HGG Advances



Centering Equity in Human Genetics and Genomics Advances

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The launch of HGG Advances, a digital, open-access journal of the American Society of Human Genetics, brings with it new opportunities to communicate high-quality genetics and genomics research as well as to think about ways to innovate on content, policies, and practices that have, in long-established journals, become convention. A strategic priority of HGG Advances is centering equity, and to this end, the journal has established an Equity Work Group that seeks to explore—along with you, HGG Advances readers, contributors, and reviewers-ways in which we can promote topical equity, capacity strengthening, authorship equity, and other policies and practices that center equity in the human genetics and genomics research publishing ecosystem. We think this effort, as well as similar endeavors elsewhere, is important for the sustainability and success of HGG Advances and is critical to advancing the fields of genomic sciences and precision medicine in general. Of course, centering equity in HGG Advances cannot be achieved by a few scholars alone. It requires the solidarity and diversity of perspective of many. So we invite you to make a personal commitment to centering equity and consider contributing to this effort.

HGG Advances is committed to equity as a key guiding principle in its scholarly activities and daily operations. Equity is often defined as a state of being fair and just. In contrast to equality or parity, centering equity means recognizing that some groups (e.g., Black, indigenous, and other persons of color sometimes referred to as "BIPOC" communities; women; those from low-to-middle-income countries or "LMICs"; and LGBTQIA+ communities) have experienced historic injustices and traumas attributable to social formations and processes derived from global imperialism and colonialism that unduly disadvantage scientists and authors in professional pursuits, among other aspects of life. This recognition of structural racism and discrimination is necessary for the design and selection of strategies and tactics to rectify these injustices and their downstream consequences. What does this principle mean for practice? We draw on the practical policy approach to equity known as "targeted universalism"—the use of targeted processes to achieve universal goals, deliberately establishing policies and practices to dismantle forces of marginalization, othering, and exclusion in the pursuit of equity.¹ In the context of scientific publishing, we think operationalizing targeted universalism requires consideration of topics, authors, and needed supports for greater diversity, inclusion, and equity,

all three of which are necessary for a sense of belonging² and full parity of participation³ in the scientific community.

Centering equity challenges the status quo and causes discomfort because it forces us to recognize and embrace potential tradeoffs. For example, increased a priori attention to certain scientific topics and/or solicitation of content from select groups might be responsive to concerns of those historically under-represented in genomics research. Yet, such a focus might appear contrary to preconceptions that scientific advances are situated only in discovery (as opposed to feasibility or implementation, for example). Moreover, we think that our greatest potential for improving equity in scientific publishing necessitates placing a greater focus on developing policies and practices that support research that engages diverse communities and stakeholders, including scientists, clinicians, and policymakers, as well others, throughout the entire research cycle.^{4–7} Such intentional centering of equity helps ensure that the international human right to participate and share in the benefits of science is respected, protected, and fulfilled.

Topical equity is an important aspiration for HGG Advances. Subject-matter interests and priorities cannot be assumed to be the same across all potential contributors to genetics and genomics research. To pursue topical equity requires subject-matter selection processes that are guided by the interests and priorities of BIPOC, women, LMIC, LGBTQIA+, and other communities and groups, as well as recognition that such topics might deviate from those set implicitly by white-centric, majority norms. Such shifts require sensitivity to how communities might experience unintended consequences depending on research topics (e.g., GWASs of sexual attraction or behavior and LGBTQIA+ communities) and ensure careful communication of research design and results to avoid misunderstandings and stigmatization.⁸ Topical equity is a tough issue but could be addressed by, for example, allocating resources that enable the publication of topical interests of priority (e.g., culturally sensitive methodologies; relevant conditions, diseases, and health outcomes). Topical equity also means looking for synergies among science, topic, and praxis.

Immediate strategies for author capacity strengthening (i.e., a term we use deliberately instead of "capacity building" to recognize the capacity diverse stakeholders bring to scientific publication and the need to remove barriers

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unfairly hindering their progress) involve allocating resources for support of BIPOC, women, LMIC, and LGBTQIA+ authors as an investment in a robust, diverse reseach community. The goal of increasing author supports is not only to enhance publication quality but also to nurture early-career researchers from diverse communities toward greater success in traversing "the publication pipeline" and in careers in genomics sciences and medicine. Another equity-prioritizing strategy is to explore and adopt policies that support equity-centering practices, such as including BIPOC/LMIC authorship as an added positive review criterion or requiring a statement of how diversity, inclusion, and/or equity informs manuscript submission. In the context of reviewer capacity strengthening, we explicitly encourage taking a bidirectional perspective in which all parties increase attentiveness to equity and impact. As we head down this path, it is important to consider what additional communities or groups would benefit from tailored approaches to equity. But both in principle and practice, we must start somewhere.

