

Promoting Transparent, Fair, and Inclusive Practices in Grantmaking: Lessons from the Open and Equitable Model Funding Program

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Executive Summary: This report presents the insights of the Open & Equitable Model Funding Program, a pilot of a cohort of eleven research funders interested in refining their grantmaking to foster open and equitable practices. Launched in April 2021 by the Open Research Funders Group (ORFG) with grants ranging from \$5 to \$560 million, this initiative brought together experts across various fields to create thirty-two interventions to promote open research and equitable grantmaking. The funders cohort fostered a collaborative learning environment through monthly meetings, allowing participants to share insights and tackle challenges. Supported by the ORFG's resources and guidance, this structured approach facilitated the tailoring of interventions to each funder's specific needs, emphasizing early identification of challenges to integrate these practices seamlessly into existing funding mechanisms. Despite facing challenges such as staff turnover, limited time, and resources, which impacted the full engagement with and implementation of the interventions, the pilot was appreciated for its organized and guided framework and its collaborative learning environment. Participants who met their pilot goals attributed their success to the clear, achievable interventions and the structured design of the pilot, which allowed for focused implementation and executive-level support. The initiative also encouraged collaboration among peers, fostering a community of like-minded organizations exploring common challenges. The ORFG's documentation of lessons learned and the testing of intervention suitability offers valuable insights for future funders to refine their grantmaking strategies, underscoring the importance of continuous effort and commitment to achieve lasting change. These recommendations were refined for relevance and completeness from direct engagement with applicants, grantees, and researchers from underserved communities, ensuring the incorporation of insights from historically marginalized groups and with the goal of tailoring more inclusive and practical improvements.

I. Introduction

This paper discusses a pilot program designed to integrate specific recommendations or interventions into the grantmaking practices of participating research funders. The primary objective of this study is to share the pilot's development and outcomes

and provide insightful information for other research funders considering the adoption of similar enhancements in their funding programs. Through an in-depth analysis of the pilot's implementation and results, this paper seeks to contribute valuable knowledge and guidance to enhance the

effectiveness and impact of grantmaking processes in the research funding community¹.

i. Why open & equitable scholarship?

Open scholarship¹ is a movement that aims to reduce barriers to participation and incentivize collaboration in the academic research enterprise by increasing transparency, reproducibility, and accessibility of research. It encompasses various aspects such as open access, open data, and open-source software (Fecher and Friesike 2014). By making research outputs and academic discussion more widely available, open scholarship can increase the findability, accessibility, re-use, and re-distribution of research products (McKiernan 2017), thereby accelerating discovery and better addressing the big challenges of our society (Besançon et al. 2021).

Moreover, open scholarship inherently calls for a more engaged and participatory role from the community, thereby cementing its ties with civic science (Smith et al. 2017). For instance, citizen science projects, which are a hallmark of community engagement in research, gain significantly from open data practices, as they rely on the collective contributions of non-professional scientists. An exemplary case is the Geo-Wiki project, an online platform for engaging the public in environmental monitoring, such as monitoring deforestation (Geo-Wiki 2010). Similarly, the open-source software movement within academic research not only fosters innovation and collaboration but also empowers communities by providing them with the tools and resources to tackle local issues. For example, the Public Lab community utilizes open-source tools to engage citizens in environmental monitoring and advocacy, turning lay people into active participants in scientific inquiry and environmental stewardship (Public Lab 2010). The ethos of open scholarship is deeply intertwined with the principles of civic science, as it champions inclusivity, collective

knowledge advancement, and the direct application of scientific endeavors to societal betterment.

Nonetheless, pushing researchers toward specific sharing practices or models without considering the context of their resources can exacerbate existing inequities, such as by requesting authors to pay journal fees for open-access publications when the author institution may not have the means to do so. Furthermore, well-resourced scholars might easily contribute and benefit from existing open-access policies and infrastructures, enhancing their visibility and collaboration opportunities; however, without adequate support like training and incentives, under-resourced scholars could struggle to participate due to digital barriers and lack of institutional support, exacerbating the gap between the two groups in the academic community (Ross-Hellauer et al. 2022). Equity-related challenges can pose significant obstacles to participation (Appendix A). This is why it is essential to tailor open scholarship initiatives to be sensitive to the diverse needs and constraints of the global research community (Chan, Kirsop, and Arunachalam 2011).

