

# Strategies for inclusive grantmaking

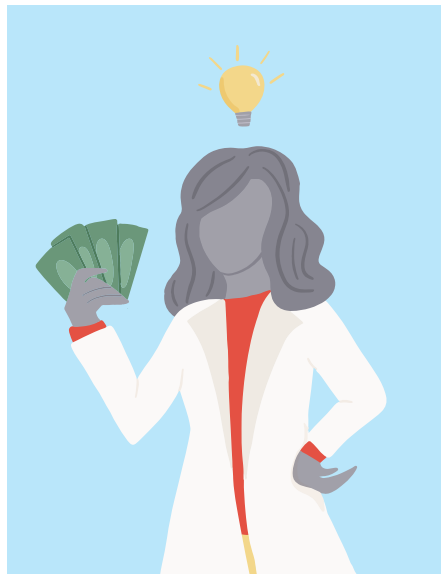
Grantmaking organizations play a crucial role in increasing diversity and equity in the biomedical workforce. Collecting demographic data, increasing the diversity of applicants and reducing bias in peer review are valuable strategies to achieve these goals.

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Increasing the diversity of the biomedical research workforce and fostering more inclusive and equitable environments for researchers can accelerate scientific discovery and decrease health disparities<sup>1–4</sup>. Achieving these goals is critical to the mission of the Health Research Alliance (HRA) and its member organizations. HRA is a collaborative member organization of nonprofit funders<sup>5</sup> committed to maximizing the impact of biomedical research to improve human health, whose active grants totaled US\$6.3 billion in 2019.

HRA strives to amplify member organizations' individual efforts to measurably advance diversity, equity and inclusion (DEI) in their grant programs and processes. HRA also seeks to dismantle the dangerous and faulty notion that such diversity initiatives put scientific excellence at risk. Our 2021 Strategic Plan placed even more emphasis on these goals. We have hosted workshops to highlight best practices and support members in their design of grant programs to advance DEI and promote inclusive peer review practices. From these workshops and other sessions, the HRA has developed actionable steps for organizations to follow to implement transformative action and to combat implicit bias against applicants from under-represented groups resulting from majority-defined notions of excellence.

Some of the most important conversations and work have been implemented through the HRA DEI Community<sup>6</sup>. This community provides a space for funders to share their practices and resources, learn strategies to help eliminate racism, discrimination and bias in biomedical research grantmaking, and promote health equity. The DEI Community is supported by subgroups formed to provide learning opportunities, resources and tools for three high-interest grantmaking topics (Table 1). In May 2021, the DEI Community conducted a survey of HRA member organizations to better understand the different DEI strategies used by funders and where funders may need more support<sup>7</sup>. This survey has resulted in



Credit: Marina Spence

several recommendations in three main categories: demographic data collection and use; increasing the diversity of the applicant and awardee pools; and reducing bias in peer review.

## Collection of demographic data

Collecting demographic data is an essential step toward advancing equity in grantmaking. Collecting data on gender, race, ethnicity, sexual orientation, socioeconomic status and disability status, among other categories, allows funders to evaluate diversity within their programs and track the effectiveness of any strategies implemented to increase equity and inclusion across the grants cycle. The specific demographic categories used should be informed by the goals the funder seeks to achieve.

Among HRA member organizations, several have collected demographic data for an extended period (>5 years), while others are new to collecting this information or plan to collect it in the near future. Demographic information most often

collected were race, ethnicity and gender data, with subcategories commonly pulled from resources such as the US National Institutes of Health and the US Census. By using these demographic subcategories, funders can better understand the demographic makeup of their applicants and awardees compared to those receiving awards from federal funding initiatives and the broader national population.

However, there are potential limitations to this approach. For example, a growing number of people may not identify with these categories: race is a complex social construct; gender is not binary; and disability may be considered as part of a person's identity rather than a medical condition. Following federal demographic data collection categories may also inadvertently overlook groups that are marginalized on the basis of sexual orientation, national origin or socioeconomic status. The HRA recommends that funders adopt demographic data collection efforts that best align with their goals. Questions should use respectful language, include the option to not respond, allow multiple selections and allow self-identification for any of the abovementioned categories.

Funders should strive to establish more inclusive categories by seeking input from appropriate communities. For example, HRA is working to build on recommendations from the Disability & Philanthropy Forum<sup>8</sup> for guidance on inclusive collection of disability data, with input from the disability community.

