# Gender disparity on editorial boards of major urology journals 

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Cite as: Nguyen AX-L, Zorigtbaatar A, Bouhadana D, et al. Gender disparity on editorial boards of major urology journals. Can Urol Assoc J 2022 January 27; Epub ahead of print. http://dx.doi.org/10.5489/cuaj. 7690

Published online January 27, 2022

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## Introduction

The underrepresentation of women urologists in academic leadership positions is suggested to be one of the drivers of gender disparity in the field. ${ }^{1}$ Other barriers for women in urology include unconscious gender assumptions, lower salaries, lack of sponsorship, and slower promotions than men. ${ }^{2,3}$ Joining editorial boards (EBs) of academic journals was noted to have a lasting impact on career development. This study aimed to evaluate the gender distribution on the EBs of major urology journals in 2015 and 2020 to then evaluate the temporal changes between these two years.

## Methods

## Identifications of editorial board members

This cross-sectional study uses publicly available data to identify the EB composition of the top urology journals in 2015 and 2020. Urology journals were selected based on their 2020 impact factor (IF) listed in the Clarivate's Journal Citation Reports' list of "urology \& nephrology" journals. The four urology journals with the highest IFs were the following: European Urology (IF=18.7), Journal of Urology (IF=5.9), European Urology Focus ( $\mathrm{IF}=4.8$ ), and BJU International ( $\mathrm{IF}=4.8$ ). Despite being among the top urology journals, Nature Reviews Urology ( $\mathrm{IF}=11.0$ ) was excluded from this study, as the 2015 EB composition was not provided. The journal EB compositions were retrieved from the journal's official website or by contacting their editorial office.

## Demographic information collected

The full names and biographies of EB members were searched on professional websites (e.g., journal websites, university webpages, conference brochures, ResearchGate, and LinkedIn) to determine their EB position (editor-in-chief, ranked editor, statistical editor, or consulting/international/unranked EB member), their academic rank, the country of their affiliated institution, their graduate degrees obtained, and their subspecialty. EB members' number of research documents and H-index were extracted from Scopus. If an author had multiple entries in Scopus, the entry with the highest H-index was used. Similar to previous studies, gender was assigned based on the gender-specific pronouns referring to editorial board members as well as by picture. ${ }^{4}$ Further gender confirmation was achieved using the Gender API algorithm. This algorithm has been shown to be the most accurate gender assignment program (over $98 \%$ accuracy). ${ }^{5}$ Data collection and gender determination were performed by one investigator and independently verified by a second author. Discordant categorizations or those not matching the Gender API algorithm were reviewed by a third investigator.

## Statistical analysis

Means and standard deviations were reported for continuous variables. Categorical variables were presented as frequencies and proportions. The Wilcoxon rank-sum test was used for non-parametric continuous data, while the Pearson chi-square test was used for categorical data. Statistical significance was defined as a two-sided $p<0.05$. Statistical analyses were performed using Stata version 14.0 (StataCorp, Texas, USA). Institutional review board approval was obtained prior to the conduct of this study.

## Results

## Editor level

At the editor level, we identified a total of 518 individual editors of which 54 were women (10.4\%) and 464 were men (89.6\%). In 2015, there were 24 women ( $7.5 \%$ ) and 297 men ( $92.5 \%$ ). In 2020, there were 34 women ( $11.9 \%$ ) and 252 men ( $88.1 \%$ ). The gender of 502 editors ( $96.9 \%$ ) were confirmed by both our searches and Gender-API. Among the 176 ranked editors and editors-in-chief, 24 (13.6\%) were women and 152 ( $86.4 \%$ ) were men. Eleven ( $25.6 \%$ ) female editors had multiple EB appointments during the study period compared to 111 ( $31.4 \%$ ) men. There were statistically significant differences in education ( $p=0.001$ ) and subspecialty ( $p<0.001$ ) by gender, as a greater proportion of women editors practiced in the areas of neuro-urology/reconstruction/female pelvic medicine $(22.2 \%$ vs. $7.1 \%$ ) as well as pediatrics ( $11.1 \%$ vs. $9.3 \%$ ), and a greater proportion of women editors had advanced educational degrees beyond a medical degree ( $46.3 \%$ vs. $40.9 \%$ ).

Women editors had a median of 96 (IQR 63-168) research documents and a median H-index of 25 (IQR 18-38), while men editors had a median of 217 (IQR 121-373) research documents and a median H-index of 39.5 (IQR 26-57). This difference in research productivity between genders was statistically significant ( $p<0.001$ for number of research documents and H -index). There was no statistically significant interaction between years in
practice and gender with regards to H -index and number of documents ( $p>0.05$ ). Almost all women editors were affiliated with institutions from high-income countries, with one editor affiliated with an institution in an upper-middle-income country (Turkey). Additional editor level demographic information can be found in Table 1.

## Per journal

At the journal level, women editors formed between $8.1 \%(\mathrm{n}=7)$ to $12.5 \%(\mathrm{n}=26)$ of the EB. Proportion of women ranked editors ranged between $13.5 \%(n=19)$ to $18.2 \%(n=2)$. Of the four included journals, none had a woman editor-in-chief. Additional journal-level demographic information can be found in Table 2.

