ISCB

INTERNATIONAL SOCIETY FOR COMPUTATIONAL BIOLOGY

Equity, Diversity, and Inclusion 2021-2022 Annual Report

Vol. 2

2021-2022 ANNUAL REPORT.

Equity, Diversity, and Inclusion (EDI) Committee of the International Society for Computational Biology (ISCB), July 2022.

Mission Statement: ISCB 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 a diverse community.

Executive summary: The objective of the ISCB EDI Annual report is to collect metrics on diversity and inclusion, make recommendations based on data and release the data to all ISCB members. Metrics allow the society to be open and transparent about the current state of ISCB, make data-driven recommendations to improve EDI and measure the impact of diversity initiatives over time.

The data shown in this report is collected through the ISCB membership profile and anonymized to protect privacy. The report includes data on diversity of its membership, as well as all honors and awards given by ISCB, so they can be directly compared to each other. It also includes a summary of EDI initiatives undertaken by ISCB. The report is put together by the ISCB EDI Committee and approved by the ISCB Executive Committee. The EDI committee serves the ISCB Board of Directors

EDI committee chairs
Larry Hunter. University of Colorado, Denver. USA
Lucia Peixoto. Washington State University. USA

EDI committee members
Luis Pedro Coelho. Fudan University. China
Casey Greene. University of Colorado School of Medicine, Denver. USA
Priscila Grynberg. MBRAPA. Brazil
Anne-Christin Hauschild. University of Marburg. Germany
Tijana Milenkovic. University of Notre Dame. USA
Gonzalo Parra. EMBL. Germany
Alejandra Medina Rivera. Universidad Nacional Autónoma de México. Mexico
Kana Shimizu. Waseda University. Japan
Wisdom A. Akurugu. University of Cape Town. South Africa

ISCB members are encouraged to reach out to ISCB and the EDI committee (edi@iscb.org) for clarifications on the data released, as well as to provide suggestions based on the annual report. We value the feedback from all our members.

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STATE OF THE SOCIETY

Gender, Gender Identity, and Ethnicity Statistics of current ISCB Memberships
Disclosure: Data reported is based on membership survey results as of June 17th, 2022.

Total Current Memberships: 3208

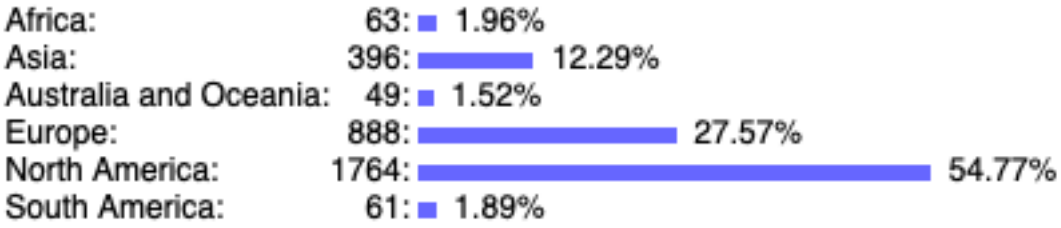
Diversity Survey Results

	Absolute	% Relative to declared status
Gender (response rate 70%)		
Female	673	30%
Male	1451	64%
Non-binary	13	0.6%
Prefer not to declare	130	6%
Gender not provided	941	
Gender Expression (response rate 58%)		
Cisgender	1603	86%
Transgender	12	0.6%
Prefer not to declare	254	14%
Gender expression not provided	1333	
Ethnicity (response rate 60%)		
African	79	4%
Asian	563	29%
European	803	42%
Indigenous	3	0.2%
Latin American	120	6%
Middle Eastern	82	4.3%
Prefer not to declare	276	14%
Ethnicity not provided	1309	

Diversity by Career Stage/membership type (Tier1:Tier2:Tier3:Tier4)

Professional: 1727 (1547:125:22:32)
Laboratory: 15 (13:1:1:0)
Posdoc: 393 (358:20:7:8)
Student: 1073 (880:91:32:70)

Regional Diversity



Data on diversity of ISCB honors

Disclosure: In this report, before 2022, we are only including distribution based on gender, as we do not yet have data collected on honors to report on other dimensions.

Note: For all Prizes and Fellows Election, a percentage in a given table is expressed out of all absolute numbers in that table except those marked as “Undefined” (up to 2021) or “Not provided” (2022), and is rounded to the closest integer.

