Annual report on equity, diversity, and inclusion: Research and Practice in Thrombosis and Haemostasis is meeting its goals

RPTH Statement on Diversity, Equity, and Inclusion

RPTH believes that diversity in all forms will advance scientific discourse. We commit to building a publishing culture of diversity, equity, and inclusion that will increase the participation of women, those from underrepresented racial/ethnic groups, early career professionals, and those from all regions of the world as associate editors, editorial board members, authors, and peer reviewers.

Research and Practice in Thrombosis and Haemostasis (RPTH) is committed to a culture of inclusion.1 In this annual report we are pleased to provide information on gender, race/ethnicity, and region of the world of authors and gender of peer reviewers. Findings allow the editor team to quantify under-representation and identify bias in peer review that might be impairing progress in science, and adversely affecting thrombosis and hemostasis research and representation among the science community.

1 | GENDER

Annually during #WomenInMedicine Month, we tabulate and report statistics on the representation of women as authors and reviewers in the journal. The goal is representation of women at the level of membership by women in the ISTH, about 45%.

Since RPTH launched in 2017, we have seen some fluctuations in representation of women authors. The percentage of women authors overall, and of women corresponding/senior authors gradually increased to June 2020.2 From July 2018 to June 2019 we observed a decline in the proportion of women senior authors of invited articles (i.e., the person invited) from 41.9% to 30.8%. This led to greater effort to invite women authors and a corresponding large increase in 2019 to 2020 to 56.8%.2 To improve accuracy of classification, we also began collecting self-reported gender (including nonbinary) when authors log in to our manuscript processing system. To tabulate author gender, we supplement this self-report data by assigning gender based on Internet searches for information about each author with missing gender.

This year, from July 2020 to June 2021, there were 1098 authors and 44.9% were women, meeting our goal of 45% for the first time and slightly higher than the percentage last year; 368 of 842 (43.7%); Figure 1). This year, gender was self-identified for 300 authors (169 men, 126 women, 5 other) and assigned for 798 authors (418 men, 367 women, 13 unknown). Thus, 42% of self-identified authors were women and 46% of assigned authors were women. The percentage of women senior/corresponding authors was similar in 2020 to 2021 and 2019 to 2020: of 159 senior/corresponding authors in 2020–21, 42.8% were women, as compared to 43.1% the year before. To enhance these data, we hope for ongoing increases in collection of self-identified author gender. This requires authors to log in to our manuscript processing site, which queries them. We encourage all authors to log in and report this information to improve our data.

A reader may inquire how the RPTH goals for gender equity in publishing are met. The editors have no control of who submits articles to us for consideration of publication, so we cannot raise the percentage of women authors on our own. However, we can assure that we are fair in peer review of submitted articles, regardless of who the authors are. We minimize unconscious bias in peer review using several methods. First, the associate editor group is consistently 40% to 50% women (with a woman editor-in-chief), which may increase fair treatment of women in peer review.3 Second, we regularly discuss unconscious bias at associate editor team meetings.

Third, we aim to equitably include women as peer reviewers, which increases representation of women authors.45 Reducing homophily in peer review (same-gender preference of associate editors for reviewers) may also help.

Tracking gender separately for authors of invited articles allows the opportunity to assess author gender imbalance more directly since the editors invite these articles. In 2019 to 2020 we overcompensated for a decline in women invited authors the prior year by overshooting our goal of 45% women authors (Figure 1). In 2020 to 2021 the proportion of senior author women publishing invited articles was 46.2% (42/90), which is more than the average of the previous 3 years, 43.2%, and just above our goal (Figure 1).

In addition to authors, we monitor peer reviewer gender and aim for this to be 45% women. The editorial board is a pool of peer reviewers that is more frequently asked to review, so by design 50% of editorial board members are women. In 2020 to 2021, of 192 individuals who completed two or more reviews, 42.7% were...
women (based on 136 self-identified and 56 assigned). Of 24 people who completed 6 or more reviews, 50% were women. However, only two of the eight people who reviewed 10 or more articles were women, suggesting that the associate editors can improve by including women reviewers more frequently. One might be concerned that women are less able to review due to competing demands, and inclusion of more women reviewers might pose a tax on these individuals, but this has not proven to be the case at other journals that made systematic efforts to increase women peer review representation.4 We showed in the past that women were more likely to accept our invitations to review.1

It is important to consider the above findings in the context of the coronavirus disease 2019 (COVID-19) pandemic. As reviewed by Woitowich and colleagues, the pandemic may disproportionately reduce productivity and career progress of women compared to men.6 We previously reported that the COVID-19 shutdown in 2020 was not associated with reduced representation of women authors in RPTH overall, but first authorship by women was lower for COVID-19–related articles than other articles during that time.7 The current results in Figure 1 extend this finding; we observed a gradual increase in authorship by women since the pandemic began (including for COVID-19–related articles), suggesting that thrombosis and hemostasis researchers have been less affected than in other fields. This is similar to findings from four high-impact cardiology journals, although this field has less representation of women.8

