BASELINE ASSESSMENT OF DEMOGRAPHIC REPRESENTATION IN AAAS/Science FUNCTIONS

January 2021
Objective: Baseline Assessment

Examine the availability and quality of demographic data and present the current demographic representation for AAAS/Science Functions and Science Family Authors and Reviewers.
The Benefits Outweigh the Risks

**RISKS**
- Imperfect data
- Imperfect process

**BENEFITS**
- Improved DEI
- Advance science better
- Serve society better
AAAS/Science Functions Included in This Report

- ADVISORY COMMITTEES
- ELECTED LEADERSHIP
- STAFF LEADERSHIP
- HONORS & AWARDS SELECTION COMMITTEES
- HONORS & AWARDS RECIPIENTS
- SPEAKERS & PRESENTERS AT MAJOR AAAS EVENTS
- PROGRAM VOLUNTEERS
- SCIENCE FAMILY EDITORS & ADVISORS
- AAAS CAREER DEVELOPMENT/ FELLOWSHIP SELECTION COMMITTEES
- AAAS CAREER DEVELOPMENT/ FELLOWSHIP PARTICIPANTS

Notes: Based on Dr. Sudip Parikh's email and draft plan, 7/21/2020; refer to Appendix A for additional details.
Science Family Authors and Reviewers

Note: Report and Research Article Authors are referred to as Report Authors throughout this report.
Methodology: Overview

**Data Collection and Analysis Process Overview**

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Assemble data for all AAAS/Science Functions and Science Family Authors and Reviewers.</td>
</tr>
<tr>
<td>2</td>
<td>Assess for consistency of demographic data.</td>
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<tr>
<td>3</td>
<td>Estimate gender*.</td>
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<td>4</td>
<td>Decide categories for gender and race/ethnicity.</td>
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<td>5</td>
<td>Decide how to count individuals within and across functions.</td>
</tr>
<tr>
<td>6</td>
<td>Present results.</td>
</tr>
</tbody>
</table>

*Lincoln Mullen (2018). Gender: Predict Gender from Names Using Historical Data. R package version 0.5.2.*
Data Collection Form

<p>| | | | | | | | | | | |</p>
<table>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Name</td>
<td>Home</td>
<td></td>
<td></td>
<td>Work</td>
<td></td>
<td></td>
<td>Demographics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>first_name</td>
<td>last_name</td>
<td>phone</td>
<td>Email</td>
<td>street</td>
<td>suite</td>
<td>city</td>
<td>state</td>
<td>postal_code</td>
<td>phone</td>
</tr>
</tbody>
</table>

Example Data Collection Form - Excel
Jennifer T. Sargent
AAAS/Science Functions (N=13,480)

**RACE/ETHNICITY**
- American Indian or Alaska Native: 0.0%
- Asian or Pacific Islander: 4.2%
- Black or African American: 2.0%
- Hispanic or Latinx: 1.2%
- Multi-racial or Other: 1.2%
- White (Non-Hispanic): 44.5%
- No Data: 46.9%

**GENDER**
- Female: 30.3%
- Male: 60.0%
- Nonbinary/Self-Identify: 0.1%
- No Data: 9.7%
Science Family Authors and Reviewers (N=49,316)
APPENDIX A:
SUBGROUPS INCLUDED IN EACH FUNCTION
Staff Leadership:

- AAAS Senior Management: Leadership Advisory Council
- AAAS Senior Management: Leadership Team
Elected Leadership:

- Board of Directors
- AAAS Council
- Section Leadership: Steering Groups
- Section Leadership: Committee on Nominations
- Electorate Nominating Committee
Advisory Committees:

- National Conference on Lawyers and Scientists (NCLS)
- Committee on Scientific Freedom and Responsibility (CSFR)
- Committee on Science & Technology Engagement with the Public (CoSTEP)
- Committee on Science, Engineering, and Public Policy (COSEPP)
- Committee on Opportunities in Science (COOS)
- Annual Meeting Scientific Program Committee
Science Family Editors and Advisors:

