# 2022 IFMBE- GENDER BEST PRACTICES SURVEY IN SOCIETIES <br> By : Marie-Ange Janvier PhD, P.Eng., CCE <br> <br> North America Regional Representative Group 

 <br> <br> North America Regional Representative Group}

A questionnaire was created to survey the best gender themed practices in societies. This survey was sent to all affiliated societies of IFMBE. There was a total of 19 respondents. This report is the summary of the results. Responses were captured from January 2021 to April 2022. Since some societies prefer to be anonymous we will not disclose the name of the respondents.

This survey will be resent in October to get more respondents. There were only 19 respondents in this first circulation of the survey, which is very low but still enough to help IFMBE to measure current and future levels of participation of women in our Affiliated Societies.

## A. General information:

Country of the societies who responded: International, USA, Belgium, Bosnia and Herzegovina, United Kingdom, Austria, Ethiopia, Greece, Vietnam, Mongolia, China, Brazil, Mexico, Latvian, Cyprus, Australia, Columbia and Croatia.

Most of the societies were established from 1970s, 1990s and 2010s with a few exception in 1980s and 2000s.

Also, most organizations have websites that are currently live or under construction.
The majority (69 \%) of societies are national organization with a few (31\%) that are transnational.
B. Membership:

1. Membership in organizations are distributed $54 \%$ individuals, $23 \%$ societies and $23 \%$ others (combination of both individuals and societies or academics institutions and societies). Please refer to the graph below that indicates the composition of membership in organizations.

Types of memberships in organizations

2. Demographic overview of membership in your organization (total number of members):

Given the range of societies we looked at the median value and provided the range. Please note there are some societies that only have regular members and no other categories. They are reflected with 0.

| General members categories: | Median | Min | Max |
| :--- | ---: | ---: | ---: |
| Affiliated/Associated members | 189 | 0 | 120000 |
| Regular members | 169 | 13 | 80000 |
| Student members | 50 | 10 | 40000 |
| Senior members | 38 | 0 | 50000 |
| Fellows | 9 | 0 | 660 |
| Honorary life members | 5 | 0 | 2200 |
| Other: Institutional | 19 | 1 | 37 |
| Other: Industry/companies | 16 | 9 | 21 |
| Other: Societies | 28 | 27 | 28 |

3. Demographic overview of women membership in your organization (number of women only):

| General \% of women in members <br> categories: |  |  |  |
| :--- | ---: | ---: | ---: |
| Affiliated/Associated members | $30 \%$ | $0 \%$ | $80 \%$ |
| Regular members | $31 \%$ | $0 \%$ | $56 \%$ |
| Student members | $39 \%$ | $0 \%$ | $61 \%$ |
| Senior members | $0 \%$ | $0 \%$ | $0 \%$ |
| Fellows | $8 \%$ | $0 \%$ | $33 \%$ |
| Honorary life members | $29 \%$ | $0 \%$ | $100 \%$ |

For women memberships we also look at the mean of percentage of women in membership given the wide range of data collected. Approximately $40 \%$ of women are represented in memberships overall except for the senior members, fellows and affiliated where it tends to be less than $40 \%$.


If there is no value provided on the graph, there was no data available to process for analysis. For comparison purposes here is the IEEE and ACCE graphs.


| ACCE Total Number of Members in Societies |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Other :Societies | 0 28 |  |  |  |
|  | Honorary Life members | 0 |  |  |  |
|  | Fellows | 6 2 |  |  |  |
|  | Senior members | 0 0 |  |  | - Women membership |
|  | Student members | 25 50 |  |  | - Total members |
|  | Regular members | $\begin{array}{\|l\|} \hline 400 \\ 1200 \end{array}$ |  |  |  |
| Affiliated/Associated members |  | 25000 |  |  |  |
|  |  | 010000 | 20000 | 30000 |  |
|  |  | Total numbe | of mem |  |  |

## C. Leadership

1. Does your organization have members in governing boards (total number of officers/members)?

The total number of members in governing board is quite similar across different organization. We provided the median to showcase more the reality of the data we collected from.

| Governing boards | Median | Min | Max |
| :--- | ---: | ---: | ---: |
| Executive committee | 6 | 1 | 12 |
| Council | 5 | 0 | 25 |
| Women WG or committee | 1 | 0 | 5 |
| Other: Fellows Committee | 0 | 0 | 6 |

2. Does your organization have any women members in governing boards (number of women officers/members only)?

This graph shows a representation of the governing boards composed of women members against the total number of governing boards.