The experience of other journals tells a different story. Brain, Behavior, and Immunity (BBI), a journal dedicated to psychoneuroimmunology, compared the gender of first and senior authors from July 2019 through January 2020 to the equivalent months in 2020 and 2021 and found that both female first authorship and senior authorship declined during the pandemic, though the senior authors were somewhat more stable.9 Data from 11 journals in the BMJ medical group also demonstrated a gender gap affecting women co-authors and those in the first and last author positions for COVID-19 research, but not other topics; as we observed, this gap lessened later in the pandemic period.10 Other work found that women were publishing less on physical and life sciences preprint servers and registering fewer new research projects.11 And, as for BBI and the BMJ, reduced women's productivity was greater for first authors, who are more likely to be early-career researchers, suggesting that young female researchers will bear the brunt of the pandemic fallout, and subsequently experience long-term career setbacks.

This “publishing gap” extends beyond medicine. An article in The Lily (a site from the Washington Post devoted to stories about millennial women in the United States) collected anecdotes early in the pandemic from editors of journals on various topics such as astrophysics, comparative political studies, economics, and others, all of whom stated they had noticed either a drop or stagnation in the number of submissions from women, while their male peers maintained previous levels of productivity or even increased submissions in some cases.12 Though these observations are mostly anecdotal, they contrast with our experience and point to a noticeable loss of women’s productivity and participation in academic publishing.

The different experience of RPTH might reflect peculiarities of our authorship or a lower impact of the pandemic on scientists in thrombosis and hemostasis (perhaps because of the prominence of coagulation abnormalities in COVID-19). Reporting of similar data by other thrombosis and hemostasis journals might provide further insight.

2 | RACE AND ETHNICITY

Representation of diverse individuals on race and ethnicity in science is desirable so that all perspectives contribute new knowledge. Race and ethnicity are constructs that have different meanings in different parts of the world, but they can unfortunately be associated with disparities in health and disparities in representation in science. To understand whether RPTH might be inadvertently treating authors differently based on these factors, we began asking authors...
logging in to our manuscript system to voluntarily provide their race or ethnicity. As there is no global classification, we used an open-ended question, “Based on your region of the world, how would you classify your race/ethnicity?” To date, we have self-reported results from 197 authors (less than for gender, as the program started later), with distribution shown in Table 1. Owing to receipt of 28 different responses, we condensed these into categories, as listed in the table.

| Race ethnicity grouping | Percentage in each group | Verbatim responses within each group if applicable |
|-------------------------|--------------------------|--------------------------------------------------|
| Caucasian or White      | 52.2%                    | Han or Han Chinese, Chinese, Japanese, Asian, East Asian, South Asian, South Asian Indian, Thai |
| Asian                   | 17.8%                    | Cornish, Danish, Dutch, European, White European, White Eastern European, Greek or White Greek, Greek Cypriot, Irish |
| European                | 8.1%                     | Cornish, Danish, Dutch, European, White European, White Eastern European, Greek or White Greek, Greek Cypriot, Irish |
| Hispanic                | 2%                       | Arab, White Middle Eastern, Muslim, Middle Eastern, Syrian |
| Middle Eastern          | 2%                       | Mixed Race, Asian American, Asian Canadian, Caucasian Asian, Asian European |
| Jewish                  | 1%                       | Don’t Want to Say, Human, N/A, Other, Not Relevant |
| African American        | 0.5%                     |                                                               |
| Black                   | 0%                       |                                                               |
| Mixed                   | 3%                       |                                                               |
| No race ethnicity       | 14%                      |                                                               |

Few journals appear to be collecting race and ethnicity data,\textsuperscript{13} and we are aware of no other reports of results. We will continue to collect these data, which cannot be inferred by methods other than self-report, and as they mature, we hope to analyze the data as we have for author or reviewer gender. As for gender, we encourage authors to provide this information to allow us to examine the data for evidence of unconscious bias in peer review. As there is no worldwide classification of race ethnicity, we also welcome readers to provide feedback on the classification used in Table 1.

### 3 | REGION OF THE WORLD

An important dimension for an international society like ISTH is representation of regions of the world. Table 2 shows we published relatively few articles from outside North America and Europe, with stable proportions over time. Submission distribution by region was also fairly stable over time. We aim to grow publications from low-income countries, where the infrastructure and resources supporting scientific productivity is often less than other regions. To facilitate this our publisher provides waivers or discounts on article publication charges. The editors also provide extra advice to authors to help improve their work. We aspire to provide educational programs in scientific publishing to authors from lower-income countries.

### 4 | CONCLUSIONS

We hope that the thrombosis and hemostasis research community appreciates the transparent approach of \textit{RPTH} to provide insight into equity, diversity, and inclusion in scientific publishing. We will continue to provide annual updates, which is important to accountability. These reports depend on self-reporting of demographic data by authors and reviewers. We understand that these data are personal and assure that we approach their use with great sensitivity, upholding privacy, and with a goal toward improving equitable scientific publishing. We
hope that when we ask for this information, individuals will provide it. We also await reports from other journals with public statements on their commitment to equity, diversity, and inclusion.13,14

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authorship, peer review, publication, women

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