Overton Prize

Data collected from 2016 to 2021

Nominator Gender	
Male	36 (57%)
Female	20 (32%)
Decline	7 (11%)
Undefined	4

Male Nominator Nominee Gender	
Male	25 (78%)
Female	6 (19%)
Decline	1 (3%)
Undefined	4

Nominee Gender	
Male	51 (77%)
Female	14 (21%)
Decline	1 (2%)
Undefined	6

Female Nominator Nominee Gender	
Male	13 (68%)
Female	6 (32%)
Decline	0 (0%)
Undefined	1

Decline to State & Undefined Nominator	
Male	8 (80%)
Female	2 (20%)
Decline	0 (0%)
Undefined	1

Short List Nominee Gender	
Male	18 (86%)
Female	3 (14%)

Final Result Nominee Gender	
Male	4 (67%)
Female	2 (33%)

Overton Prize

2022 onward

Nominee Gender	
Male	6 (55%)
Female	5 (45%)
Prefer not to declare	0 (0%)
Not provided	1
Nominee Gender Identity	
cisgender	6 (86%)
transgender	0 (0%)
Prefer not to declare	1 (14%)
Not provided	5

Nominee Ethnicity	
European	1 (10%)
Middle Eastern	1 (10%)
Latin American	1 (10%)
African	0 (0%)
Asian	3 (30%)
Native	3 (30%)
Prefer not to declare	1 (10%)
Not provided	5

Disclaimer: For 2022, only data on nominees is provided. That is, data on final results for 2022 forwards is not provided to prevent identification of anonymized data. Data on final results will be provided once aggregated data over 3 years allows for effective de-identification.

Overton Prize

Comparison of nominee gender up to 2021 vs. 2022

Note: it is only nominee gender that can be compared, because only this statistic was recorded and is being reported both up to 2021 and in 2022.

Nominee gender up to 2021: male: 77%, female: 21%, declined: 2%.
Nominee gender in 2022: male: 55%, female: 45%, prefer not to declare: 0%.
Observation: gender balance in the nominee pool has been significantly improved in 2022 compared to up to 2021 and the percentage of females is higher among the nominees in 2022 (45%) than in the general ISCB membership (30%, see the beginning of this report for the membership statistics), which is encouraging. Also, it is encouraging that even up to 2021, the percentage of female winners (33%) is slightly higher than the percentage of female ISCB members (30%), which means that the gender bias was being addressed from the nomination to the winner selection stage.

Innovator Award

Data collected from 2016 to 2021

Nominator Gender	
Male	75 (70%)
Female	30 (28%)
Decline	2 (2%)
Undefined	6

Nominee Gender	
Male	86 (82%)
Female	19 (18%)
Decline	0 (0%)
Undefined	9

Decline to State & Undefined Nominator	
Male	3 (75%)
Female	1 (25%)
Decline	0 (0%)
Undefined	4

Male Nominator Nominee Gender	
Male	61 (86%)
Female	10 (14%)
Decline	0 (0%)
Undefined	4

Female Nominator Nominee Gender	
Male	19 (83%)
Female	4 (17%)
Decline	0 (0%)
Undefined	0

Short List Nominee Gender	
Male	17 (71%)
Female	7 (29%)

Final Result Nominee Gender	
Male	4 (67%)
Female	2 (33%)

Innovator Prize

2022 onward

Nominee Gender	
Male	7 (78%)
Female	2 (22%)
Prefer not to declare	0 (0%)
Not provided	1
Nominee Gender Identity	
cisgender	2 (50%)
transgender	0 (0%)
Prefer not to declare	2 (50%)
Not provided	6

Nominee Ethnicity	
Caucasian/European	1 (20%)
Middle Eastern	0 (0%)
Latin American	0 (0%)
African	0 (0%)
Asian	0 (0%)
Native	0 (0%)
European * Middle Eastern	1 (20%)
Prefer not to declare	3 (60%)
Not provided	5

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Innovator Prize

Comparison of nominee gender up to 2021 vs. 2022

Note: it is only nominee gender that can be compared, because only this statistic was recorded and is being reported both up to 2021 and in 2022.

Nominee gender up to 2021: male: 82%, female: 18%, declined: 0%.
Nominee gender in 2022: male: 78%, female: 22%, prefer not to declare: 0%.
Observation: gender balance in the nominee pool has barely changed in 2022 compared to up to 2021. Efforts should be made to improve gender balance in the nominee pool for the Innovator Prize in the future. Nonetheless, it is encouraging that even up to 2021, the percentage of female winners (33%) is slightly higher than the percentage of female ISCB members (30%), which means that the gender bias was being addressed from the nomination to the winner selection stage.