## Discussion

We conducted a cross-sectional analysis of the gender composition of leading urology journals. We found that only $7.5 \%$ of EB members in 2015 and $11.9 \%$ in 2020 were women, showing encouraging trends. While the percentage of women EB members in 2015 is slightly lower that the proportion of women urologists in the United States at that time $(7.5 \%<$ $8.0 \%$ ), the percentage of women EB members in 2020 is higher than the most recent 2019 percentage of American women urologists ( $11.9 \%>9.5 \%$ ). ${ }^{6}$

Despite the percentage of women EB members almost doubling within five years, it remains lower than other specialties such as general surgery ( $18.3 \%$ ) and plastic surgery $(18.2 \%) .{ }^{8}$ It is, however, higher than neurosurgery ( $8.3 \%$ ) and orthopedic surgery ( $6.1 \%$ ), two surgical subspecialties that are historically known to be predominantly male. ${ }^{8}$ In addition, our findings on the increased proportion of women in female and pediatric urology are in keeping with the demographic data from the American Board of Urology. ${ }^{8}$ This trend may be further explained by the availability of mentorship during residency ${ }^{9}$ Among the women EB members, all but one were from high-income countries. This highlights an additional layer of disparity that exists among women EB members.

We found that the median research documents and H -index are lower among women EB members. Historical delay in recruitment of women in urology, the difference in career length and practice settings, prioritization of education roles over academia, family commitments, and maternity leaves putting a plateau on women's careers were previously highlighted as potential explanations for the difference in productivity. ${ }^{7}$ Some women may also adopt their partner's last name, which can lead to missing research documents published under their maiden name. Despite the rise in women urological trainees, women continue to be paid less, receive less research funding, and are promoted at slower rates which likely also hinder their academic productivity. ${ }^{10-12}$ As such, it is important to acknowledge the barriers women must face to become academic urologists, and act on these factors when nominating EB members.

With the recent influx of women in the specialty, the number of women holding EB positions might naturally increase in proportion as their careers' progress. It is possible that the influx of women in the specialty are still early in their careers and are not seeking an EB position. However, the literature reports multiple underlying causes to gender inequities in

EBs, which can be grouped under the leaky pipeline phenomenon. This phenomenon describes the loss of women at various levels prior to the application and selection of EB members: gender biases, persistent unequal recruitment of women into surgical residency, low retention of women in academic surgery and unbalanced representation of women at high faculty positions. ${ }^{8}$ Solutions to our data-proven issue of disparity are dependent on the selection criteria of EBs, which themselves constitute a beneficial area for further exploration.

Our study is not without limitations. First, it includes only four urology journals that are all in English. However, these are the highest impact journals in the field of urology so are thought to accurately reflect the urology EBs. Second, gender was identified based on pronouns used in biographies without confirmation from individuals and included only the binary options of man or woman. Our methodology tried to capture the most updated data with validation from their institutional websites. The data was collected manually by authors which may have introduced human errors in the dataset. There is also limited public information on joining EBs, and making sure the process is equitable and transparent may reduce disparities. Finally, this research study is not intended to explain all the underlying causes of gender disparity, nor to be extrapolated to other facets of diversity. As an emerging research field, more work can be done in the assessment of disparity in editorial boards with regards to parental status, ethnicity, race, and sexual orientation.

## Conclusions

In conclusion, there has been an increase in the percentage of women EB members in urological journals over the last five years. While representation of women on EBs of high impact urological journals has increased to $12 \%$, efforts to ensure adequate mentorship, research opportunities and financial support must be sustained in order to bridge the gap.