Open and equitable scholarship serves as a means to enhance the academic enterprise, rather than being an end in itself. It enables a wide array of positive outcomes in the academic, philanthropic, and societal enterprise, such as inclusivity and collaboration, as well as increased transparency, reproducibility, and public engagement, thereby strengthening scientific inquiry's overall integrity and impact, among others observed (Appendix B). Addressing these barriers necessitates a collaborative approach by governments, educational institutions, funders, and the broader academic community to ensure that the principles of open scholarship are genuinely inclusive and accessible (Cole, Reichmann, and Ross-Hellauer 2023).

ii. Why a model funding program?

Research funding organizations, such as the National Science Foundation (NSF) and the National Institutes of Health (NIH), play a pivotal role in advancing knowledge, as they allocate a substantial amount of money through their funding programs. For example, the NSF distributed a sum of \$9.9 billion USD in 2023, directly supporting around 352,000 researchers (NSF 2023). However, racial disparities

¹ We use the term “open scholarship” as an umbrella concept encompassing open access, open data, open educational resources, and a range of other open research and dissemination activities. Open scholarship is used in lieu of “Open Science” to acknowledge the range of disciplines - including the arts and humanities - that engage in these practices.

in NSF funding rates and practices have been identified, with a tendency to support closed circles of applicant pools, which have been recognized as significant barriers to an equitable research landscape (Lauer and Roychowdhury 2021). For instance, it has been observed that the average external review scores of NSF proposals show a pattern of systematic differences based on the race of the Principal Investigator (PI) (Chen et al. 2022). This trend has been reported in various research funding organizations (Taffe and Gilpin 2021), indicating that ethnic disparities are prevalent. These racial gaps in funding have long-lasting effects that reinforce a cumulative advantage for white PIs in all fields. In response to these findings, many funding bodies have thus engaged in equity-related initiatives as a corrective measure to help democratize access to research opportunities and reduce systemic biases (Wellcome's Media Office 2022). This commitment to equity is an acknowledgment of funders' roles in shaping a more inclusive and diverse academic community.

Since its establishment in 2016, the Open Research Funders Group (ORFG) has cultivated a collaborative network of philanthropies to help foster research sharing policies and strategies, with an overall aim to enhance the accessibility, transparency, reproducibility, and reusability of scholarly outputs, including papers, data, and various other forms of research. Throughout numerous dialogues, members of the ORFG, as well as the wider funder network with which the ORFG engages, have acknowledged the need to integrate equity into the core of their open scholarship missions. They recognize that equity and open scholarship are mutually reinforcing elements; one cannot effectively function without the other.

II. Program development & characteristics

As an initial step, the ORFG joined forces with the Health Research Alliance (HRA) in 2020 to establish the Equity & Open Science Working Group (ORFG 2021a). This team – consisting of ORFG members and other scholars; scientists; open scholarship community leaders; diversity, equity, and inclusion experts; and community builders (ORFG 2021b) – set out to reimagine open research, aiming for greater equity, especially for underrepresented communities. Through thorough discussions, the Working Group determined that while endorsing

and bolstering open scholarship practices within their current funding structures was essential, it was only part of the solution. They recognized that funders' grant-making capabilities were the most influential tools at their disposal to promote a more balanced and open research landscape. Therefore, the Working Group's objective evolved to encompass not only the end products of funded studies, but also the entire grant-making process.

Grant-making is the process of distributing financial support to individuals, non-profits, educational institutions, or other organizations by various entities such as foundations, governmental agencies, corporations, or charitable trusts. This financial support is usually provided to fund specific projects that align with the grant maker's objectives and mission. Grant-making practices typically follow a life cycle that includes program design, dissemination of funding opportunities, submission of proposals, review and selection of proposals, allocation of funds, reporting, and creation of an alumni network. This article focuses on the grant-making practices of research funders.

i. Development of the interventions

The program was launched in 2021, with a foundational commitment to incorporating community input right from the beginning. In a collaborative spirit, the ORFG worked alongside the community to co-create targeted interventions and develop comprehensive primers, serving as detailed implementation guides for each initiative.

The ORFG proactively engaged with the academic community to refine these interventions. It hosted open community calls, which attracted around fifty participants from five countries – the UK, US, Netherlands, Mexico, and Argentina. In addition to these interactive sessions, significant input was received asynchronously, allowing for a broader range of contributions from those unable to attend the live discussions. Among the contributors were scholars, funding program managers, and leaders of open projects from various sectors, such as research funding organizations, universities, and advocacy groups. The participants significantly collaborated to provide feedback, exchange experiences, and suggest ideas to improve targeted interventions, present results, and enhance mechanisms for participation. This critical exercise allowed for a deep dive into the

challenges and obstacles faced, particularly from traditionally marginalized contexts, to engaging in open scholarship practices.

