

# **A Report on the Gender Balance at the International Society for Biocuration Annual Conferences**

## **Introduction**

This report was requested by the Equality, Diversity and Inclusion (EDI) Committee of the International Society of Biocuration (ISB) in order to monitor the composition of the ISB annual conference attendees with regards to gender balance. The results of this report are intended to help future conference organizers achieve an equal balance of male and female participants in the key “roles” at the conferences.

The roles included in this report are a) plenary speakers, b) session speakers, c) session chairs and d) organizing/scientific committees.

The EDI will continue to monitor the gender balance of ISB annual conferences to ensure that recommendations from this report are being considered.

## **Methods**

The names of participants were gathered using the official conference websites where available (See Appendix 1), or from published abstract books. Where neither of these were available, data was obtained from other unofficial sources, as noted in Appendix 1.

In this retrospective analysis, we determined the gender of participants from their names used on the registration form, or from their official institution or company webpage. Going forward, the ISB plans to add an optional gender question on the conference registration form. Until that is in place, the EDI was unable to use self-reported gender data. With this in mind, there are some names that could not be identified as male or female, therefore these have been removed from the analysis. For the 12 conferences we analyzed, 17 participants were excluded because the gender could not be identified from their name.

The following conferences had none or missing data at the time of analysis:

- 1st International Biocurator Meeting, Asilomar, CA, USA. December 8-11, 2005 (incomplete)
- 3rd International Biocuration Meeting, Berlin, Germany. 16–19 April 2009 (no data)
- 11th International Biocuration Conference, Shanghai, China. April 8-11, 2018 (incomplete)

If a participant gave a talk in two sessions, their gender is counted twice. Similarly, if the same participant chaired multiple sessions, their gender is counted for each session they chaired.

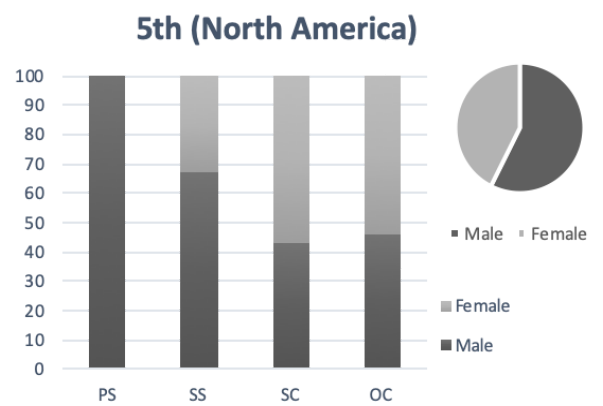
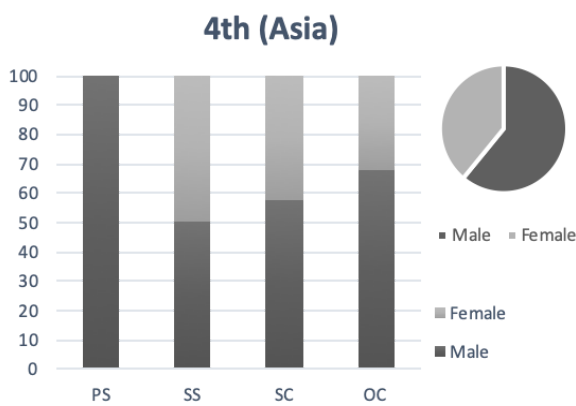
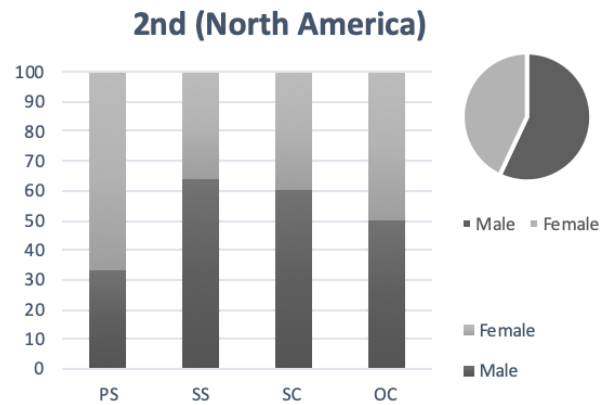
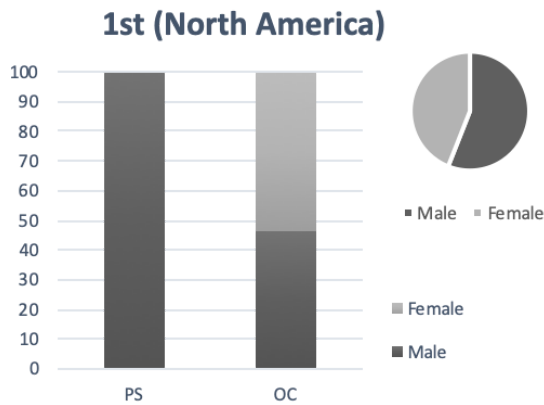
Members of the organization and scientific committees are counted once only, even if the same participant was a member of both committees, as not all conferences provided the membership of both committees.

