2024 ANNUAL REPORT.

Equity, Diversity, and Inclusion (EDI) Committee of the International Society for Computational Biology (ISCB), July 2024.

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. Participation in the identity survey by our members is important because 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.

Summary 2024

Participation on our identity survey was maintained for some categories, but it decreased significantly for gender identity from 68% to 48%. We have metrics on multiple dimensions of diversity of our society members. Based on the survey the ISCB membership continues to be predominantly male and North America and Europe centric. For society awards we continue to report only on nominations to protect identity information for awardees. Fellows' nominations and elections continue to be male dominated. Nonetheless nominations represent the society composition in terms of gender. Notably, there was a significant increase on the categories Not Provided and Prefer not to declare, to a point that in some instances, this number was higher than the number of females. For this report, the Not Provided status has not been considered for the percentages calculation.

The report is put together by the ISCB EDI Committee and approved by the ISCB Board of Directors. The EDI committee serves the ISCB Board of Directors

EDI committee chairs

Lucia Peixoto. Washington State University. USA Alejandra Medina Rivera. Universidad Nacional Autónoma de México. Mexico

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

Larry Hunter. University of Colorado, Denver. USA

Tijana Milenkovic. University of Notre Dame. USA

Gonzalo Parra. EMBL. Germany

Kana Shimizu. Waseda University. Japan

Wisdom A. Akurugu. University of Cape Town. South Africa

Zhiyong Lu, NCBI, NLM, NIH, USA.

Jason Williams, Cold Spring Harbor Laboratory, USA

Farzana Rahman, Kingston University London, UK

William Stafford Noble, University of Washington, USA

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.

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 13th, 2023.

Total Current Memberships: 4070

Diversity Survey Results

| Gender (response rate 79%) | Absolute | % Relative to declared status |
|---------------------------------------|----------|-------------------------------|
| Not provided | 838 | NA |
| Female | 1091 | 34% |
| Gender non-conforming | 1 | 0% |
| Male | 1912 | 59% |
| Non-binary | 15 | 0% |
| Prefer not to declare | 213 | 6% |
| | | |
| Gender Expression (response rate 48%) | | |
| Not provided | 2107 | NA |
| Cisgender | 1684 | 86% |
| Prefer not to declare | 268 | 14% |
| Transgender | 11 | 0.5% |

Ethnicity (response rate 71%)

| Not provided | 1169 | NA |
|---|------|-------|
| African Descent | 149 | 4.9% |
| Asian Descent | 1015 | 33.4% |
| Australian/Oceanian | 1 | 0.0% |
| Australian/Oceanian Descent | 6 | 0.2% |
| European (Non-white/Non-Caucasian) | 1 | 0.0% |
| European Descent (Non-white/Non-Caucasian) | 36 | 1.2% |
| European Descent (White/Caucasian) | 1020 | 33.6% |
| Indigenous People/First Nations Descent | 14 | 0.5% |
| Latin American Descent | 162 | 5.3% |
| Middle Eastern Descent | 153 | 5.0% |
| Other | 50 | 1.6% |
| Prefer not to declare | 432 | 14.2% |

<u>Diversity by Career Stage/membership type</u> (Academic - 11 - 20 years from the receipt of terminal degree: Academic - Up to 10 years from the receipt of terminal degree: Gradaute: Industry - 11 - 20 years from the receipt of terminal degree: Industry - More than 20 years from the receipt of terminal degree: Industry - Up to 10 years from the receipt of terminal degree: Not Provided: Postdoctoral: Prefer not to declare: Undergraduate)

Professional (382:292:359:9:52:58:84:771:7:118:0)

Laboratory (9:5:12:0:0:1:1:1:2:0:0:0) Institutional (1:1:0:0:0:2:0:0:0:0)

Post-Doc (9:0:86:2:2:0:0:2:114:208:39:0)

Student (4:1:95:775:775:1:2:11:345:11:112:107)

Regional Diversity

| Africa | 2.7% |
|-----------------------|--------|
| Asia | 16.28% |
| Australia and Oceania | 1.97% |
| Europe | 26.12% |
| North America | 49.40% |
| South America* | 2.55% |

^{*}Including Mexico and the Caribbean

Data on diversity of ISCB honors

Disclosure: In this report, we are only including distribution based on gender, as we do not yet have sufficient 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.

