2017
European Molecular Biology Organization (EMBO)	Germany	394	2001 – 2016
California Breast Cancer Research Program (CBCRP)	United States	389	2006 – 2018
Ministry of Transport (MD)	Czechia	389	1996 – 2009
Cancer Research Society (SRC)	Canada	377	2012 – 2017
Prostate Cancer Canada (PCC)	Canada	375	1996 – 2018
Alzheimer's Society (Alzheimer's Society)	United Kingdom	362	2006 – 2017
Diabetes UK (Diabetes UK)	United Kingdom	360	2003 – 2018
New Brunswick Health Research Foundation (NBHRF)	Canada	359	2008 – 2018
Alzheimer Society of Canada (ASC)	Canada	356	2004 – 2016
Action on Hearing Loss (RNID)	United Kingdom	332	1999 – 2017
Parkinson's UK (Parkinson's UK)	United Kingdom	331	2001 – 2018
California HIV/AIDS Research Program (CHRP)	United States	329	2005 – 2018
Alberta Centre for Child, Family and Community Research (ACCFCR)	Canada	323	2004 – 2015
National Center on Birth Defects and Developmental Disabilities (NCBDD)	United States	322	2007 – 2018
Stroke Association (strokeassociation)	United Kingdom	319	1996 – 2018
Office of Budget, Finance and Award Management (NSF BFA)	United States	316	1965 – 2018
National Centre for the Replacement Refinement and Reduction of Animals in Research (NC3Rs)	United Kingdom	305	2008 – 2018
Ministry of Foreign Affairs (MFACR)	Czechia	292	1993 – 2010
Ministry of Agriculture and Rural Development (MriRW)	Poland	288	2009 – 2018
Canadian Tobacco Control Research Initiative (CTCRI)	Canada	285	1999 – 2008
Centers for Medicare and Medicaid Services (CMS)	United States	280	1995 – 2017
World Health Organization (WHO)	Switzerland	277	2012 – 2015
Gulf of Mexico Research Initiative (GoMRI)	United States	267	2010 – 2018
Melanoma Research Alliance (MRA)	United States	264	2008 – 2018
Children's Tumor Foundation (CTF)	United States	259	2006 – 2017
NordForsk (NordForsk)	Norway	255	2009 – 2018
Ministry of Labour and Social Affairs (MoLSA)	Czechia	251	1993 – 2011
US Forest Service (USFS)	United States	247	2005 – 2016
Multiple Sclerosis Society (MS)	United Kingdom	236	1999 – 2017
Office of Information and Resource Management (NSF OIRM)	United States	227	1970 – 2018
Dunhill Medical Trust (DMT)	United Kingdom	217	2006 – 2019
Foundation for Polish Science (FNP)	Poland	210	2008 – 2017
Center for Information Technology (CIT)	United States	207	1980 – 2016
National Psoriasis Foundation (NPF)	United States	191	2008 – 2018
Polish Academy of Sciences (PAN)	Poland	185	2007 – 2017
National Institutes of Health (NIH)	United States	182	1998 – 2016
Motor Neurone Disease Association (MND)	United Kingdom	170	2003 – 2018
Auckland Medical Research Foundation (AMRF)	New Zealand	169	2010 – 2017
United States Nuclear Regulatory Commission (NRC)	United States	168	1982 – 1995
Prostate Cancer UK (Prostate Cancer UK)	United Kingdom	167	2007 – 2018
Cure Alzheimer's Fund (CAF)	United States	166	2004 – 2017
Internationale Stichting Alzheimer Onderzoek (ISAO)	Netherlands	158	1995 – 2014
Defense Logistics Agency (DLA)	United States	157	2006 – 2017

Ragnar Söderberg Foundation (Söderberg)	Sweden	157	2011 – 2016
Arcadia Fund (Arcadia)	United Kingdom	157	2002 – 2018
National Center for Emerging and Zoonotic Infectious Diseases (NCEZID)	United States	155	2010 – 2018
French Institute of Health and Medical Research (INSERM)	France	151	2011 – 2013
Foundation for Baltic and East European Studies	Sweden	149	2008 – 2017
Pancreatic Cancer Action Network (PCAN)	United States	142	2003 – 2016
UC Lab Fees Research Program (UCLRP)	United States	140	2008 – 2018
Financial Markets Foundation for Children (FMFFC)	Australia	139	2001 – 2017
Uniformed Services University of the Health Sciences (USUHS)	United States	135	2015 – 2018
Alzheimer's Research UK (ARUK)	United Kingdom	133	2009 – 2018
Center for Scientific Review (CSR)	United States	131	1982 – 2004