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## Figures and Tables

|  | $\begin{aligned} & \text { Total } \\ & (\mathrm{n}=518) \end{aligned}$ | Women $(n=54)$ | $\begin{aligned} & \text { Men } \\ & (\mathrm{n}=464) \end{aligned}$ | p |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Editorial board position } \\ & \text { Editor in chief } \\ & \text { Ranked editor } \\ & \text { Statistical editor } \\ & \text { Consulting/international/ } \\ & \text { unranked editorial board } \\ & \text { member } \end{aligned}$ | $\begin{aligned} & 6 \text { (1.2\%) } \\ & 170 \text { (32.8\%) } \\ & 10 \text { (1.9\%) } \\ & 332 \text { (64.1\%) } \end{aligned}$ | $\begin{aligned} & 0(0.0 \%) \\ & 24(44.4 \%) \\ & 5(9.3 \%) \\ & 25(46.3 \%) \end{aligned}$ | $\begin{aligned} & 6(1.3 \%) \\ & 146(31.5 \%) \\ & 5(1.1 \%) \\ & 307(66.2 \%) \end{aligned}$ | $<0.001$ |
| Academic rank <br> Full professor Associate professor Assistant professor Other Undetermined | $\begin{array}{\|l} \hline 314 \text { (60.6\%) } \\ 102 \text { (19.7\%) } \\ 27(5.2 \%) \\ 49(9.5 \%) \\ 26(5.0 \%) \\ \hline \end{array}$ | $\begin{aligned} & 20(37.0 \%) \\ & 15(27.8 \%) \\ & 7(13.0 \%) \\ & 7(13.0 \%) \\ & 5(9.3 \%) \\ & \hline \end{aligned}$ | $\begin{array}{\|l} 294 \text { (63.4\%) } \\ 87 \text { (18.8\%) } \\ 20(4.3 \%) \\ 42(9.1 \%) \\ 21(4.5 \%) \\ \hline \end{array}$ | 0.002 |
| Medical degree | 475 (91.7\%) | 38 (70.4\%) | 437 (94.2\%) | <0.001 |
| Highest non-medical degree <br> Post-doctorate <br> Doctorate <br> Honorary <br> Masters <br> None | $\begin{array}{\|l} \hline 23(4.4 \%) \\ 135(26.1 \%) \\ 3(0.6 \%) \\ 80(15.4 \%) \\ 277(53.5 \%) \\ \hline \end{array}$ | $\begin{array}{\|l} \hline 8(14.8 \%) \\ 16(29.6 \%) \\ 0(0.0 \%) \\ 9(16.7 \%) \\ 21(38.9 \%) \\ \hline \end{array}$ | $\begin{array}{\|l} 15(3.2 \%) \\ 119(25.6 \%) \\ 3(0.6 \%) \\ 71(15.3 \%) \\ 256(55.2 \%) \\ \hline \end{array}$ | 0.001 |
| Subspecialty Andrology/infertility Endourology/MIS Neurouro/recon/female Oncology Pediatric Atatistics Other | $\begin{aligned} & 26 \text { (5.0\%) } \\ & 56(10.8 \%) \\ & 45(8.7 \%) \\ & 268(51.7 \%) \\ & 49(9.5 \%) \\ & 17(3.3 \%) \\ & 57(11.0 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 2(3.7 \%) \\ & 2(3.7 \%) \\ & 12(22.2 \%) \\ & 14(25.9 \%) \\ & 6(11.1 \%) \\ & 8(14.8 \%) \\ & 10(18.5 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 24 \text { (5.2\%) } \\ & 54(11.6 \%) \\ & 33(7.1 \%) \\ & 254(54.7 \%) \\ & 43(9.3 \%) \\ & 9(1.9 \%) \\ & 47(10.1 \%) \\ & \hline \end{aligned}$ | $<0.001$ |
| Country Australia Austria Belgium Brazil Canada China Colombia Czech Republic Denmark Egypt France Germany Greece | $\begin{aligned} & 15(2.9 \%) \\ & 5(1.0 \%) \\ & 9(1.7 \%) \\ & 5(1.0 \%) \\ & 19(3.7 \%) \\ & 7(1.4 \%) \\ & 1(0.2 \%) \\ & 1(0.2 \%) \\ & 1(0.2 \%) \\ & 2(0.4 \%) \\ & 19(3.7 \%) \\ & 20(3.9 \%) \\ & 3(0.6 \%) \end{aligned}$ | $\begin{aligned} & 1(1.9 \%) \\ & 0(0.0 \%) \\ & 1(1.9 \%) \\ & 0(0.0 \%) \\ & 0(0.0 \%) \\ & 2(3.7 \%) \\ & 0(0.0 \%) \\ & 0(0.0 \%) \\ & 0(0.0 \%) \\ & 0(0.0 \%) \\ & 1(1.9 \%) \\ & 3(5.6 \%) \\ & 0(0.0 \%) \end{aligned}$ | $\begin{aligned} & 14(3.0 \%) \\ & 5(1.1 \%) \\ & 8(1.7 \%) \\ & 5(1.1 \%) \\ & 19(4.1 \%) \\ & 5(1.1 \%) \\ & 1(0.2 \%) \\ & 1(0.2 \%) \\ & 1(0.2 \%) \\ & 2(0.4 \%) \\ & 18(3.9 \%) \\ & 17(3.7 \%) \\ & 3(0.6 \%) \end{aligned}$ | 0.92 |


| Guyana | $1(0.2 \%)$ | $0(0.0 \%)$ | $1(0.2 \%)$ |  |
| :--- | :--- | :--- | :--- | :--- |
| Hong Kong | $1(0.2 \%)$ | $0(0.0 \%)$ | $1(0.2 \%)$ |  |
| India | $4(0.8 \%)$ | $0(0.0 \%)$ | $4(0.9 \%)$ |  |
| Indonesia | $1(0.2 \%)$ | $0(0.0 \%)$ | $1(0.2 \%)$ |  |
| Ireland | $3(0.6 \%)$ | $0(0.0 \%)$ | $3(0.6 \%)$ |  |
| Israel | $2(0.4 \%)$ | $0(0.0 \%)$ | $2(0.4 \%)$ |  |
| Italy | $31(6.0 \%)$ | $3(5.6 \%)$ | $28(6.0 \%)$ |  |
| Japan | $12(2.3 \%)$ | $0(0.0 \%)$ | $12(2.6 \%)$ |  |
| Lebanon | $1(0.2 \%)$ | $0(0.0 \%)$ | $1(0.2 \%)$ |  |
| Netherlands | $10(1.9 \%)$ | $0(0.0 \%)$ | $10(2.2 \%)$ |  |
| New Zealand | $1(0.2 \%)$ | $0(0.0 \%)$ | $1(0.2 \%)$ |  |
| Norway | $1(0.2 \%)$ | $0(0.0 \%)$ | $1(0.2 \%)$ |  |
| Portugal | $1(0.2 \%)$ | $0(0.0 \%)$ | $1(0.2 \%)$ |  |
| Singapore | $1(0.2 \%)$ | $0(0.0 \%)$ | $1(0.2 \%)$ |  |
| South Africa | $2(0.4 \%)$ | $0(0.0 \%)$ | $2(0.4 \%)$ |  |
| South Korea | $3(0.6 \%)$ | $0(0.0 \%)$ | $3(0.6 \%)$ |  |
| Spain | $3(0.6 \%)$ | $0(0.0 \%)$ | $3(0.6 \%)$ |  |
| Sweden | $2(0.4 \%)$ | $0(0.0 \%)$ | $2(0.4 \%)$ |  |
| Switzerland | $6(1.2 \%)$ | $1(1.9 \%)$ | $5(1.1 \%)$ |  |
| Taiwan | $1(0.2 \%)$ | $0(0.0 \%)$ | $1(0.2 \%)$ |  |
| Turkey | $6(1.2 \%)$ | $1(1.9 \%)$ | $5(1.1 \%)$ |  |
| United Kingdom | $55(10.6 \%)$ | $5(9.3 \%)$ | $50(10.8 \%)$ |  |
| United States | $261(50.4 \%)$ | $35(64.8 \%)$ | $226(48.7 \%)$ |  |
| Venezuela | $1(0.2 \%)$ | $0(0.0 \%)$ | $1(0.2 \%)$ |  |
| Undetermined | $1(0.2 \%)$ | $1(1.9 \%)$ | $0(0.0 \%)$ |  |
| Documents, median (IQR) | 204 | 96 | 217 | $<0.001$ |
|  | $(104,358)$ | $(63,168)$ | $(121,372.5)$ |  |
| H-Index, median (IQR) | 38 | 25 | 39.5 | $<0.001$ |

