

ISCB EQUITY DIVERSITY AND INCLUSION 2020-2021 ANNUAL REPORT

Equity, Diversity and Inclusion (EDI) Committee of the International Society for Computational Biology (ISCB) September 2021

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The International Society for Computational Biology is committed to creating a safe, inclusive, and equal society for all our members. These values are enshrined in the ISCB's Code of Conduct, values and ethics. We acknowledge, respect, and promote the value of having a diverse community. The ISCB's Equity, Diversity, and Inclusion (EDI) Committee is an ISCB Outreach Committee and serves the ISCB Board of Directors by considering our shared experiences, and promoting a respectful community that honors the humanity of all.

In principle and in practice, ISCB values and seeks diverse and inclusive participation within the field of computational biology and bioinformatics. ISCB promotes involvement and expanded access to leadership opportunities regardless of race, ethnicity, gender, religion, age, sexual orientation, nationality, disability, appearance, geographic location, or professional level. ISCB EDI Committee has prepared this annual diversity report which measures the success of diversity promotion within societal activities, specifically leadership, Intelligent Systems for Molecular Biology (ISMB) conference keynote selection, Society's Awards and election of ISCB Fellows. The report below details the strategic map for equity, diversity, and inclusion, the tools that have been put in place to support knowledge-building within the area, and where ISCB could improve its diversity, equity, and inclusion efforts. ISCB recognizes that to change the impact of diversity, equity, and inclusion within the field, we ourselves as an organization need to ensure we are equitable and diverse.

SUMMARY OF ISCB EDI RESOURCES INITIATIVES

EDI Strategic Plan (2020-2021)

Components:

- Initiatives to increase social accountability for change in the ISCB society
- Obtaining data and developing measures to assess progress
- Voluntary training: The “ISCB Awareness toolkit”
- Recruitment initiative
- Mentoring

[Read ISCB's EDI Strategic Plan](#)

[Read ISCB's awareness toolkit associated with the Strategic Plan](#)

EDI Statements and Policies

- [A Safe Space \(ISCB Code of Conduct\)](#)
- [ISCB's Statement on Countering Social Injustice](#)
- [ISCB Writes Nature Communications Urging the Correction/Retraction of Recent Article on Mentoring](#)

EDI Initiatives

1. EDI seminar series
2020-2021: Indigenous Voices in Computational Biology
<https://www.iscb.org/edi-seminar-series>
2. Women's history month 2021, daily feature of outstanding women in Computational Biology.

ANALYSIS OF THE DATA and RECOMMENDATIONS

The ISCB Equity, Diversity and Inclusion (EDI) Committee would like to thank the ISCB membership for their participation in the diversity survey of the Society. Your willingness to voluntarily complete this information has given the committee the ability to take a deeper-dive to assess our progress on ensuring equity within the field of Bioinformatics and Computational Biology. The data presented in this report (as of August 31, 2021) can be viewed in detail at the end of the report. Based on the survey the ISCB membership is diverse in terms of ethnic origin (53% of those responding are of non-European descent) but heavily male biased.

However, the data presented in this report may not yet accurately capture diversity within ISCB. Response rate on the survey was 81.5% on gender and 56.7% on ethnicity. There's still a substantial number of members that have either not participated in the survey or have preferred not to declare status. We need higher member participation to obtain more accurate data. The EDI Committee strongly encourages those who have

not completed the survey to consider doing so to allow us the ability to make a more accurate analysis.

ISCB LEADERSHIP & KEYNOTE SPEAKER SELECTION

Over the last ten years, ISCB, under the leadership of its presidents and the support of the Executive Committee, Board and membership, has seen significant increases in gender diversity within the leadership of the organization. When ISCB incorporated in 1997, only two women were representatives on the ISCB Board of Directors. Today, 41% of the ISCB Board of Directors are female and 57% of the Executive Committee (elected officers) are female. Furthermore, 50% of the Committee and Advisory Council Chairs are female and the replacement of retiring/expiring Chairs is conscientiously considered to ensure at minimum gender diversity is achieved within the Committee and Advisory Council leadership.