Overton Prize

| Submitter Gender | |
|-----------------------|----------|
| Not Provided | 19 (NA) |
| Male | 92 (70%) |
| Female | 33 (25%) |
| Prefer not to declare | 5 (4%) |

| Nominee Gender | |
|-----------------------|----------|
| Not Provided | 47 (NA) |
| Male | 61 (60%) |
| Female | 27 (26%) |
| Prefer not to declare | 14 (14%) |

| Not Provided and Prefer not to declare submitter | |
|--|----------|
| Not Provided | 11 (NA) |
| Male | 10 (77%) |
| Female | 3 (23%) |
| Prefer not to declare | 0 |

| Male Nominator Nominee Gender | |
|-------------------------------|----------|
| Not Provided | 31 (NA) |
| Male | 36 (59%) |
| Female | 13 (21%) |
| Prefer not to declare | 12 (20%) |

| Female Nominator Nominee Gender | |
|------------------------------------|----------|
| Not Provided | 5 (NA) |
| Male | 15 (54%) |
| Female | 11 (39%) |
| Prefer not to declare | 2 (7%) |

| Final Result Nominee Gender | |
|-----------------------------|---------|
| Male | 5 (71%) |
| Female | 2 (28%) |

Overton Prize

Prefer not to 1 (12%) declare

2024

Nominee Gender

Not provided 1 (NA)

Male 6 (75%)

Female 1 (12%)

Comparison of nominee gender up to 2022-2023 vs. 2024

Nominee gender up to 2023: male: 60%, female: 26%, not declared: 4%. Nominee gender in 2024: male: 75%, female: 12%, not declared: 12%.

Observation: gender balance in the nominee pool had a decline in this iteration of the prize, however, there was a severe decline in the number of nominations. Stronger and sustained efforts inviting our community to nominate researchers could be key to contend with this decay. Data on ethnicity is not provided to avoid identification.

Innovator Award

| Submitter Gender | |
|-----------------------|----------|
| Not Provided | 31 (NA) |
| Male | 96 (62%) |
| Female | 46 (30%) |
| Prefer not to declare | 13 (8%) |

| Nominee Gender | |
|-----------------------|--------------|
| Not Provided | 30 (NA) |
| Male | 127 (81%) |
| Female | 24 (15%) |
| Prefer not to declare | 5 (3%) |

| Not Provided/Prefer not to declare Submitter | |
|--|----------|
| Not Provided | 14 (NA) |
| Male | 29 (97%) |
| Female | 1 (3%) |
| Prefer not to declare | 0 |

| Male Submitter Nominee Gender | |
|-------------------------------|----------|
| Not Provided | 15 (NA) |
| Male | 67 (83%) |
| Female | 10 (12%) |
| Prefer not to declare | 4 (5%) |

| Female Submitter Nominee Gender | |
|---------------------------------|----------|
| Not Provided | 1 (NA) |
| Male | 31 (70%) |
| Female | 13 (27%) |
| Prefer not to declare | 1 (2%) |

| Final Result Nominee Gender | |
|--------------------------------|---------|
| Male | 4 (57%) |
| Female | 3 (42%) |

Innovator Prize 2024

Nominee Gender

| Not provided | 3 (NA) |
|-----------------------|---------|
| Male | 5 (63%) |
| Female | 2 (25%) |
| Prefer not to declare | 1 (13%) |

Nominee Ethnicity

| Not provided | 7 (NA) |
|-----------------------|---------|
| African | 0 (0%) |
| Asian | 4 (44%) |
| Australian/Oceanian | 0(0%) |
| European (Non-white) | 0(0%) |
| European (White) | 3(33%) |
| Indigenous | 0(0%) |
| Latin American | 0(0%) |
| Middle Eastern | 0(0%) |
| Other | 1(11%) |
| Prefer not to declare | 1 (11%) |
| | |

Comparison of nominee gender up to 2022-2023 vs. 2024

Nominee gender up to 2023: male: 81%, female: 15%, Not declared: 3%. Nominee gender in 2024: male: 63%, female: 25%, Not declared: 13%.