IQR: interquartile range.

| Journal | BJU International |  | European Urology |  | European Urology Focus |  | Journal of Urology |  | Statistics |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | Women | Men | Women | Men | Women | Men | Women | Men | p |
| Gender per journal | $\begin{aligned} & \hline 19 \\ & (9.8 \%) \end{aligned}$ | $\begin{aligned} & \hline 175 \\ & (90.2 \%) \end{aligned}$ | $\begin{array}{\|l\|} \hline 17 \\ (9.1 \%) \end{array}$ | $\begin{array}{\|l\|} \hline 170 \\ (90.9 \%) \end{array}$ | 7 (8.1\%) | $\begin{aligned} & \hline 79 \\ & (91.9 \%) \end{aligned}$ | $\begin{aligned} & \hline 26 \\ & (12.5 \%) \end{aligned}$ | 182 (87.5\%) | $<0.001$ |
| Editorial board position |  |  |  |  |  |  |  |  | $<0.001$ |
| Editor-in-chief | 0 (0.0\%) | $\begin{aligned} & \hline 2 \\ & (100.0 \%) \end{aligned}$ | 0 (0.0\%) | $\begin{aligned} & 1 \\ & (100.0 \%) \end{aligned}$ | 0 (0.0\%) | $\begin{aligned} & 2 \\ & (100.0 \%) \end{aligned}$ | 0 (0.0\%) | 2 (100.0\%) |  |
| Ranked editor | $\begin{array}{\|l\|} \hline 5 \\ (16.7 \%) \\ \hline \end{array}$ | $\begin{aligned} & 25 \\ & (83.3 \%) \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|} \hline 2 \\ (14.3 \%) \\ \hline \end{array}$ | $\begin{aligned} & \hline 12 \\ & (85.7 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 2 \\ & (18.2 \%) \\ & \hline \end{aligned}$ | 9 (81.8\%) | $\begin{array}{\|l} \hline 19 \\ (13.5 \%) \\ \hline \end{array}$ | 122 (86.5\%) |  |
| Statistical editor | 0 (NA) | 0 (NA) | $\begin{array}{\|l\|} \hline 2 \\ (66.7 \%) \\ \hline \end{array}$ | 1 (33.3\%) | 0 (0.0\%) | $\begin{aligned} & 1 \\ & (100.0 \%) \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|} \hline 5 \\ (50.0 \%) \\ \hline \end{array}$ | 5 (50.0\%) |  |
| Consulting/internationa 1/unranked editorial board member | $\begin{aligned} & 14 \\ & (8.6 \%) \end{aligned}$ | $\begin{aligned} & 148 \\ & (91.4 \%) \end{aligned}$ | $\begin{array}{\|l\|} \hline 13 \\ (7.7 \%) \end{array}$ | $\begin{aligned} & 156 \\ & (92.3 \%) \end{aligned}$ | 5 (6.9\%) | $\begin{aligned} & 67 \\ & (93.1 \%) \end{aligned}$ | 2 (3.6\%) | 53 (96.4\%) |  |
| Academic rank |  |  |  |  |  | - |  |  | $<0.001$ |
| Full professor | 6 (5.6\%) | $\begin{aligned} & \hline 102 \\ & (94.4 \%) \\ & \hline \end{aligned}$ | 5 (4.3\%) | $\begin{aligned} & 111 \\ & (95.7 \%) \\ & \hline \end{aligned}$ | 2 (3.8\%) | $\begin{aligned} & \hline 51 \\ & (96.2 \%) \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|} \hline 12 \\ (8.1 \%) \\ \hline \end{array}$ | 136 (91.9\%) |  |
| Associate professor | $\begin{aligned} & \hline 6 \\ & (17.6 \%) \end{aligned}$ | $\begin{aligned} & 28 \\ & (82.4 \%) \end{aligned}$ | $\begin{aligned} & \hline 6 \\ & (15.4 \%) \end{aligned}$ | $\begin{aligned} & 33 \\ & (84.6 \%) \end{aligned}$ | $\begin{aligned} & \hline 2 \\ & (12.5 \%) \end{aligned}$ | $\begin{aligned} & 14 \\ & (87.5 \%) \end{aligned}$ | $\begin{aligned} & 6 \\ & (15.0 \%) \end{aligned}$ | 34 (85.0\%) |  |
| Assistant professor | 0 (0.0\%) | $\begin{aligned} & 7 \\ & (100.0 \%) \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|} \hline 3 \\ (30.0 \%) \\ \hline \end{array}$ | 7 (70.0\%) | 0 (0.0\%) | $\begin{aligned} & 3 \\ & (100.0 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 5 \\ & (41.7 \%) \\ & \hline \end{aligned}$ | 7 (58.3\%) |  |
| Other | $\begin{aligned} & \hline 6 \\ & (16.7 \%) \end{aligned}$ | $\begin{aligned} & 30 \\ & (83.3 \%) \end{aligned}$ | $\begin{array}{\|l\|} \hline 1 \\ (11.1 \%) \\ \hline \end{array}$ | 8 (88.9\%) | $\begin{aligned} & 1 \\ & (10.0 \%) \end{aligned}$ | 9 (90.0\%) | 0 (0.0\%) | 2 (100.0\%) |  |
| Undetermined | $\begin{aligned} & 1 \\ & (11.1 \%) \end{aligned}$ | 8 (88.9\%) | $\begin{aligned} & 2 \\ & (15.4 \%) \end{aligned}$ | $\begin{aligned} & 11 \\ & (84.6 \%) \end{aligned}$ | $\begin{aligned} & 2 \\ & (50.0 \%) \end{aligned}$ | 2 (50.0\%) | $\begin{aligned} & \hline 3 \\ & (50.0 \%) \end{aligned}$ | 3 (50.0\%) |  |
| Medical degree | $\begin{aligned} & 16 \\ & (8.8 \%) \end{aligned}$ | $\begin{aligned} & \hline 166 \\ & (91.2 \%) \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|} \hline 11 \\ (6.2 \%) \\ \hline \end{array}$ | $\begin{aligned} & 166 \\ & (93.8 \%) \end{aligned}$ | 3 (3.8\%) | $\begin{aligned} & 77 \\ & (96.3 \%) \end{aligned}$ | $\begin{aligned} & \hline 17 \\ & (9.2 \%) \\ & \hline \end{aligned}$ | 168 (90.8\%) | $<0.001$ |