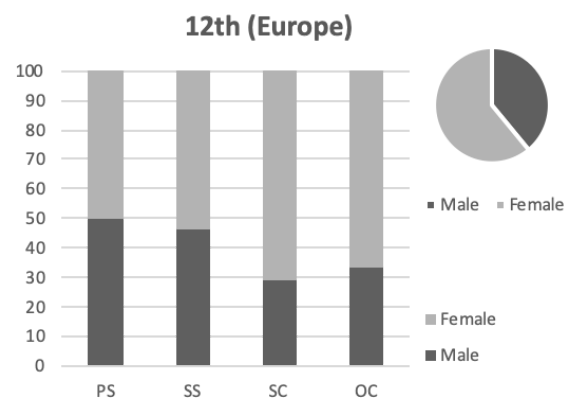
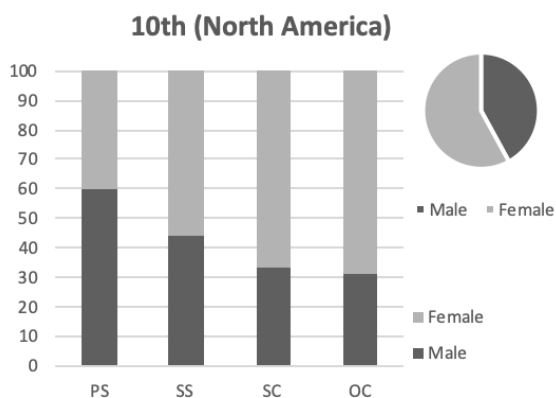
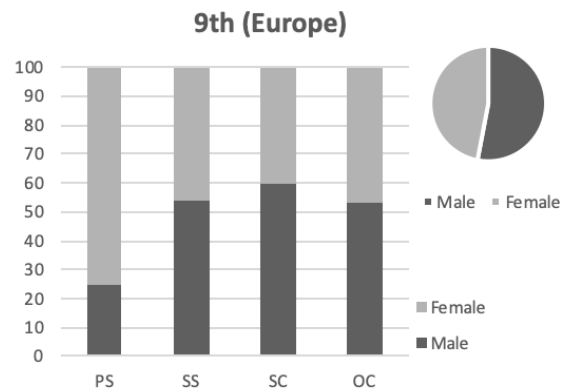
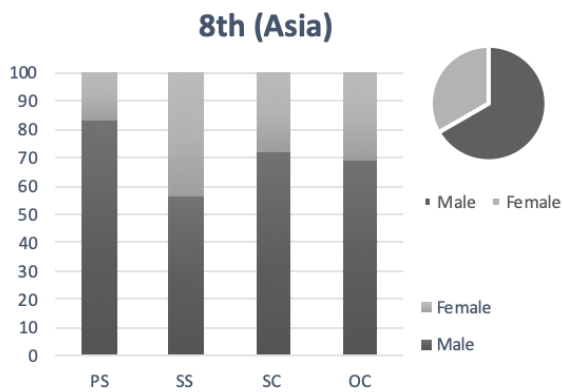
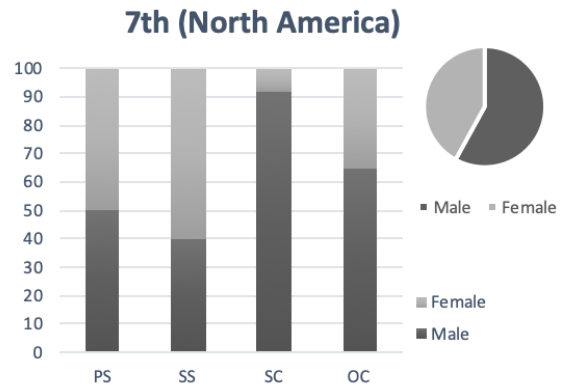
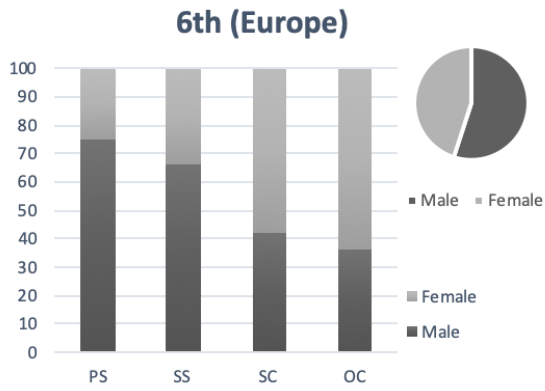
Workshop organizers and speakers are not included in the following analysis as the reporting of participation is inconsistent, e.g. some conferences specify organizers and speakers, whereas others may only specify organizers and several reported no data on workshops.