Accomplishments by a Senior Scientist

Data collected from 2016 to 2021

Nominator Gender	
Male	47 (72%)
Female	18 (28%)
Decline	0 (0%)
Undefined	2

Nominee Gender	
Male	57 (95%)
Female	2 (3%)
Decline	1 (2%)
Undefined	8

Declined to State & Undefined Nominator Nominee Gender	
Male	1 (100%)
Female	0 (0%)
Decline	0 (0%)
Undefined	0

Male Nominator Nominee Gender	
Male	43 (83%)
Female	8 (15%)
Decline	1 (2%)
Undefined	5

Female Nominator Nominee Gender	
Male	16 (89%)
Female	2 (11%)
Decline	0 (0%)
Undefined	0

Short List Nominee Gender	
Male	33 (89%)
Female	4 (11%)
Decline	0 (0%)
Undefined	0

Final Result Nominee Gender	
Male	4 (67%)
Female	2 (33%)
Decline	0 (0%)
Undefined	0

Accomplishments by a Senior Scientist

2022 onward

Nominee Gender	
Male	7 (88%)
Female	1 (12%)
Prefer not to declare	0 (0%)
Not provided	0
Nominee Gender Identity	
cisgender	1 (33%)
transgender	0 (0%)
Prefer not to declare	2 (66%)
Not provided	5

Nominee Ethnicity	
Caucasian/European	3 (75%)
Middle Eastern	0 (0%)
Latin American	0 (0%)
African	0 (0%)
Asian	0 (0%)
Native	0 (0%)
European * Middle Eastern	0 (0%)
Prefer not to declare	1 (25%)
Not provided	4

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Accomplishments by a Senior Scientist

Comparison of nominee gender up to 2021 vs. 2022

Note: it is only nominee gender that can be compared, because only this statistic was recorded and is being reported both up to 2021 and in 2022.

Nominee gender up to 2021: male: 95%, female: 3%, declined: 2%.
Nominee gender in 2022: male: 88%, female: 12%, prefer not to declare: 0%.
Observation: gender balance in the nominee pool appears to have somewhat improved in 2022 compared to up to 2021, however note that this still corresponds to a single female nominee in 2022. Hence, efforts should be made to have a higher absolute number of diverse nominees as well as to drastically improve the gender balance in the nominee pool. Nonetheless, it is encouraging that even up to 2021, the percentage of female winners (33%) is slightly higher than the percentage of female ISCB members (30%), which means that the gender bias was being addressed from the nomination to the winner selection stage.

Outstanding Service to ISCB Award

Data collected from 2016 to 2021

Nominator Gender	
Male	13 (57%)
Female	9 (39%)
Decline	1 (4%)
Undefined	0

Nominee Gender	
Male	11 (48%)
Female	12 (52%)
Decline	0 (0%)
Undefined	0

Declined to State & Undefined Nominator Nominee Gender	
Male	1 (100%)
Female	0 (0%)
Decline	0 (0%)
Undefined	0

Male Nominator Nominee Gender	
Male	8 (62%)
Female	5 (38%)
Decline	0 (0%)
Undefined	0

Female Nominator Nominee Gender	
Male	2 (22%)
Female	7 (78%)
Decline	0 (0%)
Undefined	0

Short List Nominee Gender	
Male	7 (41%)
Female	10 (59%)
Decline	0 (0%)
Undefined	0

Final Result Nominee Gender	
Male	2 (33%)
Female	4 (67%)
Decline	0 (0%)
Undefined	0

Outstanding Service to ISCB Award

2022 onward

Nominee Gender	
Male	2 (67%)
Female	1 (33%)
Prefer not to declare	0 (0%)
Not provided	0
Nominee Gender Identity	
cisgender	0 (0%)
transgender	0 (0%)
Prefer not to declare	0 (0%)
Not provided	3

Nominee Ethnicity	
Caucasian/European	1 (100%)
Middle Eastern	0 (0%)
Latin American	0 (0%)
African	0 (0%)
Asian	0 (0%)
Native	0 (0%)
European * Middle Eastern	0 (0%)
Prefer not to declare	0 (0%)
Not provided	2

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Outstanding Service to ISCB Award

Comparison of nominee gender up to 2021 vs. 2022

Note: it is only nominee gender that can be compared, because only this statistic was recorded and is being reported both up to 2021 and in 2022.

Nominee gender up to 2021: male: 48%, female: 52%, declined: 0%.
Nominee gender in 2022: male: 67%, female: 33%, prefer not to declare: 0%.
Observation: gender balance in the nominee pool has somewhat decreased in 2022 compared to up to 2021, but nonetheless, this award type remains among the best gender-balanced overall out of all prizes, especially when it comes to gender balance among awardees (67% female awardees up to 2021).