| Highest non-medical degree |  |  |  |  |  |  |  |  | $<0.001$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Post-doctorate | $\begin{array}{\|l\|} \hline 3 \\ (30.0 \%) \end{array}$ | 7 (70.0\%) | 0 (0.0\%) | $\begin{array}{\|l\|} \hline 7 \\ (100.0 \%) \\ \hline \end{array}$ | 0 (NA) | 0 (NA) | $\begin{aligned} & \hline 5 \\ & (62.5 \%) \end{aligned}$ | 3 (37.5\%) |  |
| Doctorate | $\begin{aligned} & \hline 7 \\ & (14.3 \%) \\ & \hline \end{aligned}$ | $\begin{array}{\|l} \hline 42 \\ (85.7 \%) \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline 10 \\ (15.6 \%) \end{array}$ | $\begin{array}{\|l\|} \hline 54 \\ (84.4 \%) \\ \hline \end{array}$ | $\begin{aligned} & 4 \\ & (12.9 \%) \end{aligned}$ | $\begin{aligned} & \hline 27 \\ & (87.1 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 5 \\ & (14.3 \%) \\ & \hline \end{aligned}$ | 30 (85.7\%) |  |
| Honorary | 0 (0.0\%) | $\begin{array}{\|l\|} \hline 4 \\ (100.0 \%) \\ \hline \end{array}$ | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (0.0\%) | 1 (100.0\%) |  |
| Masters | 2 (7.7\%) | $\begin{aligned} & \hline 24 \\ & (92.3 \%) \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|} \hline 3 \\ (14.3 \%) \end{array}$ | $\begin{aligned} & \hline 18 \\ & (85.7 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1 \\ & (14.3 \%) \\ & \hline \end{aligned}$ | 6 (85.7\%) | $\begin{aligned} & \hline 6 \\ & (13.6 \%) \end{aligned}$ | 38 (86.4\%) |  |
| None | 7 (6.7\%) | $\begin{aligned} & \hline 98 \\ & (93.3 \%) \\ & \hline \end{aligned}$ | 4 (4.2\%) | $\begin{aligned} & \hline 91 \\ & (95.8 \%) \\ & \hline \end{aligned}$ | 2 (4.2\%) | $\begin{aligned} & \hline 46 \\ & (95.8 \%) \end{aligned}$ | $\begin{aligned} & 10 \\ & (8.3 \%) \end{aligned}$ | 110 (91.7\%) |  |
| Subspecialty |  |  |  |  |  |  |  |  | $<0.001$ |
| Andrology/infertility | $\begin{array}{\|l\|} \hline 1 \\ (14.3 \%) \\ \hline \end{array}$ | 6 (85.7\%) | 0 (0.0\%) | $\begin{aligned} & 7 \\ & (100.0 \%) \\ & \hline \end{aligned}$ | 0 (0.0\%) | $\begin{aligned} & 1 \\ & (100.0 \%) \end{aligned}$ | 1 (6.7\%) | 14 (93.3\%) |  |
| Endourology/MIS | 1 (3.1\%) | $\begin{aligned} & \hline 31 \\ & (96.9 \%) \\ & \hline \end{aligned}$ | 0 (0.0\%) | $\begin{aligned} & \hline 16 \\ & (100.0 \%) \\ & \hline \end{aligned}$ | 0 (0.0\%) | $\begin{aligned} & 5 \\ & (100.0 \%) \end{aligned}$ | 1 (4.5\%) | 21 (95.5\%) |  |
| Neurouro/recon/female | $\begin{array}{\|l\|} \hline 4 \\ (26.7 \%) \\ \hline \end{array}$ | $\begin{aligned} & \hline 11 \\ & (73.3 \%) \end{aligned}$ | $\begin{array}{\|l\|} \hline 3 \\ (25.0 \%) \\ \hline \end{array}$ | 9 (75.0\%) | 0 (0.0\%) | $\begin{aligned} & 4 \\ & (100.0 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 5 \\ & (25.0 \%) \\ & \hline \end{aligned}$ | 15 (75.0\%) |  |
| Oncology | 8 (7.0\%) | $\begin{aligned} & \hline 106 \\ & (93.0 \%) \end{aligned}$ | 7 (5.6\%) | $\begin{aligned} & 119 \\ & (94.4 \%) \end{aligned}$ | 4 (6.2\%) | $\begin{aligned} & \hline 61 \\ & (93.8 \%) \\ & \hline \end{aligned}$ | 4 (5.3\%) | 72 (94.7\%) |  |
| Pediatric | 0 (0.0\%) | $\begin{array}{\|l} \hline 4 \\ (100.0 \%) \\ \hline \end{array}$ | 0 (0.0\%) | $\begin{aligned} & 2 \\ & (100.0 \%) \end{aligned}$ | 0 (NA) | 0 (NA) | $\begin{aligned} & \hline 6 \\ & (13.3 \%) \\ & \hline \end{aligned}$ | 39 (86.7\%) |  |
| Statistics | $\begin{array}{\|l\|} \hline 2 \\ (66.7 \%) \end{array}$ | 1 (33.3\%) | $\begin{array}{\|l} \hline 4 \\ (57.1 \%) \\ \hline \end{array}$ | 3 (42.9\%) | $\begin{aligned} & \hline 1 \\ & (33.3 \%) \end{aligned}$ | 2 (66.7\%) | $\begin{aligned} & 5 \\ & (50.0 \%) \end{aligned}$ | 5 (50.0\%) |  |
| Other | $\begin{array}{\|l\|} \hline 3 \\ (15.8 \%) \end{array}$ | $\begin{array}{\|l\|} \hline 16 \\ (84.2 \%) \end{array}$ | $\begin{array}{\|l\|} \hline 3 \\ (17.6 \%) \end{array}$ | $\begin{aligned} & \hline 14 \\ & (82.4 \%) \end{aligned}$ | $\begin{aligned} & 2 \\ & (25.0 \%) \end{aligned}$ | 6 (75.0\%) | $\begin{aligned} & 4 \\ & (20.0 \%) \end{aligned}$ | 16 (80.0\%) |  |
| Country |  |  |  |  |  |  |  |  | $<0.001$ |
| Australia | 1 (7.1\%) | $\begin{array}{\|l\|} \hline 13 \\ (92.9 \%) \end{array}$ | 0 (0.0\%) | $\begin{aligned} & 2 \\ & (100.0 \%) \end{aligned}$ | 0 (0.0\%) | $\begin{array}{\|l\|} \hline 1 \\ (100.0 \%) \end{array}$ | 0 (0.0\%) | 2 (100.0\%) |  |