**Summary of gender balance of key roles for each conference (where available)**

Each histogram shows the percentage of males and females for each key role specified below. Pie charts show the percentages of males and females in all of the conference key roles (not including workshops).

**Key Roles:** PS - Plenary Speakers; SS - Session Speakers; SC - Session Chairs; OC - Organizing/Scientific Committee





## Observations

Complete data was found for only 9 out of the 12 conferences that have been held to date. There are no consistent trends for the 9 conferences, which may be due to the low numbers involved. The numbers of participants in the key roles ranged from between ~40-100. The observations that can be made from this data are therefore quite limited, but some practical recommendations can be made.

The plenary speakers from three of the earlier conferences (1st (North America); 4th (Asia), 5th (North America)) were all male.

From the pie charts, we can see that in most conferences, with the exception of the 10th (North America) and 12th (Europe), there are more males than females involved in a key conference role. The balance swings in the other direction for the 10th (2017 North America) and 12th (2019 Europe) conferences, which may indicate that the ISB are improving at involving more females in key roles, but work still needs to be done to even out the balance.

For some of the conferences there is a positive link between the gender composition of the organizing/scientific committees and the gender composition of the speakers/chairs, i.e. male biased committees tend to choose males to speak at/chair sessions and vice versa. For example, the 4th conference in Asia had a male biased organizing/scientific committee and all plenary speakers and a majority of session chairs were male. Similarly, the 12th conference in Europe had a female biased organizing/scientific committee and a majority of session chairs and a slight majority of the session speakers were female, however there was an equal balance of plenary speakers for this conference.

One thing to note from the raw data was that in two of the conferences a small number of people were chosen as session chairs repeatedly. Often these were members of the organizing/scientific committees - it would be beneficial to share this role to give these opportunities to other scientists.