ISCB Fellows Election

Data collected from 2016 to 2021

Nominator Gender	
Male	134 (62%)
Female	82 (38%)
Decline	0 (8%)
Undefined	4

Nominee Gender	
Male	152 (71%)
Female	61 (29%)
Decline	1 (0%)
Undefined	6

Male Nominator Nominee Gender	
Male	100 (76%)
Female	31 (24%)
Decline	1 (1%)
Undefined	3

Female Nominator Nominee Gender	
Male	44 (55%)
Female	36 (45%)
Decline	0 (0%)
Undefined	2

Declined to State & Undefined Nominator Nominee Gender	
Male	2 (100%)
Female	0 (0%)
Decline	0 (0%)
Undefined	1

1st Ballot Nominee Gender	
Male	112 (62%)
Female	70 (38%)
Decline	0 (0%)
Undefined	5

Final Ballot Nominee Gender	
Male	31 (53%)
Female	28 (47%)
Decline	0 (0%)
Undefined	0

Up to 2021:

Total Fellows nominated: 55

Nominee gender summary (as declared by the nominee):
Male: 35 (65%)
Female: 14 (26%)
Declined to state: 5 (9%)
Undefined: 4

Nominee type:
Academic: 45
Industry: 8
Unclassified: 2

Total Fellows elected: 13

Elected Fellow gender summary:
Male: 9 (69%)
Female: 4 (31%)

ISCB Fellows Election

2022 onward

Nominee Gender	
Male	27 (73%)
Female	10 (27%)
Prefer not to declare	0 (0%)
Not provided	0 (0%)

Elected - Gender	
Male	8 (73%)
Female	3 (27%)
Prefer not to declare	0 (0%)
Not provided	0

Nominee Ethnicity	
Caucasian/European	16 (52%)
Middle Eastern	1 (3%)
Latin American	0 (0%)
African	1 (3%)
Asian	10 (32%)
Native	0 (0%)
European * Middle Eastern	0 (0%)
Prefer not to declare	3 (10%)
Not provided	6

Elected - Ethnicity	
Caucasian/European	6 (67%)
Middle Eastern	0 (0%)
Latin American	0 (0%)
African	0 (0%)
Asian	2 (22%)
Native	0 (0%)
Prefer not to declare	1 (11%)
Not provided	2

Total elected (based on ballot or as a prize winner) - Gender	
Male	8 (73%)
Female	3 (27%)
Prefer not to declare	0 (0%)
Not provided	0

Fellows Diversity Report – 2022 Awards

Total number of considered nominations: 37
Total number of nominees on the final ballot (that met eligibility criteria): 28

- Gender: female: 6 (21%), male: 22 (79%)
- Ethnicity: Asian: 8 (29%), Middle Eastern: 1 (4%), Caucasian (European): 11 (39%), Undeclared: 2 (7%)

Number of Fellows elected based on final ballot: 8
Total number of elected Fellows (based on ballot or as a prize winner): 11

ISCB Fellows Election

Comparison up to 2021 vs. 2022

Nominee gender up to 2021: male: 71%, female: 29%, declined: 0%.
Nominee gender in 2022: male: 73%, female: 27%, prefer not to declare: 0%.

Final ballot nominee gender up to 2021: male: 53%, female: 47%, declined: 0%.
Final ballot nominee gender in 2022: male: 79%, female: 21%, prefer not to declare: 0%.

Elected fellow gender up to 2021: male: 65%, female: 26%, declined: 9%.
Elected fellow gender in 2022: male: 73%, female: 27%, prefer not to declare: 0%.

Data on diversity of ISCB travel fellowships

Starting this year (2022), the travel fellowship committee of ISMB is a subcommittee of the EDI committee, reflecting the commitment of ISCB to improve equitable access to our main conference.

General Award Statistics

155 Applications received
47 Awards distributed (19 virtual, 28 in-person)

Virtual Fellowship Awards, 19 Total

14 Female
5 Male
0 Nonbinary

3 Academic Faculty (early career)
1 Academic Staff (early career)
2 Post-Doctoral Fellows
7 Doctoral Candidates
2 Graduate Students
2 Undergraduate Students
2 High School Students

Countries represented (in alphabetical order): Canada, France, Great Britain, India, Peru, Turkey, USA.

In-person Travel Fellowship Awards, 28 Total

13 Female
14 Male
1 Nonbinary

2 Academic Faculty (early career)
3 Post-Doctoral Fellows
10 Doctoral Candidates
8 Graduate Students
3 Undergraduate Students
2 High School Students

Countries represented (in alphabetical order): Australia, Brazil, Canada, Germany, Ghana, Great Britain, India, Iran, Italy, Japan, Oman, Poland, Slovakia (from Russia), Turkey, USA. ,

8 Posters
5 Proceedings
13 Talks and Posters

SUMMARY OF ISCB EDI RESOURCES INITIATIVES

EDI Strategic Plan **(**2020-2021)
Components:

- Increasing 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 . Participation data: 9 Presentations, 193 registered, 968 views total including live, mean views 107.5/video.
2. Women’s history month 2021, daily feature of outstanding women in Computational Biology.
3. Equity focused research at ISMB 2022. https://www.iscb.org/ismb2022-program/equity
4. The EDI committee initiated a call for a revision of our fee structure, which was executed by the board. This revision had the goal to make membership more affordable to economies with a low GDP investment in science was a good step towards a more global and inclusive ISCB community