Through this extensive community engagement, the ORFG gathered valuable input and identified and classified a comprehensive list of barriers to engaging in open scholarship practices from an equity perspective (Appendix C). Identifying these barriers was crucial for refining the interventions to address the specific challenges identified through community feedback and collaboration.

The ORFG also analyzed and logically structured these interventions to align them with the grantmaking life cycle stages for operational clarity and ease of implementation. These stages included program development; program dissemination; application mechanics; application review; strategies during the award, evaluation metrics, and outputs; and the engagement of program alumni and networks.

The final playbook included a total of 32 in number, which were publicly unveiled in July 2022, marking a significant milestone in this journey (ORFG 2021c). The ORFG envisioned that the interventions would be implemented by research funding organizations toward advancing equity in the distribution of grant funding.

ii. Assembly of the funder cohort

After publicly posting the playbook of interventions, the ORFG began to recruit members from both the ORFG and the HRA to engage in a pilot program designed to turn them into practice. The ORFG sought program officers or executive-level staff willing to select and apply an appropriate subset of these interventions to at least one of their funding programs for at least one funding cycle, with an expectation to share their insights and experiences with the broader funder cohort. A varied group of eleven funding organizations committed to participate in this initiative (ORFG 2021b). Subsequently, the cohort commenced their meetings in 2022, engaging in a rigorous and collaborative process for approximately 14 months. The program culminated in the fall of 2023 with exit interviews, during which recent developments such as the OSTP memo were discussed, alongside potential

alignments that could further enhance the impact of our initiatives.

III. Pilot implementation & analysis

i. Profile of the funder cohort

The composition of the funder cohort was heterogeneous in terms of organizational size, funding capacity, and reach. Specifically, 30% of the organizations were classified as small, with a workforce under twenty employees, 45% were considered medium-sized, with a staff count between twenty-one and 100, and the remaining 25% were large organizations, employing over 100 individuals. Financially, the cohort's annual grants ranged widely, from \$5 million USD to as much as \$560 million USD, and their endowments spanned from \$200 million USD to \$12 billion USD. Geographically, their funding efforts were distributed, with two funding programs focusing on regional initiatives, six on national projects within the US, and four extending their support to international endeavors. Additionally, the composition of the funding group reflected support for a broad array of research disciplines: 8% dedicated to the humanities, 16% to the field of education, 25% to mathematics and physical sciences, and 50% to biomedical research.

ii. Profile of participants

To participate in the pilot program, each organization had to assemble a team to represent them throughout the program. One prerequisite was that each participating organization had to involve at least one senior-level individual who oversaw a funding program. The idea behind this was that these individuals have more influence over who receives the funding and can offer perspectives that other individuals might not have the authority to offer. Each organization had autonomy in selecting the rest of their team and in selecting how many team members there were. This flexibility enabled the participants to choose support staff that aligned with their operational needs, which ensured that each organization could tailor the recommendations according to their distinct situations.

With these selection criteria in mind, each participating organization included representation by more than three staff members on average. Among this representation, 15% held executive-level

positions (e.g. President, Vice President, or C-suite roles), 40% were at the senior level (e.g. senior program officer or the equivalent), and 45% held mid-level positions (e.g. program associate or similar). Importantly, all participating organizations had the approval for participation from their leadership, ensuring that support for the initiative was anchored at the highest level. This widespread organizational support was crucial for each participating group's robust engagement and meaningful contributions.

iii. Program operations & logistics

The ORFG launched the cohort in April 2021, presenting cohort members with the entire set of potential interventions they could choose to adopt in their funding programs. Members were empowered to select the interventions they found most applicable and beneficial for their operations and missions, with the liberty to bypass those they considered less pertinent or not feasible to implement at the time.

The cohort's monthly meetings were structured in two distinct parts. Initially, the first segment spanning seven sessions was dedicated to thoroughly examining each intervention, clustered around the seven distinct phases of the grant-making lifecycle (detailed in section 2.1 above). These discussions aimed to deepen participants' understanding of each intervention, as well as to nurture a community of practice in which members felt comfortable sharing their experiences and challenges.