Equity in academic publishing requires attention to those serving on the Journal's editorial board and those serving as manuscript reviewers. One consideration to explore is how to operationalize bidirectional capacity strengthening effectively between reviewers and authors, wherein reviewers are educated on equity and new authors are encouraged to become reviewers. Targeted approaches to consider include access to enhanced editorial support for overcoming constraints imposed by differences in language,⁹ tracking diversity of reviewer invitations and service, and pursuing efforts to encourage local reviewers for global content (i.e., inviting reviewers with appropriate subject-matter, jurisdictional, and contextual expertise). It could also include a heightened status or pool of reviewers willing to provide an enhanced review incorporating not only critique but strong guidance for improving a manuscript.

Authorship plays a key role in one's recognition as a successful scholar; the publication itself is an initial accomplishment that compounds over time as publications contribute to professional promotions and achievements. Equity as a guiding principle in authorship calls for auditing certain authorship designations (e.g., first author, corresponding author, and senior author) to assess, track, and encourage diversity and inclusion in those roles. Publication authorship style and procedures can constrain co-first authorship that disadvantages women.^{10–12} Authorship naming practices (such as the deadnaming or misgendering of transgender scholars¹³) can also be harmful. Several strategies might help promote authorship equity. Editorial practices and policies are needed to curb parasitic relations between genomics professionals from high-income countries and those from LMICs.⁷ Open-access publishing is a strategy that has had varying success at promoting author equity. Although authors of open-access articles can reach more readers and wider audiences (as

well as gain more citations) than those published behind a paywall, article processing charges (APCs) have been shown to be a sizable barrier to geographic and other forms of diversity among authors.¹⁴ Seeking submissions, supporting authors, and deferring or subsidizing APCs are strategies that could promote authorship equity.

We think that most of the human genetics and genomics community share a commitment to equity to rectify historical injustices that manifest as inequities and disparities¹⁵ in topical inclusion, manuscript acceptance, authorship, and ultimately professional recognition. Despite our best intentions, addressing these disparities and their underlying inequities might feel overwhelming, will involve forces beyond our purview, and most likely will require incremental reforms throughout the field over time. That said, we have considered a few potential policies and practices that move us toward centering equity. For example, given that open access publications run on razor-thin margins, seeking out financial resources to support equity-promoting strategies is fundamental, whether that be through targeted sponsorship or grant mechanisms. Such resources could be used to sponsor competitive awards for BIPOC/LMIC new investigators or first authors to defer page costs and thus remove a barrier to publication as well as recognize exceptional scholarship. Some "lower hanging" opportunities could be to include formal public recognition or certification of reviewers willing to provide additional support to less experienced authors or to those for whom English is not a first language. Similarly, in light of the importance of mentoring services for faculty promotion, recognition of author mentorship could support reporting to or inclusion in promotion portfolios. Such incentives within the existing systems of career development hold promise for centering equity and might even expand beyond the confines of HGG Advances.

Recognizing that centering equity cannot be achieved by us individually and that the approach taken requires diversity and solidarity, we offer an opportunity for the community to faciliate these efforts. To this end, we are launching a dedicated space in which diverse voices can speak out and be amplified toward making the field a more inclusive and equitable community. Thus, we are pleased to introduce a new HGG Advances forum called "We're right here: Embracing diversity and building equity in genomic science and medicine." In this forum, members of the human genetics and genomics community are invited to discuss matters of diversity, inclusion, and equity in the field-in their own way. Submissions may take the form of commentaries, reviews, or original research articles and will receive peer review with fast turn-around. In this spirit, we invite and encourage the entire human genetics and genomics community to join in our efforts to center equity and maximize the great heterogeneity of our field. We end with a query of the readership-what would you like to see in this forum? Please send your responses to hggadvances@ashg.org.

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Declaration of interests

The content of this commentary is the authors' responsibility and might not represent the views of the authors' funding sources, employers, clients, or any other person or entity. J.K.W. is an employee of Geisinger, has a part-time private law practice in Pennsylvania, is an academic affiliate of anthropology and an adjunct instructor of law at Penn State University, and is a member of the Scientific Advisory Board for Sage Bionetworks. J.Y. is parttime deputy director of the Korean Community Service Center and serves as a consultant to Northshore University Health System. C.D.R. is a member of the Board of Directors of ASHG and the Ethics Advisory Board of Illumina. M.J.B. is Chairman of the Scientific Advisory Board of GeneDx.

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