



Commentary

The Society for Epidemiologic Research and the Future of Diversity and Inclusion in Epidemiology

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“The mission of the Diversity and Inclusion Committee (D&I) in the Society for Epidemiologic Research is to foster the diversity of our membership and work towards the engagement of all members, from diverse backgrounds at all stages of their careers, in the Society’s activities, with the intent of enhancing discovery in public health.” As a foundational step in implementing our mission, the D&I Committee conducted a survey of SER membership. Here we report on the efforts we have undertaken to expand the diversity and inclusiveness of our Society and our aspirations for future efforts in support of D&I. Early on, we established the *SERvisits* program to conduct outreach to institutions and students that have historically been underrepresented at SER; we hope this program continues to grow in its reach and impact. We have also taken steps to increase the inclusiveness of SER activities, for example, by engaging members on issues of D&I through symposia and workshops at SER annual meetings and through social media. DeVilbiss et al. (*Am J Epidemiol.* 2020;189(10):998–1010) have demonstrated that there is substantial room for improvement with regards to diversity and inclusion within SER. We invite SER members to become involved and collaborate on this long-term goal.

diversity; epidemiology; inclusion

Abbreviations: D&I, diversity and inclusion; SER, Society for Epidemiologic Research.

Editor’s note: *The opinions expressed in this article are those of the authors and do not necessarily reflect the views of the American Journal of Epidemiology.*

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In 2016, a grassroots movement within the Society of Epidemiologic Research (SER) raised the concern that SER

was not doing enough to create an environment that actively engaged and supported its diverse members. In response to this concern, in 2017, 49 years after the inaugural 1968 meeting of SER, a working group was established to address issues of diversity and inclusion at our annual meeting and within our Society at large (1). The Diversity and Inclusion (D&I) working group became a permanent standing committee of SER on July 1, 2019. DeVilbiss et al. (2) reported on the diversity and inclusiveness of SER and the challenges facing SER with respect to inclusiveness, providing empirical support underlying the original concern that led to the formation of the D&I Committee; it characterizes the diversity of our existing membership yet illustrates that elements of diversity and inclusion within SER are in need of improvement.

Consistent with our mission, the Committee's composition is itself diverse: diverse with respect to years of SER membership, institutional affiliation, geographic region, sex, age, race/ethnicity, native language, sexual orientation, religion, and substantive area of research. Collectively, we share a passion for the mission of SER, for advancing scientific discovery, and for translating scientific discoveries into public health practice. We believe that these goals are best accomplished by "diverse scientific communities" (2), which have been shown to foster the most effective and impactful engagement in research and public health practice.

We provide this commentary to share with SER membership and the field of epidemiology at large the specific steps we have taken to expand the diversity and inclusiveness of our Society, to set forth an agenda for the D&I mission of SER, and to extend an invitation to all SER members to join in our efforts.

DIVERSITY

Diversity benefits all individuals, improves the quality of scientific research, and benefits all aspects of society at large (3–5). Yet, similar to most schools of public health, the D&I Committee has not adopted a formal definition of diversity (6) given the wide range of views as to how best to define diversity and what aspects of diversity we should prioritize for our efforts. Limited diversity risks exposure to unfair treatment and exclusion from opportunity (highlighting the important connection between diversity and inclusion). It is important to note that there are many facets of diversity. For example, the Everyday Discrimination Scale, one of the most commonly used measures of discrimination in health research, queries experiences of unfair treatment that individuals attribute to ancestry or national origins, gender, race, age, religion, height, weight, sexual orientation, education, income, physical disability, and skin color (7). Other aspects of diversity that are important for SER to consider include career stage and duration of SER membership, type of affiliation (e.g., affiliated with an institution that is highly represented at SER vs. not), geographic region (both within the United States and internationally), and occupational diversity (e.g., primarily research-focused vs. focused on public health practice). Given the uniqueness of identities and experiences, different aspects of diversity are important to different individuals, and aspects of diversity can intersect within individuals and evolve over time. Our view is that professional societies are responsible for being sensitive to all facets of diversity.