Participants initiated the implementation of interventions at the outset of the pilot. It took them nearly eight months post-launch to share preliminary outcomes with their cohort peers, as this period was necessary for them to extensively explore and understand, internally and externally, the impact of the changes they were trying to make. The cohort members shared real-world feedback and evidence gathered from their practical application. This candid approach fostered a collaborative environment for reflection and collective learning.

During the program, the cohort members received continuous support from the ORFG, for example by contacting the ORFG for further guidance and

assistance in implementing their selected recommendations. The ORFG provided customized templates for each funder's specific situation to make the implementation process more efficient. Furthermore, the ORFG acted as a liaison, connecting funders with experienced professionals to address particular queries and facilitate knowledge sharing and exchange of experiences. The ORFG focused on providing practical, concrete examples and best practices to guide cohort members.

Funders retained the flexibility to adjust their choices as needed, allowing them to withdraw certain interventions they had initially chosen or to expand their selection by incorporating more recommendations as their implementation process evolved. This adaptable framework was designed to accommodate the evolving needs and insights of the funders as they worked towards integrating the interventions into their funding programs. Providing flexibility to the funders not only helped in minimizing attrition rates within the program but also underscored the valuable insight that a variety of strategies can be employed to foster open and equitable scholarship.

iv. Interventions implemented

At the outset of the program, the ORFG surveyed participating funding organizations to determine which of the thirty-two recommended interventions they had already independently implemented within their programs. It was observed that, on average, participating organizations already had eight of the thirty-two suggested interventions in place, with thirty-one of the thirty-two interventions being employed by at least one organization. This finding indicates that the organizations were, to some extent, aligned with the ORFG's recommendations from the beginning, even before joining the program. This also increased confidence in the process through which ORFG arrived at its list of interventions (Appendix C), as well as the practicality of implementation from the perspective of a funding organization. Among the interventions most commonly implemented by the participating organizations prior to joining the program (Appendix D) were:

- Publicly share information on awarded projects
- Consider flexible payment schedules to suit the needs of specific awardees

- Compensate external reviewers and other supporting personnel for their time and expertise
- Collect demographic data from applicants and awardees for statistical purposes

After joining the pilot program and discussing the potential interventions with the ORFG and their fellow funders within the cohort, participating organizations then decided to add between one and sixteen new interventions, with the majority of organizations selecting around six. The most frequently newly added interventions (Appendix E) were:

- Disseminate funding opportunities through an array of diverse channels
- Train grant reviewers and program staff on how to identify and combat implicit bias
- Provide concrete and actionable feedback to all applicants as part of the review process
- Simplify reporting practices

During the program, the cohort members therefore focused on both enhancing their existing interventions by expanding their scope and depth (Appendix D), as well as initiating the implementation of their new selections (Appendix E). On average, each cohort member worked on refining or implementing around fourteen interventions in total.

On the opposite end of the spectrum, certain proposed interventions were not adopted by any cohort participants. This was not necessarily due to the perception that these interventions were unimportant; rather, they were often considered more challenging to implement, requiring more time and resources than the organizations may have been able to commit to during the pilot phase. In this list we have:

- Receive applications, and process them in languages other than English
- Create supplementary grants for under resourced applicants to support services access to information, educational support for writing/curating information, and networking opportunities
- Endorse a comprehensive authorship and recognition mechanism
- Endorse track and compliance mechanisms for the program's output sharing policies

IV. Pilot results

i. Usefulness of the pilot

At the conclusion of the pilot, the ORFG surveyed cohort members to gather insights. Upon evaluation of their experience, 18% of the participants rated their participation in the pilot as “extremely helpful” and 82% rated it as “very helpful.” This was based on a scale that included “extremely helpful,” “very helpful,” “slightly helpful,” and “not at all helpful.”

When the ORFG inquired about the most significant benefits derived from participating in the pilot, participants highlighted several key advantages, including the value of learning from the experiences of others (33.3%), the resources shared (28.6%), the individual guidance and personalized support provided by the ORFG team (23.8%), and the benefit of committing to this work by tying it to specific deliverables and deadlines (14.3%).

ii. Challenges and insights gained

The ORFG also surveyed cohort members to gather insights on the lessons they learned, the main challenges encountered, and their overall experience in the program. The exit survey included a question to gauge participants' perceptions of the pilot outcomes against their initial expectations. They were offered three response options: “exceeded expectations,” “met expectations,” and “fell short.” The feedback was divided; around half of the respondents (58%) felt that the pilot “met expectations,” while the other half (42%) believed it “fell short” of their expectations.