## Transparency in data use

Funders must establish the ways in which demographic data will be used and provide transparency around its use. Many HRA funders use demographic data to track the gender, racial and ethnic diversity of their programs, while a smaller number use these data to inform organizational strategies and programmatic design. Very few funders use demographic data as part of the review process or in funding determination. To ensure the transparency of demographic

**Table 1 | DEI Community at the Health Research Alliance**

Health Research Alliance		
A collaborative member organization of nonprofit funders committed to maximizing the impact of biomedical research to improve human health		
Diversity, equity, and inclusion community		
<b>Goal:</b> To provide learning opportunities, develop resources and identify tools to amplify member's individual efforts to measurably advance diversity, equity and inclusion in their grant programs and processes		
Subgroup 1	Subgroup 2	Subgroup 3
Collecting and using demographic data	Increasing diversity in applicant and awardee pools	Reducing bias in peer review

data use, funders should provide a data use statement that clarifies to applicants who will have access to their data and how it will be used. Furthermore, organizations are encouraged to have their data use statements reviewed by legal counsel to ensure that the intended data use is consistent with the organization's overall mission.

For example, the Doris Duke Charitable Foundation (DDCF) recently expanded its longstanding collection of demographic race and ethnicity data to include and measure representation of individuals from groups marginalized on the basis of gender, sexual orientation or socioeconomic status. These changes were implemented along with a revised statement to clarify why data are collected and how they are being used. In the first two years since these changes were implemented, applicants were also invited to share their thoughts about the collection of these optional demographic data to help inform the DDCF's demographic data collection strategies going forward.

Although understanding the demographics of applicant and awardee pools is essential, other key stakeholders are also important in diversifying the workforce. For example, several organizations have also collected demographic data for organizational leadership (including advisory boards), staff, volunteers and review committees in order to improve DEI in biomedical research grantmaking, which ultimately creates a more diverse and inclusive culture.

### Diversity of applicants and awardees

To increase diversity in applicant pools, HRA member organizations have broadened the distribution of funding announcements to include direct outreach to affinity-based societies, institutions and applicants from under-represented groups. Social media and informational webinars can also be utilized for broader distribution. Flexibility around application eligibility requirements, to allow for life circumstances that may have affected career trajectories (for example,

by not counting periods of medical or maternity leaves toward eligibility windows), will promote inclusion and broaden the applicant pool.

Optional resiliency statements or diversity statements may also enhance diversity of awardees. Resiliency statements invite applicants to share their experiences, attributes and competencies, and aim to help reviewers contextualize an applicant's achievements and/or career trajectories. Resiliency statements explain how experiences of marginalization or other factors may enrich their contributions to science, but they have the drawback that they place the onus on applicants to disclose their experience and potentially relive past traumas. Diversity statements require all applicants, plus sometimes their department chairs and mentors, to explain how they promote diverse, equitable and inclusive environments, and how their efforts align with the overall departmental and institutional goals. Many of these strategies have only recently been implemented, so their success is still being determined.

Another approach to increase diversity in grantee pools is establishing dedicated programs and resources to support researchers from under-represented groups, such as the American Society for Hematology's Minority Recruitment Initiative. Although these strategies are less commonly used by HRA member organizations, a network of senior faculty in biomedical engineering have called for their wider use<sup>9</sup>.

Some funding organizations explicitly include health equity as a priority funding area. Funders have also begun asking applicants to indicate steps being taken to ensure that no aspect of the research plan exacerbates racial, ethnic or gender-based health disparities or inequities. Health Resources in Action (HRiA) utilizes an approach (for some programs) whereby applicants explain how their research project will advance health equity and

indicate how their project study population is diverse and inclusive (as do the US National Institutes of Health<sup>10</sup>). Because a diverse STEM workforce advances health equity, HRiA also requires some programs to include the training of undergraduates from under-represented groups, which must include meaningful engagement of these students through research training and networking opportunities.

### Reducing bias in peer review

Publishers and grantmaking organizations all rely on peer review, but disparities and biases have been documented in the review of both publications<sup>11-13</sup> and grants<sup>14-17</sup>. There are several approaches to reduce bias in peer review, all of which rely on collecting and analyzing demographic data of applicants and awardees to determine whether any populations are underfunded. Once an underfunded population is identified, there are concrete, actionable steps that funders can take. HRA member organizations have implemented three different approaches, which can be used independently or in tandem. First, to both increase the diversity of grant awardees and reduce bias in peer review, member organizations have made concerted efforts to ensure that diverse experiences and perspectives are represented in their review panels. Active inclusion of people from under-represented groups in peer review is essential because, for example, bias can occur when women are not asked to participate at the same rate as men<sup>18</sup>. Review panels can be diversified by recruiting former awardees from under-represented groups and networking within societies such as the ABRCMS (Annual Biomedical Research Conference for Minority Students), SACNAS (Society for Advancement of Chicanos/Hispanics and Native Americans in Science) and AISES (American Indian Science and Engineering Society).