| Austria | 0 (0.0\%) | $\begin{array}{\|l\|} \hline 6 \\ (100.0 \%) \\ \hline \end{array}$ | 0 (0.0\%) | $\begin{array}{\|l\|} \hline 2 \\ (100.0 \%) \end{array}$ | 0 (0.0\%) | $\begin{array}{\|l} \hline 2 \\ (100.0 \%) \end{array}$ | 0 (NA) | 0 (NA) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Belgium | 0 (0.0\%) | $\begin{array}{\|l\|} \hline 2 \\ (100.0 \%) \\ \hline \end{array}$ | $\begin{aligned} & 1 \\ & (20.0 \%) \end{aligned}$ | 4 (80.0\%) | $\begin{array}{\|l\|} \hline 1 \\ (33.3 \%) \\ \hline \end{array}$ | 2 (66.7\%) | 0 (0.0\%) | 1 (100.0\%) |  |  |
| Brazil | 0 (0.0\%) | $\begin{array}{\|l\|} \hline 1 \\ (100.0 \%) \\ \hline \end{array}$ | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (0.0\%) | 4 (100.0\%) |  |  |
| Canada | 0 (0.0\%) | $\begin{array}{\|l\|} \hline 6 \\ (100.0 \%) \\ \hline \end{array}$ | 0 (0.0\%) | $\begin{aligned} & \hline 8 \\ & (100.0 \%) \\ & \hline \end{aligned}$ | 0 (0.0\%) | $\begin{aligned} & \hline 1 \\ & (100.0 \%) \\ & \hline \end{aligned}$ | 0 (0.0\%) | 8 (100.0\%) |  |  |
| China | $\begin{array}{\|l\|} \hline 1 \\ (16.7 \%) \\ \hline \end{array}$ | 5 (83.3\%) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | $\begin{aligned} & \hline 1 \\ & (50.0 \%) \\ & \hline \end{aligned}$ | 1 (50.0\%) |  |  |
| Colombia | 0 (0.0\%) | $\begin{array}{\|l\|} \hline 1 \\ (100.0 \%) \end{array}$ | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) |  |  |
| Czech Republic | 0 (NA) | 0 (NA) | 0 (0.0\%) | $\begin{aligned} & 1 \\ & (100.0 \%) \\ & \hline \end{aligned}$ | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) |  |  |
| Denmark | 0 (0.0\%) | $\begin{array}{\|l\|} \hline 1 \\ (100.0 \%) \\ \hline \end{array}$ | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) |  |  |
| Egypt | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (0.0\%) | 2 (100.0\%) |  |  |
| France | $\begin{aligned} & 1 \\ & \hline(50.0 \%) \\ & \hline \end{aligned}$ | 1 (50.0\%) | 0 (0.0\%) | $\begin{aligned} & 14 \\ & (100.0 \%) \end{aligned}$ | 0 (0.0\%) | $\begin{aligned} & 7 \\ & (100.0 \%) \end{aligned}$ | 0 (0.0\%) | 1 (100.0\%) |  |  |
| Germany | $\begin{aligned} & 2 \\ & (33.3 \%) \end{aligned}$ | 4 (66.7\%) | $\begin{aligned} & \hline 2 \\ & (13.3 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 13 \\ & (86.7 \%) \end{aligned}$ | $\begin{aligned} & 1 \\ & (12.5 \%) \end{aligned}$ | 7 (87.5\%) | 0 (0.0\%) | 2 (100.0\%) |  |  |
| Greece | 0 (0.0\%) | $\begin{array}{\|l} \hline 1 \\ (100.0 \%) \\ \hline \end{array}$ | 0 (0.0\%) | $\begin{aligned} & 3 \\ & (100.0 \%) \\ & \hline \end{aligned}$ | 0 (NA) | 0 (NA) | 0 (0.0\%) | 1 (100.0\%) |  |  |
| Guyana | 0 (0.0\%) | $\begin{array}{\|l} \hline 1 \\ (100.0 \%) \\ \hline \end{array}$ | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) |  |  |
| Hong Kong | 0 (0.0\%) | $\begin{array}{\|l\|} \hline 1 \\ (100.0 \%) \\ \hline \end{array}$ | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) |  |  |
| India | 0 (0.0\%) | $\begin{array}{\|l\|} \hline 3 \\ (100.0 \%) \\ \hline \end{array}$ | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (0.0\%) | 2 (100.0\%) |  |  |
| Indonesia | 0 (0.0\%) | $\begin{array}{\|l\|} \hline 1 \\ (100.0 \%) \end{array}$ | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) |  |  |