For those participants who reported that the pilot “met expectations,” several reasons were cited for this positive assessment:

- The interventions were well-defined and achievable, providing clear and feasible goals for the organizations to aim for.
- The structure of the pilot helped organizations allocate dedicated time and focus to the interventions, ensuring that they were given the appropriate level of attention.
- The pilot provided a framework that facilitated initiating these practices at the executive level, where strategic decisions are made.
- It offered an opportunity to collaborate with a community of like-minded individuals and

organizations, all exploring similar questions and challenges.

- The experience reinforced certain ideas and practices that were initially discussed in previous initiatives at the organization, affirming the value of past efforts and strategies.

For those participants who reported that the pilot “fell short” of their expectations, diverse reasons for this belief included:

- The turnover of representatives and staff within participating research funding organizations.
- Limited time and insufficient resources to engage more thoroughly with the interventions.
- The complexity of the process, with an understanding that achieving the desired changes is a long journey, one that extends beyond the pilot’s timeframe and requires sustained effort and commitment.
- Concern that the interventions might overwhelm applicants with more work and requirements.

In the survey, the ORFG also inquired about any unexpected learnings the organizations encountered while implementing their chosen set of interventions. The responses revealed that the most common unexpected insight was underestimating the time (40%) and resources (20%) required to enact these changes. Additionally, there were reports of resistance encountered both within the organizations from staff and board members (30%) and from external sources, primarily external reviewers or review committees (10%).

Survey responses indicated a unanimous desire among the participating organizations to sustain the initiatives started during the pilot. A majority, 58% of the cohort members, planned to extend the reach of their interventions, applying them to more funding programs within their organizations. One foundation expressed an ambition to extend their impact further by assisting other foundations in undertaking similar work. The remaining 42% of participants intended to expand their suite of interventions, implementing a greater number within the same funding program that was involved in the pilot. This commitment reflects a robust

endorsement of the pilot’s objectives and an eagerness to further integrate its recommendations into their operational frameworks.

iii. Roadmap for future implementations

While pilot participants reported gaining useful insight from participation in the program, we are planning several strategic adjustments to further enhance the success of future cohorts. These adjustments will be aimed at optimizing participant experiences and the program’s overall outcomes:

- **Expectation management:** Manage expectations by setting realistic goals and being transparent about the potential limitations of the pilot’s impact within the given timeframe.
- **Targeted intervention selection:** Encourage future participants to select and focus on a strategic and perhaps smaller number of interventions, enabling a more targeted and manageable approach to implementation.
- **Deepened engagement:** Introduce thematic focus into the cohort sessions to allow participants to delve deeper into specific subjects. This would help to ensure more comprehensive discussions with the aim of better applying each theme to participants’ specific contexts. Cohort session theme examples could include: bias in grant review, data collection of applicants and awardees to identify diversity gaps, or development of equitable open research policies, among others.
- **Language and framing:** Shift the way we speak about the proposed interventions to more accurately reflect the ongoing nature of efforts in diversity, equity, inclusion, and justice to foster a mindset of continuous cultural and structural change.
- **Resource management:** Address resource allocation challenges and staff turnover by providing clear guidelines on the time and resource commitments needed for each intervention and creating contingency plans ahead of time for personnel changes.
- **Community and collaboration:** Strengthen the sense of community among participants through facilitated networking opportunities and shared resource platforms, encouraging peer-to-peer support and collaboration.

- Long-term view and commitment: Emphasize the long-term nature of the changes being sought, encouraging organizations to commit to sustained effort and ongoing evaluation beyond the pilot's duration.
- Integration of feedback: Systematically integrate participant feedback into the design of future cohorts, ensuring that the program evolves to meet the needs and address the challenges identified by its participants.
- Diversity and equity commitment: Reinforce the program's dedication to diversity and equity in every aspect of its operation, from participant selection to the design of interventions and measurement of outcomes.
- Continuous evaluation and improvement: Implement a cycle of continuous evaluation and improvement, using robust metrics and feedback mechanisms to inform the adaptation of the program over time.
- Expanded disciplinary participation: Actively seek participation from funders in diverse disciplines to enrich the program with a broader range of perspectives and approaches. This expansion will enhance the diversity of insights and experiences within

the cohort and contribute to developing more universally applicable and inclusive funding models.