This conscious effort to ensure gender diversity continued in the selection of keynote speakers for the Intelligent Systems for Molecular Biology (ISMB) conference, ISCB's flagship and most prestigious conference. 61% of ISMB selected keynote speakers were female between 2016 till present. To further support this initiative, guiding principles for speaker selection were put in place to encourage at least 30% female keynote speakers selection for all ISCB official conferences. This specific threshold was selected as it represents 5% more than the known male/female breakdown of the professional ISCB membership.

ISCB AWARDS AND HONORS

Whilst the final selection of awardees shows a good gender balance that reflects that of the membership, all ISCB awards and honors, except the service award, show a gender bias during the selection process that is **most prominent at the nomination stage**. Bias exists regardless of gender of the nominator. We do not know whether this is also true in terms of ethnicity. Given ISCB membership composition and the gender bias reported data, bias in ethnicity of honors is likely. The ISCB committees responsible for the selection of the awards, however, deserve recognition for their clear conscious efforts to ensure at minimum gender diversity at the final selection level, as you see from the data provided. Furthermore, following our review of the election of Fellows, we would also like to highlight the efforts made by the Fellows Committee to ensure the election of a diverse class of Fellows following the 2015 election. New procedures and processes have been put into place to ensure diversity at all levels.

These achievements do not diminish, however, the need to improve the considerable bias at the nominations level. Steps will be taken to correct this bias. We strongly encourage members to take part in nominating candidates and to use the ISCB awareness toolkit developed by the EDI committee before selecting their candidates.

EDI COMMITTEE RECOMMENDATIONS FOR the ISCB BOARD OF DIRECTORS

1. A deeper look at the award process is necessary. Some suggestions from the EDI committee to help mitigate bias in the award process:
 - Allow for self-nominations in addition to nominations by others.
 - Make the whole process after the nomination more transparent on the ISCB website, by publicizing the summary statistics both for the nominations and the awards made.
 - Make the award selection committee blind to the initial nomination process to avoid introducing bias based on who the nominator is (or isn't if we allow self-nominations).
 - If introducing the measures above does not improve bias on awards, consider enforcing a ratio that matches the composition of the society (at the professional level) by the selection committees.
2. Include completion of the ISCB awareness toolkit in membership profile survey and offer incentives for members to do so (conference ribbons, banners), especially for members that serve on ISCB committees. The fact that the initial nomination stage is where most of the bias is means our community needs to be educated regarding implicit bias.
3. Our membership is quite diverse in terms of ethnic origin (53% of survey respondents are non-European descent), and many may have limited access to travel to the main conferences based on their location. As meetings go back to in-person, there is an opportunity to leverage our experience over the past year to make sure our meetings are inclusive of our membership. We support ISCB's goal moving forward to offer as many conferences as financially feasible as hybrid events - in-person and virtual attendance. Conferences that are designed to be hybrid should have live-stream sessions from the conference location, archived recorded sessions that will be accessible to the registered attendance during and after the conference dates, virtual poster presentations and networking opportunities. We support the continued growth of the ISCBacademy program - webinar series. The revision of our fee structure together with virtual options will ensure a more global and inclusive ISCB community
4. In the future, we need to collect demographic info for abstract submitters, talk selections, invited talks, etc. for all ISCB-associated conferences. Our initial assessment supports the existence of bias in recognition in our community. Continuing to collect more and better data will help create better strategies on how to address it.
5. Encourage empirical research into equity, diversity and inclusion in science that utilize rigorous data analysis. Include the following topic on calls for proceedings and abstracts for ISMB.

Topic title: Equity-focused Research

Description: This category is for research that examines issues of equity, representation, diversity, or other elements related to datasets, methods, or the field of computational biology at large.

Consider and encourage such submissions also for the journal *Bioinformatics Advances*.

STATE OF THE SOCIETY - DEMOGRAPHIC DATA

Gender, Gender Identity, and Ethnicity Statistics of current ISCB Memberships
 Disclosure: Data reported is based on membership survey results as of August 31, 2021.