| Ireland | 0 (0.0\%) | $\begin{array}{\|l} \hline 3 \\ (100.0 \%) \end{array}$ | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Israel | 0 (NA) | 0 (NA) | 0 (0.0\%) | $\begin{aligned} & 2 \\ & (100.0 \%) \end{aligned}$ | 0 (0.0\%) | $\begin{aligned} & 1 \\ & (100.0 \%) \end{aligned}$ | 0 (NA) | 0 (NA) |  |
| Italy | 1 (9.1\%) | $\begin{aligned} & 10 \\ & (90.9 \%) \\ & \hline \end{aligned}$ | 2 (9.5\%) | $\begin{aligned} & 19 \\ & (90.5 \%) \end{aligned}$ | 0 (0.0\%) | $\begin{aligned} & 11 \\ & (100.0 \%) \end{aligned}$ | 0 (0.0\%) | 2 (100.0\%) |  |
| Japan | 0 (0.0\%) | $\begin{aligned} & 2 \\ & (100.0 \%) \end{aligned}$ | 0 (0.0\%) | $\begin{aligned} & 6 \\ & (100.0 \%) \end{aligned}$ | 0 (0.0\%) | $\begin{aligned} & 2 \\ & (100.0 \%) \end{aligned}$ | 0 (0.0\%) | 4 (100.0\%) |  |
| Lebanon | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (0.0\%) | 1 (100.0\%) |  |
| Netherlands | 0 (0.0\%) | $\begin{array}{\|l} \hline 3 \\ (100.0 \%) \end{array}$ | 0 (0.0\%) | $\begin{aligned} & 7 \\ & (100.0 \%) \end{aligned}$ | 0 (0.0\%) | $\begin{aligned} & 1 \\ & (100.0 \%) \end{aligned}$ | 0 (NA) | 0 (NA) |  |
| New Zealand | 0 (0.0\%) | $\begin{aligned} & 1 \\ & (100.0 \%) \end{aligned}$ | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) |  |
| Norway | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (0.0\%) | 1 (100.0\%) |  |
| Portugal | 0 (0.0\%) | $\begin{aligned} & \hline 2 \\ & (100.0 \%) \end{aligned}$ | 0 (0.0\%) | $\begin{aligned} & 1 \\ & (100.0 \%) \end{aligned}$ | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) |  |
| Singapore | 0 (NA) | 0 (NA) | 0 (0.0\%) | $\begin{aligned} & 1 \\ & (100.0 \%) \end{aligned}$ | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) |  |
| South Africa | 0 (0.0\%) | $\begin{aligned} & 1 \\ & (100.0 \%) \end{aligned}$ | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (0.0\%) | 1 (100.0\%) |  |
| South Korea | 0 (0.0\%) | $\begin{aligned} & 3 \\ & (100.0 \%) \\ & \hline \end{aligned}$ | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (0.0\%) | 2 (100.0\%) |  |
| Spain | 0 (NA) | 0 (NA) | 0 (0.0\%) | $\begin{aligned} & 2 \\ & (100.0 \%) \end{aligned}$ | 0 (0.0\%) | $\begin{aligned} & 2 \\ & (100.0 \%) \end{aligned}$ | 0 (NA) | 0 (NA) |  |
| Sweden | 0 (0.0\%) | $\begin{aligned} & 1 \\ & (100.0 \%) \end{aligned}$ | 0 (0.0\%) | $\begin{aligned} & 1 \\ & (100.0 \%) \end{aligned}$ | 0 (0.0\%) | $\begin{aligned} & 1 \\ & (100.0 \%) \end{aligned}$ | 0 (NA) | 0 (NA) |  |
| Switzerland | 0 (0.0\%) | $\begin{aligned} & 2 \\ & (100.0 \%) \end{aligned}$ | $\begin{aligned} & 1 \\ & (25.0 \%) \end{aligned}$ | 3 (75.0\%) | 0 (0.0\%) | $\begin{aligned} & 2 \\ & (100.0 \%) \end{aligned}$ | 0 (0.0\%) | 1 (100.0\%) |  |
| Taiwan | 0 (0.0\%) | $\begin{aligned} & 1 \\ & (100.0 \%) \end{aligned}$ | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) |  |