Funders can also harness social media, such as Black in X groups on Twitter<sup>19</sup>, which have a variety of hashtags (#Black in Micro, #Black in Neuro, etc.) and hold a yearly roll call in which Black investigators introduce themselves to the science Twitter community. Finally, when looking for specific expertise, funders can look to the many professional societies with special interest groups, such as the American Association for Cancer Research's (AACR) Minority Affairs Committee and the American Society of Clinical Oncology's (ASCO) Diversity in Oncology Initiative.

### Anti-bias training

Many HRA member organizations encourage or require reviewers to

**Table 2 | Recommended approaches to inclusive grantmaking**

Collecting and using demographic data	Increasing diversity in applicant and awardee pools	Reducing bias in peer review
Set DEI goals	Broadly distribute funding announcement	Diversify review panel members
Define under-representation	Utilize social media	Require or provide anti-bias training
Collect and assess demographic data	Provide applicants flexibility	Consider holistic or blinded peer review
Establish inclusive demographic categories	Contextualize applicant achievements	Provide guidance to reviewers
Have and provide a data use policy	Explicitly state DEI and health equity priorities	Encourage resubmission and provide resources

undergo anti-bias training, which can be implemented in several ways: the Burroughs Wellcome Fund have reviewers provide documentation that they have had anti-bias training at their institution; Conquer Cancer, the ASCO Foundation, requires reviewers to review the ASCO Statement on Unconscious Bias and Peer Review and view a three-minute video from The Royal Society on unconscious bias;<sup>20</sup> and the Melanoma Research Alliance provides two videos<sup>20,21</sup> to reviewers at the time of application assignment and reads a DEI statement at the beginning of the review panel meeting. Project Implicit also offers 10- to 15-minute training modules on implicit bias.

Training can also be provided by a diversity professional, who can speak to the funding organization, reviewers and/or awardees. HRA provided training to its members on asset framing, a narrative model that defines people by their assets and aspirations before noting the challenges and deficits, run by BMe Community<sup>22</sup>. Professional training requires a greater time and financial commitment than online courses, and so it is important for the funder to define the problem they are trying to solve and what they want to achieve, in order to find a good match between the diversity professional and the goals of the funder.

Other strategies to reduce bias in peer review include the implementation of blinded peer review<sup>23</sup> and other alternatives<sup>24</sup>, as well as the use of rubrics or review questions to help reviewers determine appropriate review criteria for evaluating applications, thereby mitigating potential scoring bias. A greater diversity of applicant pools can also be encouraged by providing courses, webinars or other

resources to highlight best practices in grant writing. Providing the above, as well as allowing multiple resubmissions and revising reviewer comments to make feedback more constructive, can also help to make grantmaking more equitable.

### Share successes and failures

There are a variety of methods available for funders to advance DEI in their grantmaking processes, which vary in their ease of implementation (Table 2). Funders should review their current practices and implement the most appropriate strategies for their organization and its goals, in order to achieve a more diverse, equitable and inclusive research portfolio. Many of these strategies have only recently been implemented, and so their effects are not fully understood, and are likely to vary from organization to organization.

It is therefore important that funders regularly evaluate any DEI initiatives they implement, to determine whether they do indeed result in the outcomes desired by the organization. Moreover, funders should be aware that some interventions may cause inadvertent harm, and so should review and evaluate any changes through this lens<sup>25</sup>. Finally, funders should share their successes as well as failures in order to learn from one another so that a more diverse, equitable and inclusive biomedical workforce is rapidly achieved. □

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Published online: 19 April 2022  
<https://doi.org/10.1038/s41591-022-01757-8>

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### Acknowledgements

The authors would like to thank P. Frustace for her input to develop the DEI survey of HRA member organizations and critical review of the manuscript. We also wish to thank HRA members for completing the survey.

### Author contributions

All authors contributed to the writing of this manuscript.

### Competing interests

S.E.A., M.C.R. and K.L.M. serve on the HRA Board of Directors. L.R.R. is a paid consultant to the HRA. L.R.R. and M.C.R. are members of SACNAS.