V. Conclusion

The process of adapting grantmaking processes to be more open and equitable is ongoing. While much has been learned from this Open & Equitable Model Funding Program, it is within the hope of the authors that additional funders, with heterogeneous missions and processes, will adapt and implement these interventions, as well as suggest complementary measures not surfaced during this pilot. Consistent with the precepts of open science, the transparent reporting of these experiences will further a virtuous circle that can ultimately generate systems-level change across the grantmaking community.

As ORFG charts the course for future iterations of the program, this roadmap is not just a plan, but a commitment to evolve, guided by the voices and experiences of those who participate. It represents an iterative process of learning and adaptation, with each step informed by the one before it. The ORFG will continue on this journey with the understanding that the path to inclusive, equitable, and open scholarship is a shared one, made richer and more rewarding by the diversity of its participants.

VI. Appendices

Appendix A: Potential barriers to participation in open scholarship, identified from an equity perspective.

Type of Barrier	Description
Bias and Discrimination	Systemic biases can affect which research is supported, whose work is published, and who gets credit for scientific contributions. This can lead to the underrepresentation of certain groups in open scholarship initiatives.
Cultural	Different cultures have different approaches to sharing information, and there may be mistrust or misunderstanding of the intentions behind open scholarship. Moreover, certain cultures may restrict the sharing of knowledge that is considered traditional or sacred.
Economic	Access to open scholarly outputs often requires internet access and the use of computers or other devices, which can be expensive. Additionally, while open scholarship is often freely accessible, participating actively in it can come with costs that are prohibitive for some, especially those from low-income countries or underfunded institutions. For instance, pushing scholars towards certain open-access publishing business models, contributing data, or attending conferences can present economic challenges.

Educational	A certain level of guidance and training is required to engage actively with academic research. Those without this background may struggle to participate fully in open scholarship initiatives.
Infrastructure	Even if researchers are willing to participate, they may work in institutions that lack the infrastructure or support systems necessary for engaging with open scholarship, such as institutional repositories or access to open-source software.
Language	Much of the scientific literature is published in English, which can be a barrier for those who do not speak the language. This can limit both the consumption of open scholarly outputs and the contribution to them.
Legal and Policy	Intellectual property laws, data protection regulations, and institutional policies can limit the sharing of data and findings, making it difficult for researchers to participate fully in open scholarship.
Network and Collaboration	Established researchers often have more opportunities to build networks and collaborate. Newcomers or those from marginalized groups may not have the same opportunities, which can limit their ability to engage with the open scholarship community.
Technological	Not all regions have the same level of technological advancement or infrastructure. This can hinder participation in digital open scholarship platforms and limit access to online resources.
Recognition and Incentive Structures	The current academic system often rewards traditional publication and grant metrics over open scholarship, which can disincentivize researchers, especially underrepresented and early career scholars, from participating in open scholarship practices.
Resource Allocation	There can be an uneven distribution of resources within the academic community, where well-funded and established academics from prestigious institutions have more capacity to participate in open scholarship than their less well-resourced and recognized counterparts.

Source: Crowd-sourced information from the Equity in Open Science Working Group and further community engagement.

Appendix B: Potential enhancements to the academic enterprise achievable through open scholarship.

Enables	Description
Addressing Ethical Considerations	There is an ethical imperative to make the benefits of academic research available to all and to make the academic enterprise in general more inclusive, especially considering that much of the research is publicly or philanthropically funded.
Democratization of Knowledge	By making academic research and data accessible to a wider audience, open scholarship democratizes knowledge. It allows a broader segment of society to access, scrutinize, utilize, and participate in knowledge creation.
Education and Training	Open access to academic resources can be an invaluable educational tool, providing students and lifelong learners worldwide with up-to-date information and research findings.

Enhanced Collaboration	Encourages collaboration across disciplines and borders. This can accelerate discovery, as researchers can build upon each other's work more efficiently.
Equity and Justice	Open scholarship can play a role in addressing historical inequities in the academic enterprise. By actively including underrepresented groups, open scholarship works towards correcting biases in research agendas, funding, and recognition.
Increased Reproducibility and Accountability	With more eyes on research, academic work can be improved due to the increased scrutiny and peer review that comes from a larger and more diverse group of participants.
Innovation and Creativity	Diverse perspectives can lead to more innovative and creative solutions to complex problems. Inclusion in open scholarship means that unique insights from different cultural, geographical, and socioeconomic backgrounds can contribute to the advancement of knowledge.
Global Challenges	Many of the challenges faced today, such as climate change, health pandemics, and sustainability, are global in nature. Addressing them effectively requires the involvement and cooperation of a global community of researchers and actors.
Public Engagement and Trust	Engaging a broader audience can enhance public understanding of research and trust in academic processes and findings, which is crucial for public support of evidence-based policy-making and informed public debate.
Reduction of Duplication	When diverse voices participate openly, it reduces the risk of duplication of efforts, as researchers can see what others are working on and can thus direct their efforts towards unexplored areas.