| Turkey | $\begin{aligned} & 1 \\ & (33.3 \%) \end{aligned}$ | 2 (66.7\%) | $\begin{aligned} & \hline 1 \\ & (20.0 \%) \end{aligned}$ | 4 (80.0\%) | 0 (NA) | 0 (NA) | $\begin{aligned} & 1 \\ & (33.3 \%) \end{aligned}$ | 2 (66.7\%) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United Kingdom | 4 (8.0\%) | $\begin{array}{\|l\|} \hline 46 \\ (92.0 \%) \end{array}$ | 0 (0.0\%) | $\begin{aligned} & 11 \\ & (100.0 \%) \end{aligned}$ | 0 (0.0\%) | $\begin{array}{\|l} \hline 8 \\ (100.0 \%) \end{array}$ | $\begin{aligned} & 1 \\ & (50.0 \%) \\ & \hline \end{aligned}$ | 1 (50.0\%) |  |
| United States | $\begin{aligned} & 8 \\ & (13.8 \%) \\ & \hline \end{aligned}$ | $\begin{array}{\|l} \hline 50 \\ (86.2 \%) \end{array}$ | $\begin{aligned} & \hline 9 \\ & (12.2 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 65 \\ & (87.8 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 4 \\ & (11.4 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 31 \\ & (88.6 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 23 \\ & (13.9 \%) \\ & \hline \end{aligned}$ | 143 (86.1\%) |  |
| Venezuela | 0 (0.0\%) | $\begin{aligned} & \hline 1 \\ & (100.0 \%) \end{aligned}$ | 0 (0.0\%) | $\begin{aligned} & 1 \\ & (100.0 \%) \end{aligned}$ | 0 (NA) | 0 (NA) | 0 (NA) | 0 (NA) |  |
| Undetermined | 0 (NA) | 0 (NA) | $\begin{aligned} & 1 \\ & (100.0 \%) \end{aligned}$ | 0 (0.0\%) | $\begin{aligned} & 1 \\ & (100.0 \%) \end{aligned}$ | 0 (0.0\%) | 0 (NA) | 0 (NA) |  |
| Documents, median (IQR) | $\begin{aligned} & 129 \\ & (48, \\ & 254) \end{aligned}$ | $\begin{aligned} & 213 \\ & (95,390) \end{aligned}$ | $\begin{aligned} & \hline 164.5 \\ & (97, \\ & 324.5) \end{aligned}$ | $\begin{aligned} & 301 \\ & (171,433) \end{aligned}$ | $\begin{aligned} & 373.5 \\ & (238, \\ & 420) \end{aligned}$ | $\begin{aligned} & 338 \\ & (192,467) \end{aligned}$ | $\begin{aligned} & 78 \\ & (62,135) \end{aligned}$ | $\begin{aligned} & 214 \\ & (108,372) \end{aligned}$ | $<0.001$ |
| H-Index, median (IQR) | $\begin{aligned} & 28 \\ & (22,42) \end{aligned}$ | $\begin{aligned} & \hline 40 \\ & (21,54) \\ & \hline \end{aligned}$ | $\begin{aligned} & 32.5 \\ & (21,47) \\ & \hline \end{aligned}$ | $\begin{aligned} & 48.5 \\ & (34,68) \\ & \hline \end{aligned}$ | $\begin{aligned} & 55.5 \\ & (42,80) \end{aligned}$ | $\begin{aligned} & 52 \\ & (38,71) \end{aligned}$ | $\begin{aligned} & 21.5 \\ & (17,27) \\ & \hline \end{aligned}$ | $\begin{aligned} & 38 \\ & (27,52) \end{aligned}$ | $<0.001$ |

IQR: interquartile range.