CONCLUDING REMARKS 2022

Participation on our identity survey has increased substantially since last year: 70% on gender and 60% on ethnicity. We now have good metrics on diversity of our society members. There continues to be reluctance to report ethnicity and gender identity relative to gender. Based on the survey the ISCB membership continues to be predominantly male and North America and Europe centric.
Since the previous report, the Overton prize showed a mark improvement on gender representation. All other awards except the service award continue to show predominant male nominations.
The Fellows election showed bias results relative to the diversity of nominees present in the ballot. The society is actively taking steps to improve the process to address this issue.

Because our previous report showed that bias exists regardless of gender of the nominator, we are no longer tracking statistics regarding nominator. At this point there is not enough data to determine if bias in ethnicity exists but continuing to track data will allow this in the future if we are able to improve participation rate.

EDI COMMITTEE RECOMMENDATIONS FOR the EC/BOARD
(Confidential, not to be released with the report)

1. A deeper look at the award process is still necessary. Some additional data that may aid this process:
    - Self-nominations seemed to have improved nomination number for the Overton and Innovator awards. We may want to encourage self-nominations by senior scientists, especially women.
    - The number of nominations, especially for senior scientists and serv ice awards is small. We may want to consider a campaign to encourage nominations, that includes different images of success to improve diversity of nominations.
2. Award nominations and fellows vote underscore a potential need to further educate our members. How aware are members of the ISCB EDI toolkit? Can fellows be required to read it?
3. We are aware that the process of fellow's elections is being revised based on the disappointing outcomes of the election. We defer to the EC and board on the matter.
4. Our membership is quite diverse in terms of ethnic origin (53% are non-European descent), and many may have limited access to travel to the main conferences based on their location. Data of registration of ISMB 2022 as a hybrid conference will allow us to determine if the hybrid format increases diverse participation.
5. We support the continued growth of the ISCBacademy program - webinar series.
6. In the future, we recommend collecting demographic info for talk selections and invited talks, for all COSIs at ISMB as well as for other 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.
7. We recommend tracking metrics regarding whether the revision of the fee structure on membership has improved regional diversity.

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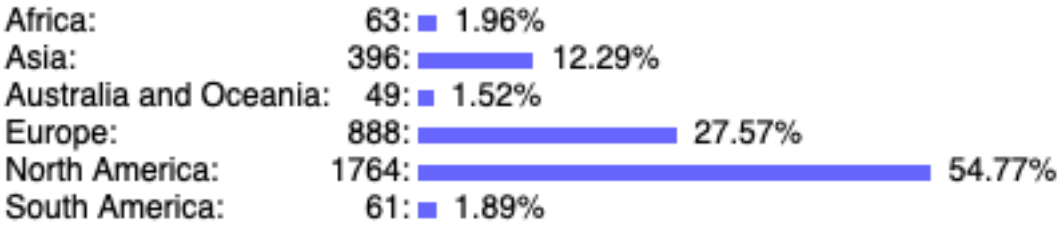
Regional Diversity



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Overton Prize

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Female	20 (32%)
Decline	7 (11%)
Undefined	4

Male Nominator Nominee Gender	
Male	25 (78%)
Female	6 (19%)
Decline	1 (3%)
Undefined	4

Nominee Gender	
Male	51 (77%)
Female	14 (21%)
Decline	1 (2%)
Undefined	6

Female Nominator Nominee Gender	
Male	13 (68%)
Female	6 (32%)
Decline	0 (0%)
Undefined	1

Decline to State & Undefined Nominator	
Male	8 (80%)
Female	2 (20%)
Decline	0 (0%)
Undefined	1

Short List Nominee Gender	
Male	18 (86%)
Female	3 (14%)

Final Result Nominee Gender	
Male	4 (67%)
Female	2 (33%)

Overton Prize

2022 onward

Nominee Gender	
Male	6 (55%)
Female	5 (45%)
Prefer not to declare	0 (0%)
Not provided	1
Nominee Gender Identity	
cisgender	6 (86%)
transgender	0 (0%)
Prefer not to declare	1 (14%)
Not provided	5

Nominee Ethnicity	
European	1 (10%)
Middle Eastern	1 (10%)
Latin American	1 (10%)
African	0 (0%)
Asian	3 (30%)
Native	3 (30%)
Prefer not to declare	1 (10%)
Not provided	5

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Overton Prize

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Nominee gender up to 2021: male: 77%, female: 21%, declined: 2%.
Nominee gender in 2022: male: 55%, female: 45%, prefer not to declare: 0%.
Observation: gender balance in the nominee pool has been significantly improved in 2022 compared to up to 2021 and the percentage of females is higher among the nominees in 2022 (45%) than in the general ISCB membership (30%, see the beginning of this report for the membership statistics), which is encouraging. Also, it is encouraging that even up to 2021, the percentage of female winners (33%) is slightly higher than the percentage of female ISCB members (30%), which means that the gender bias was being addressed from the nomination to the winner selection stage.