Total Current Memberships: 2,868

Gender (Response Rate 81.5%)

Category	Absolute	% relevant to declared status
Female	522	29%
Male	1285	71%
Non-binary	4	0%
Prefer not to declare	112	
Gender not provided	945	

Gender Expression (Response Rate 60%)

Category	Absolute	% relevant to declared status
Cisgender	1197	99.67%
Transgender	4	0.33%
Prefer not to declare	198	
Gender expression not provided	1469	

Ethnicity (Response Rate 56.7%)

Category	Absolute	% relevant to declared status
African	55	4%
Asian	420	32%
European	646	50%
Indigenous	9	1%
Latin American	101	8%
Middle Eastern	66	5%
Prefer not to declare	217	
Ethnicity not provided	1394	

Membership Count: 2868

**ISCB Professional Members - Gender Statistics
(Response Rate 81.6%)**

Category	Absolute	% relevant to declared status
Female	283	24.6%
Male	868	75.3%
Non-binary	1	0.1%
Prefer not to declare	81	
Gender not provided	278	

**ISCB Professional Members - Gender Expression
(Response Rate 51.7%)**

Category	Absolute	% relevant to declared status
Cisgender	655	99.54%
Transgender	3	0.46%
Prefer not to declare	123	
Gender expression not provided	663	
Total Professional Members:	1511	

Gender Statistics of Leadership 2021

Executive Committee

Total Members: 7

Male: 3 (43%)

Female: 4 (57%)

ISCB Board of Directors

Total Members: 24

Male: 14 (59%)

Female: 10 (41%)

ISCB Committees and Advisory Councils Chairs:

Total: 27

Male: 14 (50%)

Female: 14 (50%)

ISMB Distinguished Keynote Speakers (non-Awardees) 2016-2021:

Total:13
 Male:5 (38.5%)
 Female: 8 (61.5%)

DATA ON DIVERSITY OF ISCB AWARDS AND HONORS

Disclosure: In this report we are only including distribution based on gender, as we do not yet have enough data collected on honors to report on other dimensions.

Data collected from 2016 to 2021.

Overton Prize 2016 - 2021

	Nominee Male	Nominee Female	Nominee Decline	Nominee Undefined	Total
Nominator Male	25	6	1	4	36
Nominator Female	13	6	0	1	20
Nominator Decline/Undefined	8	2	0	1	11
Total	46	14	1	6	67

Short List Nominee Gender	
Male	18
Female	3

Final Result Nominee Gender	
Male	4
Female	2

Innovator Award 2016 – 2021

	Nominee Male	Nominee Female	Nominee Decline	Nominee Undefined	Total
Nominator Male	61	10	0	4	75
Nominator Female	19	4	0	0	23
Nominator Decline/Undefined	3	1	0	4	8
Total	83	15	0	8	106

Short List Nominee Gender	
Male	17
Female	7

Final Result Nominee Gender	
Male	4
Female	2

Accomplishments by a Senior Scientist 2016 - 2021

	Nominee Male	Nominee Female	Nominee Decline	Nominee Undefined	Total
Nominator Male	43	8	1	5	57
Nominator Female	16	2	0	0	18
Nominator Decline/Undefined	1	0	0	0	1
Total	60	10	1	5	76

Short List Nominee Gender	
Male	33
Female	4

Final Result Nominee Gender	
Male	4
Female	2

Outstanding Service to ISCB Award 2016-2021

	Nominee Male	Nominee Female	Nominee Decline	Nominee Undefined	Total
Nominator Male	8	5	0	0	13
Nominator Female	2	7	0	0	9
Nominator Decline/Undefined	1	0	0	0	1
Total	11	12	0	0	23

Short List Nominee Gender	
Male	7
Female	10

Final Result Nominee Gender	
Male	2
Female	4

Fellows Election 2016-2021

	Nominee Male	Nominee Female	Nominee Decline	Nominee Undefined	Total
Nominator Male	100	31	1	3	135
Nominator Female	44	36	0	2	82
Nominator Decline/Undefined	2	0	0	1	3
Total	146	67	1	6	220

1st Ballot Nominee Gender (40% yes/maybe vote to move to next rd)	
Male	112
Female	70
Decline	
Undefined	5

Final Ballot Nominee Gender	
Male	31
Female	28

Total Fellows Since 2009	
Male	71
Female	30
TOTAL	101