- Professional Editors
- Academic Editors
- Advisors
Honors and Awards Recipients:

- Honorary Fellows, All Active Members
- Honorary Fellows, Class of 2019
- 2020 Award Winners (Award for Science Diplomacy; Award for Scientific Freedom and Responsibility; Early Career Award for Public Engagement with Science; Kavli Science Journalism Award; Mani L. Bhaumik Award for Engagement with Science; Mentor Awards; Newcomb Cleveland Prize; Philip Hauge Abelson Prize; AAAS/Subaru SB&F Prize for Excellence in Science Books)
Honors and Awards Selection Committees:

- Honorary Fellows Selection Committee
- Award for Science Diplomacy Selection Committee
- Award for Scientific Freedom and Responsibility Selection Committee
- Early Career Award for Public Engagement with Science Selection Committee
- Kavli Science Journalism Awards Selection Committee
- Mani L. Bhaumik Award for Public Engagement with Science Selection Committee
- Mentor Awards Selection Committee
- Newcomb Cleveland Prize Selection Committee
- Philip Hauge Abelson Prize Selection Committee
- AAAS/Subaru SB&F Prize for Excellence in Science Books Selection Committee
Career Development/Fellowship Program Participants:

- S&T Policy Fellows
- Mass Media Fellows
- Leshner Leadership Fellows
- News from Science Internships
- Diverse Voices
- If/THEN Ambassadors
- Catalyzing Advocacy in Science and Engineering (CASE) Workshop Participants
- Lemelson Invention Ambassadors
- L’Oreal USA for Women in Science Fellowships
Career Development/Fellowship Program Selection Committees:

- S&T Policy Fellows Selection Committee
- Mass Media Fellows Selection Committee
- Leshner Leadership Fellows Selection Committee
- If/THEN Ambassadors Selection Committee
- Lemelson Invention Ambassadors Selection Committee
- L’Oreal USA for Women in Science Fellowships Selection Committee
Speakers and Presenters at Major AAAS Events:

- Annual Meeting Speakers
- S&T Policy Forum Speakers
- ERN Speakers
- Noyce Summit Keynote Speakers
Volunteers:

- Scientists engaged by SciLine
- On-Call Scientists
- STEM Volunteers
Science Family Authors and Reviewers:

- Report Authors
- Review Authors
- Commentary Authors
- Reviewers
APPENDIX B: ADDITIONAL DATA

COVERAGE INFORMATION
Data Coverage: Gender AAAS/Science Functions and Science Family Authors and Reviewers

- Staff Leadership
- Honors and Awards Selection Committees
- Speakers
- Career Development/Fellowship Selection Committees
- Elected Leadership
- Advisory Committees
- Honors and Awards Recipients
- Volunteers
- Science Family Editors and Advisors
- Career Development/Fellowship Participants
- Science Family Authors and Reviewers

0.0% 20.0% 40.0% 60.0% 80.0% 100.0%

Covered
No Data
Data Coverage: Race/Ethnicity AAAS/Science Functions and Science Family Authors and Reviewers

- Staff Leadership
- Speakers
- Honors and Awards Recipients
- Career Development/Fellowship Selection Committees
- Elected Leadership
- Career Development/Fellowship Participants
- Honors and Awards Selection Committees
- Science Family Editors and Advisors
- Advisory Committees
- Science Family Authors and Reviewers
- Volunteers

Coverage:
- Covered
- No Data
APPENDIX C: DEMOGRAPHIC REPRESENTATION IN EACH FUNCTION
AAAS Staff Leadership (N=21)

RACE/ETHNICITY

- **AMERICAN INDIAN OR ALASKA NATIVE**: 0.0%
- **ASIAN OR PACIFIC ISLANDER**: 9.5%
- **BLACK OR AFRICAN AMERICAN**: 9.5%
- **HISPANIC OR LATINX**: 0.0%
- **MULTI-RACIAL OR OTHER**: 0.0%
- **WHITE (NON-HISPANIC)**: 76.2%
- **NO DATA**: 4.8%