Innovator Award

Data collected from 2016 to 2021

Nominator Gender	
Male	75 (70%)
Female	30 (28%)
Decline	2 (2%)
Undefined	6

Nominee Gender	
Male	86 (82%)
Female	19 (18%)
Decline	0 (0%)
Undefined	9

Decline to State & Undefined Nominator	
Male	3 (75%)
Female	1 (25%)
Decline	0 (0%)
Undefined	4

Male Nominator Nominee Gender	
Male	61 (86%)
Female	10 (14%)
Decline	0 (0%)
Undefined	4

Female Nominator Nominee Gender	
Male	19 (83%)
Female	4 (17%)
Decline	0 (0%)
Undefined	0

Short List Nominee Gender	
Male	17 (71%)
Female	7 (29%)

Final Result Nominee Gender	
Male	4 (67%)
Female	2 (33%)

Innovator Prize

2022 onward

Nominee Gender	
Male	7 (78%)
Female	2 (22%)
Prefer not to declare	0 (0%)
Not provided	1
Nominee Gender Identity	
cisgender	2 (50%)
transgender	0 (0%)
Prefer not to declare	2 (50%)
Not provided	6

Nominee Ethnicity	
Caucasian/European	1 (20%)
Middle Eastern	0 (0%)
Latin American	0 (0%)
African	0 (0%)
Asian	0 (0%)
Native	0 (0%)
European * Middle Eastern	1 (20%)
Prefer not to declare	3 (60%)
Not provided	5

Disclaimer: For 2022, only data on nominees is provided. That is, data on final results for 2022 forwards is not provided to prevent identification of anonymized data. Data on final results will be provided once aggregated data over 3 years allows for effective de-identification.

Innovator Prize

Comparison of nominee gender up to 2021 vs. 2022

Note: it is only nominee gender that can be compared, because only this statistic was recorded and is being reported both up to 2021 and in 2022.

Nominee gender up to 2021: male: 82%, female: 18%, declined: 0%.
Nominee gender in 2022: male: 78%, female: 22%, prefer not to declare: 0%.
Observation: gender balance in the nominee pool has barely changed in 2022 compared to up to 2021. Efforts should be made to improve gender balance in the nominee pool for the Innovator Prize in the future. Nonetheless, it is encouraging that even up to 2021, the percentage of female winners (33%) is slightly higher than the percentage of female ISCB members (30%), which means that the gender bias was being addressed from the nomination to the winner selection stage.

Accomplishments by a Senior Scientist

Data collected from 2016 to 2021

Nominator Gender	
Male	47 (72%)
Female	18 (28%)
Decline	0 (0%)
Undefined	2

Nominee Gender	
Male	57 (95%)
Female	2 (3%)
Decline	1 (2%)
Undefined	8

Declined to State & Undefined Nominator Nominee Gender	
Male	1 (100%)
Female	0 (0%)
Decline	0 (0%)
Undefined	0

Male Nominator Nominee Gender	
Male	43 (83%)
Female	8 (15%)
Decline	1 (2%)
Undefined	5

Female Nominator Nominee Gender	
Male	16 (89%)
Female	2 (11%)
Decline	0 (0%)
Undefined	0

Short List Nominee Gender	
Male	33 (89%)
Female	4 (11%)
Decline	0 (0%)
Undefined	0

Final Result Nominee Gender	
Male	4 (67%)
Female	2 (33%)
Decline	0 (0%)
Undefined	0

Accomplishments by a Senior Scientist

2022 onward

Nominee Gender	
Male	7 (88%)
Female	1 (12%)
Prefer not to declare	0 (0%)
Not provided	0
Nominee Gender Identity	
cisgender	1 (33%)
transgender	0 (0%)
Prefer not to declare	2 (66%)
Not provided	5

Nominee Ethnicity	
Caucasian/European	3 (75%)
Middle Eastern	0 (0%)
Latin American	0 (0%)
African	0 (0%)
Asian	0 (0%)
Native	0 (0%)
European * Middle Eastern	0 (0%)
Prefer not to declare	1 (25%)
Not provided	4

Disclaimer: For 2022, only data on nominees is provided. That is, data on final results for 2022 forwards is not provided to prevent identification of anonymized data. Data on final results will be provided once aggregated data over 3 years allows for effective de-identification.