## **Recommendations**

- Key conference roles, e.g., plenary speakers, comprised of all-male or all-female participants are strongly discouraged and will be noticed and called out by attendees. If conference organizers have difficulties attracting either males or females to these roles, they are encouraged to speak with the ISB EDI committee for advice
- An equal number of males and females on the organizing/scientific committees should help to balance the gender composition of the other key roles
- Organizers should ensure there is an equal balance of male and female plenary speakers
- Organizers should ensure there is an equal balance of male and female session speakers. If not enough female speakers are applying to present a talk, organizers should endeavour to invite more females to speak. The ISB has funding for travel fellowships, and it may be an option to offer travel fellowships to female speakers to increase the diversity
- Organizers should ensure there is an equal balance of male and female session chairs and that the same people are not chairing many different sessions. People from any of the key roles of the conference, as well as conference attendees that do

not have another key role, may be chosen as session chairs. This should help diversify the range of people actively involved in the conference

- In order to assist with continued monitoring of gender balance for ISB annual conferences, the conference organizers should ensure that a permanent website is provided for the conference and that names and affiliations are given for all conference key roles
- To enable the EDI committee to monitor the gender balance of conference-associated workshops, the conference organizers should also provide names and affiliations of workshop organizers, panels and speakers

It is fortunate that the field of biocuration attracts a high proportion of both females and males. Organizers of the annual ISB conferences should, therefore, not be faced with much difficulty in compiling gender balanced programs. For future conferences we hope that organizers will heed the recommendations from this report to create truly equal and inclusive meetings.

Conference organizers are encouraged to speak with the ISB EDI committee at any point to ask for advice on creating a balanced program.

*Analysis and report prepared by Rachael Huntley on behalf of the Equality, Diversity and Inclusion Committee of the International Society of Biocuration, October 2019.*

## **Appendix 1. Sources of participant names**

1st International Biocurator Meeting, Asilomar, CA, December 8-11, 2005:

<https://mailman.stanford.edu/pipermail/go-friends/2005-August/001143.html> and  
<http://biocurator.org/intnlbiocurator.html>

2nd International Biocuration Meeting, October 25-28, 2007, Dolce Hayes Mansion, San Jose, California, USA:

<https://sourceforge.net/p/gmod/news/2007/02/2nd-international-biocuration-meeting/>

3rd International Biocuration Meeting, 16–19 April 2009 Berlin, Germany:

[http://www.embo.org/events/past-events?e\\_pg=47&](http://www.embo.org/events/past-events?e_pg=47&)

4th International Biocuration Conference, Tokyo, Japan, October 11-14, 2010:

<http://hinj.jp/biocuration2010/>

5th International Biocuration Conference, Washington, DC, USA, April 2-4, 2012:

<https://proteininformationresource.org/biocuration2012/>

6th International Biocuration Conference, Churchill College, Cambridge, UK, April 7-10, 2013:

<https://www.ebi.ac.uk/biocuration2013/>

7th International Biocuration Conference, OICR in Toronto, Canada on April 6-9th, 2014:

Conference website inaccessible, Abstract Book used

8th International Biocuration Conference, April 23-26th, 2015 in Beijing, China:

Conference website inaccessible, Abstract Book used

9th International Biocuration Conference, April 10-14th, 2016 in Geneva, Switzerland:

<https://www.sib.swiss/events/biocuration2016/>

10th International Biocuration Conference, March 26-29, 2017, Stanford University, Palo Alto California, USA:

<http://med.stanford.edu/biocuration.html>

11th International Biocuration Conference Fudan University, in Shanghai, China on April 8-11, 2018:

Conference website inaccessible, Minimal information gathered from:

[https://www.aconf.org/conf\\_128208](https://www.aconf.org/conf_128208)

12th International Biocuration Conference, University of Cambridge, in Cambridge, UK from April 7-10, 2019:

<https://www.biocuration2019.org/>