The women representation across the governing board is roughly $30 \%$ in overall the societies. However in Women Groups it is 70\% governance.

For comparison purposes here are the graphs of IEEE and ACCE.


3. Number of Presidents (Founding years of society)? And also provide number of women presidents.

| Positions | MEAN | MEDIAN | MIN | MAX |
| :--- | ---: | ---: | ---: | ---: |
| Presidents | 13 | 10 | 1 | 45 |
| Female Presidents | 1 | 0 | 0 | 7 |

In general most organizations did not have a women president while they have had at most 10 years of existence with a president.
D. Activities

1. Did your organization engage in any women in (bio)engineering activities in the past 5 years?

At least 10 organizations did engage in at least one women in (bio)engineering activity in the past 5 years. 3 of them engaged every year at most of their conferences. The location of these events ranges from China, Tampere, Ulaabaata, Australia to online format. The median of participants is approximately 9 with 0 being the minimum to 5000 being the maximum.

Short description of activity:

- Women Academic Developments Workshop
- Program mentoring
- Seminar
- Online Workshop: Project Management for women in (biomedical) engineering projects.
- Special session 'Women in BME in Europe' during the EMBEC2017 Conference
- Seminars and Women in Engineering Luncheons
- Research
- Various consultations, outreach activities events
- Financial Scholarship aimed at Women in BME to assist attendance at international conference
- Director of our new Undergradute Bioengineering Program, lecturers of several signatures in our MSc Bioengineering Program and researchers


## E. Recognition

1. Did students/young investigators win an award at a regional conference that was sponsored or supported by your organization in the past 5 years?

The students/young investigators did win an award sponsored by the organization in the past 5 years. Most organizations did it either yearly, in 2017, 2018 and 2019 respectively.

Event:

- ISB Student Travel Award, WACBE Young Scholar Award
- 30th IEEE International Symposium on Computer-Based Medical Systems (CBMS 2017), 8th Panhellenic Conference on Biomedical Technology
- Student
- Stefan Schuy-Award --> http://www.oegbmt.at/index.php?id=88
- IUPESM 2018
- EMBEC 2017 Conference
- EMBC Annual Conference
- Early careers academic, Healthcare and innovation Awards and Best Trainee presentation
- National conference IV
- IBM Hackathon
- Australian Biomedical Engineering Conference
- Annual Meeting

Type of award:

- Best paper(Majority)
- Best presentation
- Young Investigator Award and Student Poster Competition
- Best Design
- Annual awards and grants for early career members and students

The next table describes the total awards granted. Mostly 3-5 awards were provided to students/young investigators per society.

| Total Awards: | MEDIAN | MIN | MAX |
| :--- | ---: | ---: | ---: |
| Total Award winners 1st | 3 | 0 | 6 |
| Total Award winners 2nd | 3 | 0 | 6 |
| Total Award winners 3rd | 5 | 0 | 6 |

2. Did women students/young investigators win an award at a regional conference that was sponsored or supported by your organization in the past 5 years? Please specify the information below.

Women students did win students/young investigators awards in the past year in 2019, 2020 and in one organization every year in the past 5 years.

Event:

- IFMBE Conference
- 30th IEEE International Symposium on Computer-Based Medical Systems (CBMS 2017)
- EMBEC 2017 Conference
- Student Paper Competition
- Annual EMBC Conference
- Summer school's Emerging Technologies for Independent living
- National conference IV
- Australian Biomedical Engineering Conference
- Early careers academic, Healthcare and innovation Awards and Best Trainee presentation

Type of award:

- Best paper (Majority)
- Young Investigator Award + Student Poster Competition
- Best innovative project
- Academic, Healthcare and Innovation
- Trainee Presentation

The following table describes the women who won awards in the past 5 years in the societies. In general at least one woman one an award in the past 5 years.

| Total Women Awards: | MEDIAN | MIN | MAX |
| :--- | ---: | ---: | ---: |
| Total Award winners 1st | 1 | 0 | 3 |
| Total Award winners 2nd | 0 | 0 | 2 |
| Total Award winners 3rd | 2 | 0 | 3 |

3. Information on women in (bio)engineering initiatives or support programs of government institutions or other societies/organizations in your country.

In general there are no women in (bio)engineering initiatives or support programs of government institutions or other societies/organizations in the countries. The only programs are either "Women in engineering or German initiatives in Women in Technology and Economic impulses from women in research and technology - w-fFORTE.