Observation: gender balance in the nominee pool has changed in 2024 nominations compared to up to 2022-23. Efforts should be made to improve gender balance in the nominee pool for the Innovator/Mid-career Prize in the future, notably a higher number of participants preferred not to declare gender.

Accomplishments by a Senior Scientist

| Submitter Gender | |
|-----------------------|----------|
| Not Provided | 20 (NA) |
| Male | 66 (73%) |
| Female | 19 (21%) |
| Prefer not to declare | 5 (6%) |

| Nominee Gender | |
|-----------------------|----------|
| Not Provided | 26 (NA) |
| Male | 59 (70%) |
| Female | 16 (19%) |
| Prefer not to declare | 9 (11%) |

| Not Provided/ Prefer not to declare Submitter Nominee Gender | |
|--|---------|
| Not Provided | 8 (NA) |
| Male | 8 (47%) |
| Female | 7 (41%) |
| Prefer not to declare | 2 (12%) |

| Male Submitter Nominee Gender | |
|----------------------------------|----------|
| Not Provided | 18 (NA) |
| Male | 36 (75%) |
| Female | 5 (10%) |
| Prefer not to declare | 7 (15%) |

| Female Submitter Nominee Gender | |
|------------------------------------|----------|
| Not Provided | 0 (NA) |
| Male | 15 (73%) |
| Female | 4(21%) |
| Prefer not to declare | 0 |

| Final Result Nominee Gender | | |
|-----------------------------|---------|--|
| Not Provided | 0 (NA) | |
| Male | 5 (71%) | |
| Female | 2 (28%) | |
| Prefer not to declare | 0 | |

Accomplishments by a Senior Scientist 2024

Nominee Gender

| Not provided | 3(NA) |
|-----------------------|---------|
| Male | 4 (57%) |
| Female | 2 (29%) |
| Prefer not to declare | 1 (14%) |

| Nominee | Ethnicity |
|----------|------------------|
| MOHILLEE | |

| Not provided | 6(NA) |
|-----------------------|--------|
| • | ` , |
| African | 0 (0%) |
| Asian | 0 (0%) |
| Australian/Oceanian | 0(0%) |
| European (Non-white) | 0(0%) |
| European (White) | 4(80%) |
| Indigenous | 0(0%) |
| Latin American | 0(0%) |
| Middle Eastern | 0(0%) |
| Other | 0(0%) |
| Prefer not to declare | 1(20%) |
| | |

Comparison of nominee gender up to 2022-2023 vs. 2024

Nominee gender up to 2023: male: 70%, female: 19%, prefer not to declare: 11%. Nominee gender in 2024: male: 57%, female: 29%, prefer not to declare: 14%.

Observation: gender balance in the nominee pool appears to have improved in 2024 compared to up to 2023, however, the percentage of people that prefers not to declare or not provide this information is considerable.