GENDER

- **FEMALE**: 57.1%
- **MALE**: 42.9%
- **NONBINARY/-SELF-IDENTIFY**: 0.0%
- **NO DATA**: 0.0%
AAAS Elected Leadership (N=404)

**RACE/ETHNICITY**

- **American Indian or Alaska Native**: 0.0%
- **Asian or Pacific Islander**: 5.4%
- **Black or African American**: 1.5%
- **Hispanic or Latinx**: 2.0%
- **Multi-Racial or Other**: 0.5%
- **White (Non-Hispanic)**: 54.7%
- **No Data**: 35.9%

**GENDER**

- **Female**: 63.9%
- **Male**: 30.9%
- **Nonbinary/Identify Other**: 0.0%
- **No Data**: 5.2%
Elected Leadership Subgroup: Board of Directors (N=15)

RACE/ETHNICITY
- American Indian or Alaska Native: 0.0%
- Asian or Pacific Islander: 6.7%
- Black or African American: 20.0%
- Hispanic or Latinx: 0.0%
- Multi-racial or Other: 0.0%
- White (Non-Hispanic): 73.3%
- No Data: 0.0%

GENDER
- Female: 66.7%
- Male: 33.3%
- Nonbinary/Other Self-Identify: 0.0%
- No Data: 0.0%
Advisory Committees (N=74)

**RACE/ETHNICITY**
- American Indian or Alaska Native: 0.0%
- Asian or Pacific Islander: 14.0%
- Black or African American: 4.1%
- Hispanic or Latinx: 0.0%
- Multi-racial or Other: 0.0%
- White (Non-Hispanic): 27.0%
- No Data: 67.6%

**GENDER**
- Female: 54.1%
- Male: 40.5%
- Nonbinary/Self-identify: 0.0%
- No Data: 5.4%
Science Family Editors and Advisors (N=720)

**RACE/ETHNICITY**

- **AMERICAN INDIAN OR ALASKA NATIVE**: 0.0%
- **ASIAN OR PACIFIC ISLANDER**: 3.9%
- **BLACK OR AFRICAN AMERICAN**: 0.7%
- **HISPANIC OR LATINX**: 0.8%
- **MULTI-RACIAL OR OTHER**: 1.3%
- **WHITE (NON-HISPANIC)**: 26.0%
- **NO DATA**: 67.4%

**GENDER**

- **FEMALE**: 28.1%
- **MALE**: 56.1%
- **NONBINARY/-SELF-IDENTIFY**: 0.0%
- **NO DATA**: 15.8%
Honors and Awards Recipients (N=8,785)

RACE/ETHNICITY
- American Indian or Alaska Native: 0.0%
- Asian or Pacific Islander: 5.3%
- Black or African American: 0.8%
- Hispanic or Latinx: 0.8%
- Multi-Racial or Other: 1.4%
- White (Non-Hispanic): 61.1%
- No Data: 30.6%

GENDER
- Female: 19.7%
- Male: 73.3%
- Nonbinary/Self-Identify: < 0.1%
- No Data: 7.0%
Honors and Awards Recipients Subgroup: Honorary Fellows, All Active Members (N=8,734)
Honors and Awards Recipients Subgroup: Honorary Fellows, Class of 2019 (N=435)

**Race/Ethnicity**
- American Indian or Alaska Native: 0.0%
- Asian or Pacific Islander: 5.5%
- Black or African American: 1.1%
- Hispanic or Latinx: 1.1%
- Multi-racial or Other: 0.7%
- White (Non-Hispanic): 42.5%
- No Data: 49.0%

**Gender**
- Female: 32.0%
- Male: 58.9%
- Nonbinary/Non-Hybrid: 0.0%
- No Data: 9.2%
Honors and Awards Selection Committees (N=102)
Career Development/Fellowship Participants Subgroup: S&T Policy Fellows (N=281)