Source: Own elaboration with crowd-sourced information from the Equity in Open Science Working Group and further community engagement.

Appendix C: Interventions within the Open & Equitable Model Funding Program.

Number	Intervention	Life Cycle
1	Clearly articulate and communicate the links between and among open scholarship, equity, and inclusion with the organization's mission and goals of the specific funding program to all actors within the program	Program Development
2	Develop funding programs centering on DEI (Diversity, Equity, and Inclusion) considerations	
3	Seek legal guidance on how to maximize openness and inclusivity while ensuring appropriate protections within funding programs	
4	Disseminate funding opportunities through an array of diverse channels	Publicity & Dissemination
5	Coordinate with diverse organizations to circulate the call to their networks and, when appropriate, create new partnerships and collaborations to co-host events geared toward specific populations	
6	Communicate future funding opportunities to non-funded finalists	
7	Diversify mechanisms to assist prospective applicants to decrease disparities	
8	Simplify the application process to ensure it is not inordinately	Application

	time-consuming	Mechanics
9	Design grant application windows and requirements to accommodate applicants with competing priorities and diverse support structures	
10	Receive applications, and process them in languages other than English	
11	Have a publicly available review rubric	Application Review
12	Ensure a diverse pool of reviewers	
13	Develop a robust code of conduct for reviewers and create efficient mechanisms for reporting biased conduct during and after the review process	
14	Train grant reviewers and program staff on how to identify and combat implicit bias	
15	Provide concrete and actionable feedback to all applicants as part of the review process	
16	Compensate external reviewers and other supporting personnel for their time and expertise	Strategies During the Award
17	Consider flexible payment schedules to suit the needs of specific awardees	
18	Create supplementary grants for under-resourced applicants to support access to information, educational support for writing/curating information, and networking opportunities	
19	Provide guidance and support to ensure grantees can disseminate their work as openly as possible	
20	Simplify reporting practices	Evaluation Metrics & Outputs
21	Define expectations of open output sharing in funded projects	
22	Endorse a comprehensive authorship and recognition mechanism	
23	Endorse diverse scholarly products and metrics to evaluate and measure the success of funded projects	
24	Collect demographic data from applicants and awardees for statistical purposes	
25	Publicly share information on awarded projects	
26	Evaluate the diversity of the grantee pool so it accurately represents the community itself	
27	Evaluate and publicly share the impact and lessons of any the interventions implemented	
28	Make publicly available the interventions implemented, and invite the community to provide feedback for improvements over time	
29	Endorse track and compliance mechanisms for the program's output sharing policies	Alumni & Network
30	Create and adequately resource alumni networks	
31	Diversify your grantees elevated in public and internal events and activities	

32	Invite alumni as reviewers, advisory board members, and in other roles to further develop and amplify the program	
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Source: Own elaboration with information gathered during the operation of the Open & Equitable Model Funding Program.

Appendix D: Interventions being implemented by participating funders prior to joining the program.

Intervention Number	Intervention	Total of Funders that Already Had Intervention
25	Publicly share information on awarded projects	8
17	Consider flexible payment schedules to suit the needs of specific awardees	7
16	Compensate external reviewers and other supporting personnel for their time and expertise	6
24	Collect demographic data from applicants and awardees for statistical purposes	6
1	Clearly articulate and communicate the links between and among open scholarship, equity, and inclusion with the organization's mission, and goals of the specific funding program to all actors within the program	5
5	Coordinate with diverse organizations to circulate the call to their networks and, when appropriate, create new partnerships and collaborations to co-host events geared toward specific populations	5
9	Design grant application windows and requirements to accommodate applicants with competing priorities and diverse support structures	5
26	Evaluate the diversity of the grantee pool so it accurately represents the community itself	5
2	Develop funding programs centering on DEI (Diversity, Equity, and Inclusion) considerations	4
4	Disseminate funding opportunities through an array of diverse channels	4
12	Ensure a diverse pool of reviewers	4
13	Develop a robust code of conduct for reviewers and create efficient mechanisms for reporting biased conduct during and after the review process	4
15	Provide concrete and actionable feedback to all applicants as part of the review process	4
30	Create and adequately resource alumni networks	4
8	Simplify the application process to ensure it is not inordinately time-consuming	3
11	Have a publicly available review rubric	3
23	Endorse diverse scholarly products and metrics to evaluate and measure the success of funded projects	3