Outstanding Service to ISCB Award

| Submitter Gender | |
|-----------------------|----------|
| Not Provided | 3 (NA) |
| Male | 20 (51%) |
| Female | 15 (38%) |
| Prefer not to declare | 4 (10%) |

| Nominee Gender | |
|-----------------------|----------|
| Not Provided | 2 (NA) |
| Male | 20 (50%) |
| Female | 20 (50%) |
| Prefer not to declare | 0 |

| Not Provided & Prefer not to declare Submitter Nominee Gender | |
|---|---------|
| Not Provided | 2 (NA) |
| Male | 3 (60%) |
| Female | 2 (40%) |
| Prefer not to declare | 0 |

| Male Submitter Nominee Gender | |
|----------------------------------|----------|
| Not Provided | 0 (0%) |
| Male | 12 (60%) |
| Female | 8 (40%) |
| Prefer not to declare | 0 |

| Female Submitter Nominator Nominee Gender | |
|--|------------|
| Not Provided | 0 (NA) |
| Male | 5(33.3%) |
| Female | 10 (66.6%) |
| Prefer not to declare | 0 |

| Final Result Nominee Gender | |
|-----------------------------|---------|
| Not Provided | 0 (NA) |
| Male | 2 (28%) |
| Female | 5 (71%) |
| Prefer not to declare | 0 |

Outstanding Service to ISCB Award 2024

| | | Nominee Ethnicity | |
|---------------|--------|-----------------------|--------|
| Nominee Gend | der | African | 0 (0%) |
| N.4. I | • | Asian | 2 (0%) |
| Male | 2 | Australian/Oceanian | 0(0%) |
| | (100%) | European | 0 (0%) |
| Female | (0%) | European (Non-white) | 0(0%) |
| | . , | European (White) | 0(0%) |
| Prefer not to | 0 (0%) | Indigenous | 0(0%) |
| declare | | Latin American | 0(0%) |
| Not provided | 0 | Middle Eastern | 0 (0%) |
| rtot providod | · · | Not provided | 0 (0%) |
| | | Other | 0(0%) |
| | | Prefer not to declare | 0(0%) |

Comparison of nominee gender up to 2023 vs. 2024

Nominee gender up to 2023: male: 50%, female: 50%, prefer not to declare: 0%. Nominee gender in 2024: male: 100%, female:0%, prefer not to declared: 0%.

Observation: Historically this award remains among the best gender-balanced overall relative to society in the nominee pool. However, for the last edition, the number of nominations was significantly low, hence no conclusions can be made from the data.

ISCB Fellows Election

| Submitter Gender | |
|-----------------------|-----------|
| Not Provided | 11 (NA) |
| Male | 303 (60%) |
| Female | 171 (34%) |
| Prefer not to declare | 34 (67) |

| Female Submitter Nominee Gender | |
|------------------------------------|----------|
| Not Provided | 6 (NA) |
| Male | 93 (56%) |
| Female | 64 (39%) |
| Prefer not to declare | 8 (5%) |

| Nominee Gender | |
|-----------------------|-----------|
| Not Provided | 29 (NA) |
| Male | 306 (63%) |
| Female | 136 (28%) |
| Prefer not to declare | 40 (8%) |

| Not Provided & Prefer not to declare Submitter Nominee Gender | |
|---|----------|
| Not Provided | 4 (NA) |
| Male | 30 (73%) |
| Female | 6 (15%) |
| Prefer not to declare | 5 (12%) |

| Male Submitter Nominee Gender | |
|----------------------------------|-----------|
| Not Provided | 19 (NA) |
| Male | 183 (64%) |
| Female | 66 (23%) |
| Prefer not to declare | 35 (12%) |

| Final Nominee Gender | | |
|----------------------|----------|--|
| Male | 40 (54%) | |
| Female | 34 (45%) | |
| Decline | 0 (0%) | |
| Undefined | 0 | |

ISCB Fellows Election 2024

Nominee Gender (30)

Elected – Gender (12) Not provided 5 (NA) Not provided 3 (NA) Male 15(60%) Male 5(56%) 4 (16%) Female Female 1 (11%) Prefer not to 6 (24%) declare Prefer not to 3 (33%) declare

Elected - Ethnicity (12)

Not provided 4 (NA%) African 0 (0%) Asian 2 (25%) (0%)Australian/Oceanian 0 (0%) European (Non-white) 3 (37%) European (White) Indigenous 0 (0%) Latin 0 (0%) American Middle Eastern 0 (0%) Other 0 (0%) Prefer not to declare 3(37%)