Center for Neuroscience and Regenerative Medicine (CNRM)	United States	127	2009 – 2017
Citizens United for Research in Epilepsy (CURE)	United States	120	2010 – 2017
Defense and Veterans Brain Injury Center (DVBIC)	United States	107	1995 – 2016
Mesothelioma Applied Research Foundation (MARF)	United States	104	2001 – 2018
National Security Authority (NBÚ)	Czechia	100	2000 – 2009
Office of Public Health Preparedness and Response (OPHPR)	United States	99	2008 – 2018
Ministry of Economy (MH)	Czechia	98	1991 – 1997
Templeton World Charity Foundation (TWCF)	Bahamas	95	2011 – 2018
Ministry of Regional Development (MMR)	Czechia	92	2004 – 2007
Tuberous Sclerosis Alliance (TS Alliance)	United States	91	2013 – 2018
Arthritis Society (Arthritis Society)	Canada	89	1998 – 2002
University of California Research Initiatives (UCRI)	United States	82	2009 – 2017
Yorkshire Cancer Research (YCR)	United Kingdom	80	1990 – 2017
American Epilepsy Society (AES)	United States	77	2015 – 2018
Administration for Community Living (ACL)	United States	77	1994 – 2016
Indian Health Service (GOVERNMENT)	United States	75	1994 – 2007
Canadian Prostate Cancer Research Initiative (CPCRI)	Canada	74	2001 – 2005
State Office for Nuclear Safety (SÚJB)	Czechia	74	1996 – 2009
Institute for Evaluation of Labour Market and Education Policy (IFAU)	Sweden	71	2005 – 2018
Fondation Vaincre Alzheimer (LECMA)	France	64	2005 – 2018
National Geospatial-Intelligence Agency (NIMA)	United States	58	1997 – 2017
Marie Curie (MC)	United Kingdom	57	2010 – 2016
Office of Inspector General (OIG)	United States	56	1982 – 2018
Irish Cancer Society (Irish Cancer Society)	Ireland	51	2009 – 2016
State Mining Administration (ČBÚ)	Czechia	51	1999 – 2010
The Neurofibromatosis Therapy Acceleration Program at Johns Hopkins (NTAP)	United States	47	2013 – 2018
UC Proof of Concept Grant (UCPOC)	United States	43	2012 – 2014
Karlovy Vary Region (KKV)	Czechia	43	2012 – 2015
Liberec Region (KLI)	Czechia	41	2012 – 2016
Pancreatic Cancer UK (Pancreatic Cancer UK)	United Kingdom	41	2010 – 2016
Bladder Cancer Advocacy Network (BCAN)	United States	41	2013 – 2018
Pulmonary Fibrosis Foundation (PFF)	United States	39	2012 – 2018
Autistica (Autistica)	United Kingdom	37	2006 – 2017
Global Lyme Alliance (GLA)	United States	35	2008 – 2016
Batten Disease Support and Research Association (BDSRA)	United States	32	2013 – 2016
National Security Agency (NSA)	United States	30	2015 – 2018
Security Information Service (BIS)	Czechia	29	1998 – 2009
Einstein Healthcare Network (AEHN)	United States	28	2015 – 2018
MQ: Transforming Mental Health (MQ)	United Kingdom	24	2014 – 2017
Combat Casualty Care Research Program (CCCRP)	United States	23	2010 – 2016
Ministry of Informatics (MI)	Czechia	21	2001 – 2006
National Science Board (NSF NSB)	United States	21	1991 – 2016
Canada-California Strategic Innovation Partnership (CCSIP)	United States	19	2009 – 2011
Macular Society (MacularSociety)	United Kingdom	17	2013 – 2017
Autism Science Foundation (ASF)	United States	16	2014 – 2016
Myrovlytis Trust (Myrovlytis Trust)	United Kingdom	16	2007 – 2011
Czech Office for Surveying, Mapping and Cadastre (ČÚZK)	Czechia	13	1992 – 2004
Hradec Králové Region (KHK)	Czechia	11	2010 – 2011
United States Department of the Interior (DOI)	United States	7	1982 – 1984
The city of Prague (KHP)	Czechia	6	2013 – 2017
United States Army Corps of Engineers (CoE)	United States	6	2015 – 2015
Ministry of Justice (MS)	Czechia	5	1996 – 2009
Ústecký Region (KUL)	Czechia	2	2008 – 2009
Institute of Education Sciences (IES)	United States	2	2016 – 2017
United States Marine Corps (USMC)	United States	2	2015 – 2018
Office of the Government (ÚřVl ČR)	Czechia	1	2004 – 2004

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