31	Diversify your grantees elevated in public and internal events and activities	3
32	Invite alumni as reviewers, advisory board members, and in other roles to further develop and amplify the program	3
3	Seek legal guidance on how to maximize openness and inclusivity while ensuring appropriate protections within funding programs	2
7	Diversify mechanisms to assist prospective applicants to decrease disparities	2
18	Create supplementary grants for under-resourced applicants to support access to information, educational support for writing/curating information, and networking opportunities	2
20	Simplify reporting practices	2
27	Evaluate and publicly share the impact and lessons of any the interventions implemented	2
28	Make publicly available the interventions implemented, and invite the community to provide feedback for improvements over time	2
6	Communicate future funding opportunities to non-funded finalists	1
14	Train grant reviewers and program staff on how to identify and combat implicit bias	1
19	Provide guidance and support to ensure grantees can disseminate their work as openly as possible	1
21	Define expectations of open output sharing in funded projects	1
22	Endorse a comprehensive authorship and recognition mechanism	1
29	Endorse track and compliance mechanisms for the program's output sharing policies	1
10	Receive applications, and process them in languages other than English	0

Source: Own elaboration with information gathered during the operation of the Open & Equitable Model Funding Program.

Appendix E: Interventions piloted by participating funding programs.

Intervention Number	Intervention	Number of Funders Implementing
4	Disseminate funding opportunities through an array of diverse channels	5
14	Train grant reviewers and program staff on how to identify and combat implicit bias	5
15	Provide concrete and actionable feedback to all applicants as part of the review process	5
20	Simplify reporting practices	5
7	Diversify mechanisms to assist prospective applicants to decrease	4

	disparities	
8	Simplify the application process to ensure it is not inordinately time-consuming	4
26	Evaluate the diversity of the grantee pool so it accurately represents the community itself	4
5	Coordinate with diverse organizations to circulate the call to their networks and, when appropriate, create new partnerships and collaborations to co-host events geared toward specific populations	3
6	Communicate future funding opportunities to non-funded finalists	3
9	Design grant application windows and requirements to accommodate applicants with competing priorities and diverse support structures	3
12	Ensure a diverse pool of reviewers	3
21	Define expectations of open output sharing in funded projects	3
24	Collect demographic data from applicants and awardees for statistical purposes	3
28	Make publicly available the interventions implemented, and invite the community to provide feedback for improvements over time	3
1	Clearly articulate and communicate the links between and among open scholarship, equity, and inclusion with the organization's mission, and goals of the specific funding program to all actors within the program	2
2	Develop funding programs centering on DEI (Diversity, Equity, and Inclusion) considerations	2
11	Have a publicly available review rubric	2
17	Consider flexible payment schedules to suit the needs of specific awardees	2
25	Publicly share information on awarded projects	2
32	Invite alumni as reviewers, advisory board members, and in other roles to further develop and amplify the program	2
3	Seek legal guidance on how to maximize openness and inclusivity while ensuring appropriate protections within funding programs	1
13	Develop a robust code of conduct for reviewers and create efficient mechanisms for reporting biased conduct during and after the review process	1
16	Compensate external reviewers and other supporting personnel for their time and expertise	1
19	Provide guidance and support to ensure grantees can disseminate their work as openly as possible	1
23	Endorse diverse scholarly products and metrics to evaluate and measure the success of funded projects	1
27	Evaluate and publicly share the impact and lessons of any the interventions implemented	1
30	Create and adequately resource alumni networks	1

31	Diversify your grantees elevated in public and internal events and activities	1
10	Receive applications, and process them in languages other than English	0
18	Create supplementary grants for under-resourced applicants to support access to information, educational support for writing/curating information, and networking opportunities	0
22	Endorse a comprehensive authorship and recognition mechanism	0
29	Endorse track and compliance mechanisms for the program's output sharing policies	0

Source: Own elaboration with information gathered during the operation of the Open & Equitable Model Funding Program.

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