SER launched an initiative in 2018 called *SERvisits* (8) to increase the institutional and geographic diversity of the Society's membership. SER researchers visit institutions, lead a seminar, and engage with students and faculty. To enhance membership and participation at selected institutions, the Society provides offers bundled memberships for students from each participating institution and sponsors students to attend our upcoming annual meeting. D&I has sought out institutions for participation in *SERvisits* that have historically been underrepresented at SER meetings and whose faculty and students have been underrepresented in SER membership. Though most *SERvisits* to date have

resulted from outreach efforts on our part, institutions interested in hosting an *SERvisits* event are invited to contact us to express their interest.

The *SERvisits* program is designed as a mutual exchange with SER members visiting underrepresented institutions and scientists from underrepresented institutions visiting the annual SER meeting. These latter visits were amplified in 2018 with the creation of the Susser-Stein Inclusion Awards from Columbia University to support multiple epidemiologists-in-training from these institutions to travel to and attend the annual SER meeting. As the program grows, we hope to expand the roster of participating SER faculty, expand the type and geographic location of participating institutions, and attract new SER members who will become active in our Society over the long term. Importantly, *SERvisits* has relied on SER faculty members who have generously funded their own travel to participating institutions.

INCLUSION

Once achieved, diversity alone is not sufficient to improve the experiences of a society's members. As DeVilbiss et al. (2) pointed out, "creating a culture of inclusion" is "essential to achieving and sustaining diverse representation." SER has considerable room for improvement. Only 41% of survey respondents reported feeling very welcomed at SER-sponsored activities, including the annual meeting; this figure varied considerably by race/ethnicity and gender. Moreover, feeling welcomed was found to be associated with a higher likelihood of participation in SER activities. Establishing a code of conduct (9) was essential for SER and represented an initial step in expanding equitable inclusion and participation among SER members.

D&I has supported programmatic activities designed to elevate and confront issues of inclusion within SER. Accordingly, one of our approaches to accomplish our inclusion goals has been to organize scientific and career development sessions at annual SER meetings addressing D&I-related issues, given by presenters that have been typically underrepresented in the Society. The Committee has also engaged with SER membership on D&I topics throughout the year. We published a D&I "playlist" on the SER website, containing a selection of articles on D&I research questions and D&I concerns within the process of research itself. The Committee engaged in open discussions about D&I through social media, including the recent D&I Twitter Takeover (10). The Susser-Stein Inclusion Awards are also an example of a new program to enhance participation from, overtly welcome, and include new scientists in SER who would otherwise not have been connected to the organization.

In 2019, D&I shaped key dimensions of the SER annual meeting. The 2019 Presidential Address previewed early results of the survey now reported by DeVilbiss et al. (2) and began a conversation about D&I both at SER and within the broader field of epidemiology. Social events at the 2019 SER annual meeting were designed with inclusion in mind—the presidential reception was opened for the first time to all conference attendees and a dedicated reception was held for *SERvisits* participants. To encourage contin-

using conversation and data collection on D&I issues, we exhibited a D&I table where we solicited comments and input from attendees about their experiences at SER and suggestions for improving the inclusiveness of our organization. We hope to build on and expand these efforts at future conferences.

THE FUTURE

The report from DeVilbiss et al. (2) caps a large-scale, all-volunteer effort to design, pretest, implement, analyze, and document a study intended to assess D&I-related issues of concern to SER members. It reflects our core value that the achievement of diversity and inclusion requires ongoing and deliberate action. We are grateful to the 631 SER members who participated in the survey, albeit representing only 39% of all members. Because this survey provides a foundation on which to evaluate changes in membership diversity, representation, and inclusion as well as the effectiveness of future D&I initiatives, we encourage every SER member to participate in future iterations of the survey. We also invite feedback on how best to carry out future D&I surveys. The survey reported by DeVilbiss et al. was conducted anonymously and thus not designed to follow participants over time. Future surveys might be designed to track within-individual changes in their experiences at SER, might target specific groups for in-depth study (e.g., first-time attendees or early-career scientists), might focus on specific SER activities, or might extend beyond SER to include academic departments or other societies. Based on our experience designing and implementing the survey now reported by DeVilbiss et al., it is important for future efforts to receive broad input on the design and content; it is equally important that individuals dedicated to the mission of D&I become involved and share the workload.