Accomplishments by a Senior Scientist

Comparison of nominee gender up to 2021 vs. 2022

Note: it is only nominee gender that can be compared, because only this statistic was recorded and is being reported both up to 2021 and in 2022.

Nominee gender up to 2021: male: 95%, female: 3%, declined: 2%.
Nominee gender in 2022: male: 88%, female: 12%, prefer not to declare: 0%.
Observation: gender balance in the nominee pool appears to have somewhat improved in 2022 compared to up to 2021, however note that this still corresponds to a single female nominee in 2022. Hence, efforts should be made to have a higher absolute number of diverse nominees as well as to drastically improve the gender balance in the nominee pool. Nonetheless, it is encouraging that even up to 2021, the percentage of female winners (33%) is slightly higher than the percentage of female ISCB members (30%), which means that the gender bias was being addressed from the nomination to the winner selection stage.

Outstanding Service to ISCB Award

Data collected from 2016 to 2021

Nominator Gender	
Male	13 (57%)
Female	9 (39%)
Decline	1 (4%)
Undefined	0

Nominee Gender	
Male	11 (48%)
Female	12 (52%)
Decline	0 (0%)
Undefined	0

Declined to State & Undefined Nominator Nominee Gender	
Male	1 (100%)
Female	0 (0%)
Decline	0 (0%)
Undefined	0

Male Nominator Nominee Gender	
Male	8 (62%)
Female	5 (38%)
Decline	0 (0%)
Undefined	0

Female Nominator Nominee Gender	
Male	2 (22%)
Female	7 (78%)
Decline	0 (0%)
Undefined	0

Short List Nominee Gender	
Male	7 (41%)
Female	10 (59%)
Decline	0 (0%)
Undefined	0

Final Result Nominee Gender	
Male	2 (33%)
Female	4 (67%)
Decline	0 (0%)
Undefined	0

Outstanding Service to ISCB Award

2022 onward

Nominee Gender	
Male	2 (67%)
Female	1 (33%)
Prefer not to declare	0 (0%)
Not provided	0
Nominee Gender Identity	
cisgender	0 (0%)
transgender	0 (0%)
Prefer not to declare	0 (0%)
Not provided	3

Nominee Ethnicity	
Caucasian/European	1 (100%)
Middle Eastern	0 (0%)
Latin American	0 (0%)
African	0 (0%)
Asian	0 (0%)
Native	0 (0%)
European * Middle Eastern	0 (0%)
Prefer not to declare	0 (0%)
Not provided	2

Disclaimer: For 2022, only data on nominees is provided. That is, data on final results for 2022 forwards is not provided to prevent identification of anonymized data. Data on final results will be provided once aggregated data over 3 years allows for effective de-identification.

Outstanding Service to ISCB Award

Comparison of nominee gender up to 2021 vs. 2022

Note: it is only nominee gender that can be compared, because only this statistic was recorded and is being reported both up to 2021 and in 2022.

Nominee gender up to 2021: male: 48%, female: 52%, declined: 0%.
Nominee gender in 2022: male: 67%, female: 33%, prefer not to declare: 0%.
Observation: gender balance in the nominee pool has somewhat decreased in 2022 compared to up to 2021, but nonetheless, this award type remains among the best gender-balanced overall out of all prizes, especially when it comes to gender balance among awardees (67% female awardees up to 2021).

ISCB Fellows Election

Data collected from 2016 to 2021

Nominator Gender	
Male	134 (62%)
Female	82 (38%)
Decline	0 (8%)
Undefined	4

Nominee Gender	
Male	152 (71%)
Female	61 (29%)
Decline	1 (0%)
Undefined	6

Male Nominator Nominee Gender	
Male	100 (76%)
Female	31 (24%)
Decline	1 (1%)
Undefined	3

Female Nominator Nominee Gender	
Male	44 (55%)
Female	36 (45%)
Decline	0 (0%)
Undefined	2

Declined to State & Undefined Nominator Nominee Gender	
Male	2 (100%)
Female	0 (0%)
Decline	0 (0%)
Undefined	1

1st Ballot Nominee Gender	
Male	112 (62%)
Female	70 (38%)
Decline	0 (0%)
Undefined	5

Final Ballot Nominee Gender	
Male	31 (53%)
Female	28 (47%)
Decline	0 (0%)
Undefined	0

Up to 2021:

Total Fellows nominated: 55

Nominee gender summary (as declared by the nominee):
Male: 35 (65%)
Female: 14 (26%)
Declined to state: 5 (9%)
Undefined: 4

Nominee type:
Academic: 45
Industry: 8
Unclassified: 2

Total Fellows elected: 13

Elected Fellow gender summary:
Male: 9 (69%)
Female: 4 (31%)