Nominee Ethnicity (30)

| Not provided | 7 (NA%) |
|-----------------------|---------|
| African | 0 (0%) |
| Asian | 8 (33%) |
| Australian/Oceanian | (0%) |
| European (Non-white) | 0 (0%) |
| European (White) | 7 (29%) |
| Indigenous | 0 (0%) |
| Latin American | 1 (4%) |
| Middle Eastern | 0 (0%) |
| Other | 0 (0%) |
| Prefer not to declare | 7 (29%) |
| African | 0 (0%) |
| | |

Comparison: up to 2023 vs. 2024

Nominee gender up to 2023: male: 63%, female: 28%, prefer not to declare: 8%. Nominee gender in 2024: male: 60 %, female: 16%, prefer not to declare: 24%.

Elected fellow gender up to 2023: male: 54%, female: 45%

Elected fellow gender in 2024: male:56 %, female: 11%, prefer not to declare: 33%.

Observation: Fellow's nominations and election continued to be male dominated, and this trend has not changed in recent years. However, elected Fellows gender distribution is well balanced.

ISMB 2024 Travel Fellowships

Committee: Anne Christin Hauschild, Luis Pedro Coelho, R. Gonzalo Parra, Farzana Rahman, Kana Shimizu

Total Funding: \$31,705 USD

COSI support: BioOntologies, CAMDA, iRNA, EvolCompGen, CompMS, NetBio, MLCSB

Total number of applications: 358

Committee selected 30 applicants. 20 female, 11 male, 1 nonbinary

5 lower income countries, 5 middle-lower income countries, 8 upper-middle income countries, 9 high income countries.

Awardees are originally from 18 different countries.

Selection was based on:

Financial need Submission type Review score

ISCB DEPENDENT-CARE AWARDS (2024)

Committee: Wisdom A Akurugu and Farzana Rahman

https://www.iscb.org/ismbeccb2023-general-info/iscb-dependent-care-award

Number of applications: 6 Total funding: \$3000 USD Number of awards: 6 awards

3 graduate students

1 post doc

1 non-tenured faculty

Awardees are currently located in 6 different countries.

ECCB Travel Fellowships

\$5000 USD 10 Awards

4 Male

6 Female

Awardees are currently residing in 9 different countries.



ISCB Equity Diversity and Inclusion Committee 2024 Summary.

Updated Website: https://www.iscb.org/iscb-edi

We propose the following Components for the EDI Strategic Plan (2025–2030):

- Give continuity to the five Components stated in the 2020–2025 EDI Strategic plan.
- Recruitment and leadership development initiative. We acknowledge that ISCB has made
 great progress on representation in leadership positions and awards in some dimensions of
 diversity; however, it is now important to revise the impact of the strategy in Communities of
 Special Interest (COSI) leadership.
- Community engagement and outreach. Enhancing outreach efforts to attract and retain diverse talent within computational biology, fostering mentorship programs, and forging partnerships with organizations dedicated to EDI in STEM fields.

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

Annual reports

2022-2023: https://www.iscb.org/images/stories/annual-reports/EDI annual report 2022.pdf
2020-2021: https://www.iscb.org/images/stories/annual-reports/EDI annual report 2021. https://www.iscb.org/images/stories/annual-reports/EDI annual report 2022.pdf
2024: In process.

EDI Initiatives

Past

- 1. Fee restructure initiated by a request from the EDI committee in 2022 in now in effect.
- 2. Women's history month 2021, daily feature of outstanding women in Computational Biology.

Current

- 3. Equity focused research track started at ISMB 2022. Continued at ISMB 2024.
- ISCB Dependent-care award (second edition 2024): https://www.iscb.org/ismb2024/programme-schedule/scientific-programme/equity-and-diversity-in-computational-biology-research
- 5. LGTBQISCB+ Symposium! June 17th, 2024. https://www.iscb.org/lgbtgs2024/home