DeVilbiss et al. (2) provide an opportunity for self-reflection at the organizational level. Their results make clear that SER membership is diverse but could be more diverse and could be more inclusive. The activities described above represent only our initial efforts to increase SER's diversity and inclusion, which are closely aligned with SER's initiatives aimed at expanding opportunities for member involvement in our committees (11) and career development opportunities for trainees. We enthusiastically invite comments, input, feedback, and suggestions for new ideas. D&I co-chairs and committee members are your points of contact (1).

As a committee we recognize that there are no easy remedies to these issues. A criticism of the Committee's work thus far is that we have only begun to call out issues of diversity and inclusion (e.g., education) and address the immediate ways in which they can be improved (e.g., recruitment). Importantly, DeVilbiss et al. challenge us to think about the structural ways the Society can increase diversity and feelings of inclusion among its members. Understanding and framing organizational responses and improvements will be one of our primary goals moving forward. A central aspect of this is ongoing surveillance to track our progress—for example, to identify trends in participation, recruitment,

and engagement of members at our annual meetings and throughout the year. We envision consistent engagement with data that will help motivate more accurate and responsive solutions to ongoing (and emergent) issues related to diversity and inclusion at SER.

D&I-related challenges facing SER are not unique to SER. In the future we hope to expand engagement around D&I issues with other epidemiology societies as well as professional organizations in the population sciences (encompassing academic societies, schools of public health, and governmental organizations concerned with public health—as SER aspires to welcome and serve them all). We also recognize that social forces affecting SER are also shaping the field of epidemiology. Not only can SER benefit from and respond to large-scale social changes (12), in the future, it has—through our membership—the potential to shape them.

Finally, the results from DeVilbiss et al. also motivate us to reflect on inclusiveness from our own unique individual perspectives—for each of us to ask, how can we make SER (and our own institution) a more welcoming place? How can we, individually, promote structural change? Can the organizational and programmatic initiatives described above change each individual's experience at SER? We firmly believe that by all of us acting individually and collectively, SER can become a more inclusive society—from openly welcoming a member to their first conference to just as openly welcoming back a member to their fiftieth.

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REFERENCES

1. Society for Epidemiologic Research. Diversity and Inclusion Committee. <https://epiresearch.org/committees/diversity-and-inclusion-working-group/>. Accessed April 5, 2020.
2. DeVilbiss EA, Weuve J, Fink DS, et al. Assessing representation and perceived inclusion among members of the Society for Epidemiologic Research. *Am J Epidemiol*. 2020;189(10):998–1010.
3. Gurin P, Nagda BA, Lopez GE. The benefits of diversity in education for democratic citizenship. *J Soc Issues*. 2004; 60(1):17–34.
4. Whitla DK, Orfield G, Silen W, et al. Educational benefits of diversity in medical school: a survey of students. *Acad Med*. 2003;78(5):460–466.
5. Gewin V. Why diversity helps to produce stronger research. <https://www.nature.com/articles/d41586-018-07415-9>. Accessed April 5, 2020.
6. Merino Y. What do schools of public health have to say about diversity and inclusion? *Pedagogy Health Promot*. 2018;5(4): 233–240.
7. Williams DR, Yan Y, Jackson JS, et al. Racial differences in physical and mental health: socio-economic status, stress and discrimination. *J Health Psychol*. 1997;2(3):335–351.
8. Society for Epidemiologic Research. SERvisits. <https://epiresearch.org/ser-visits/>. Accessed April 5, 2020.
9. Society for Epidemiologic Research. Code of conduct. <https://epiresearch.org/about-us/code-of-conduct/>. Accessed April 5, 2020.
10. #DandITwitterTakeover. <https://twitter.com/hashtag/DandITwitterTakeover>. Accessed April 5, 2020.
11. Society for Epidemiologic Research. Committees. <https://epiresearch.org/committees/>. Accessed April 5, 2020.
12. O'Neil A, Sojo V, Fileborn B, et al. The #MeToo movement: an opportunity in public health? *Lancet*. 2018;391(10140): 2587–2589.