ISCB Fellows Election

2022 onward

Nominee Gender	
Male	27 (73%)
Female	10 (27%)
Prefer not to declare	0 (0%)
Not provided	0 (0%)

Elected - Gender	
Male	8 (73%)
Female	3 (27%)
Prefer not to declare	0 (0%)
Not provided	0

Nominee Ethnicity	
Caucasian/European	16 (52%)
Middle Eastern	1 (3%)
Latin American	0 (0%)
African	1 (3%)
Asian	10 (32%)
Native	0 (0%)
European * Middle Eastern	0 (0%)
Prefer not to declare	3 (10%)
Not provided	6

Elected - Ethnicity	
Caucasian/European	6 (67%)
Middle Eastern	0 (0%)
Latin American	0 (0%)
African	0 (0%)
Asian	2 (22%)
Native	0 (0%)
Prefer not to declare	1 (11%)
Not provided	2

Total elected (based on ballot or as a prize winner) - Gender	
Male	8 (73%)
Female	3 (27%)
Prefer not to declare	0 (0%)
Not provided	0

Fellows Diversity Report – 2022 Awards

Total number of considered nominations: 37
Total number of nominees on the final ballot (that met eligibility criteria): 28

- Gender: female: 6 (21%), male: 22 (79%)
- Ethnicity: Asian: 8 (29%), Middle Eastern: 1 (4%), Caucasian (European): 11 (39%), Undeclared: 2 (7%)

Number of Fellows elected based on final ballot: 8
Total number of elected Fellows (based on ballot or as a prize winner): 11

ISCB Fellows Election

Comparison up to 2021 vs. 2022

Nominee gender up to 2021: male: 71%, female: 29%, declined: 0%.
Nominee gender in 2022: male: 73%, female: 27%, prefer not to declare: 0%.

Final ballot nominee gender up to 2021: male: 53%, female: 47%, declined: 0%.
Final ballot nominee gender in 2022: male: 79%, female: 21%, prefer not to declare: 0%.

Elected fellow gender up to 2021: male: 65%, female: 26%, declined: 9%.
Elected fellow gender in 2022: male: 73%, female: 27%, prefer not to declare: 0%.

Data on diversity of ISCB travel fellowships

Starting this year (2022), the travel fellowship committee of ISMB is a subcommittee of the EDI committee, reflecting the commitment of ISCB to improve equitable access to our main conference.

General Award Statistics

155 Applications received
47 Awards distributed (19 virtual, 28 in-person)

Virtual Fellowship Awards, 19 Total

14 Female
5 Male
0 Nonbinary

3 Academic Faculty (early career)
1 Academic Staff (early career)
2 Post-Doctoral Fellows
7 Doctoral Candidates
2 Graduate Students
2 Undergraduate Students
2 High School Students

Countries represented (in alphabetical order): Canada, France, Great Britain, India, Peru, Turkey, USA.

In-person Travel Fellowship Awards, 28 Total

13 Female
14 Male
1 Nonbinary

2 Academic Faculty (early career)
3 Post-Doctoral Fellows
10 Doctoral Candidates
8 Graduate Students
3 Undergraduate Students
2 High School Students

Countries represented (in alphabetical order): Australia, Brazil, Canada, Germany, Ghana, Great Britain, India, Iran, Italy, Japan, Oman, Poland, Slovakia (from Russia), Turkey, USA. ,

8 Posters
5 Proceedings
13 Talks and Posters

SUMMARY OF ISCB EDI RESOURCES INITIATIVES

EDI Strategic Plan **(**2020-2021)
Components:

- Increasing 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 . Participation data: 9 Presentations, 193 registered, 968 views total including live, mean views 107.5/video.
2. Women’s history month 2021, daily feature of outstanding women in Computational Biology.
3. Equity focused research at ISMB 2022. https://www.iscb.org/ismb2022-program/equity
4. The EDI committee initiated a call for a revision of our fee structure, which was executed by the board. This revision had the goal to make membership more affordable to economies with a low GDP investment in science was a good step towards a more global and inclusive ISCB community

CONCLUDING REMARKS 2022

Participation on our identity survey has increased substantially since last year: 70% on gender and 60% on ethnicity. We now have good metrics on diversity of our society members. There continues to be reluctance to report ethnicity and gender identity relative to gender. Based on the survey the ISCB membership continues to be predominantly male and North America and Europe centric.
Since the previous report, the Overton prize showed a mark improvement on gender representation. All other awards except the service award continue to show predominant male nominations.
The Fellows election showed bias results relative to the diversity of nominees present in the ballot. The society is actively taking steps to improve the process to address this issue.

Because our previous report showed that bias exists regardless of gender of the nominator, we are no longer tracking statistics regarding nominator. At this point there is not enough data to determine if bias in ethnicity exists but continuing to track data will allow this in the future if we are able to improve participation rate.