RACE/ETHNICITY

- American Indian or Alaska Native: 0.0%
- Asian or Pacific Islander: 11.7%
- Black or African American: 10.3%
- Hispanic or Latinx: 7.8%
- Multi-racial or Other: 2.8%
- White (Non-Hispanic): 63.7%
- No Data: 3.6%

GENDER

- Female: 64.4%
- Male: 35.2%
- Nonbinary/Non-Hispanic: 0.0%
- No Data: 0.4%
Speakers and Presenters at Major AAAS Events (N=844)
AAAS Program Volunteers (N=3,676)

**RACE/ETHNICITY**
- **American Indian or Alaska Native**: 0.0%
- **Asian or Pacific Islander**: 1.0%
- **Black or African American**: 0.2%
- **Hispanic or Latinx**: 0.3%
- **Multi-Racial or Other**: 0.4%
- **White (Non-Hispanic)**: 8.8%
- **No Data**: 89.3%

**GENDER**
- **Female**: 39.8%
- **Male**: 45.7%
- **Nonbinary/Other**: 0.0%
- **No Data**: 14.5%
Science Family Authors and Reviewers Subgroup: Review Authors (N=518)
Science Family Authors and Reviewers Subgroup: Commentary Authors (N=1,133)

**Race/Ethnicity**
- American Indian or Alaska Native: 0.0%
- Asian or Pacific Islander: 1.9%
- Black or African American: 0.4%
- Hispanic or Latinx: 1.3%
- Multi-Racial or Other: 1.0%
- White (Non-Hispanic): 14.0%
- No Data: 81.4%

**Gender**
- Female: 28.2%
- Male: 55.1%
- Nonbinary/SELF-IDENTIFY: 0.0%
- No Data: 16.7%
Science Family Authors and Reviewers Subgroup: Reviewers (N=16,734)

**Race/Ethnicity**
- < 0.1% American Indian or Alaska Native
- 4.6% Asian or Pacific Islander
- 0.1% Black or African American
- 0.7% Hispanic or Latinx
- 0.7% Multi-racial or Other
- 13.1% White (non-Hispanic)
- 80.7% No Data

**Gender**
- Female 19.7%
- Male 57.4%
- Nonbinary/Self-Identify < 0.1%
- No Data 22.8%
APPENDIX D: GENDER ESTIMATES
AAAS/Science Functions (N=13,480)

Gender Coverage and Estimates:

- No Data: 9.7%
- Estimated: 33.2%
- Self-report: 57.1%
Staff Leadership (N=21)

Gender Coverage and Estimates:

- No Data: 0.0%
- Estimated: 0.0%
- Self-report: 100%
Elected Leadership (N=404)

Gender Coverage and Estimates:

- No Data: 5.2%
- Estimated: 28.2%
- Self-report: 66.6%
Elected Leaders Subgroup: Board of Directors (N=15)

Gender Coverage and Estimates:

- No Data: 0.0%
- Estimated: 0.0%
- Self-report: 100%
Advisory Committees (N=74)

Gender Coverage and Estimates:

- No Data: 5.4%
- Estimated: 56.8%
- Self-report: 37.8%
Science Editors and Advisors (N=720)

Gender Coverage and Estimates:

- No Data: 15.8%
- Estimated: 51.2%
- Self-report: 32.9%
Honors and Awards Recipients (N=8,875)

Gender Coverage and Estimates:

- No Data: 7.0%
- Estimated: 21.7%
- Self-report: 71.3%
Honors and Awards Recipients Subgroup: Honorary Fellows, All Active Members (N=8,734)

Gender Coverage and Estimates:

- No Data: 7.0%
- Estimated: 21.4%
- Self-report: 71.6%
Honors and Awards Recipients Subgroup: Honorary Fellows, Class of 2019 (N=435)

Gender Coverage and Estimates:

- No Data: 9.2%
- Estimated: 37.9%
- Self-report: 52.9%
Honors and Award Selection Committees (N=102)

Gender Coverage and Estimates:

- No Data: 1.0%
- Estimated: 24.5%
- Self-report: 74.5%
Career/Development Fellowship Participants (N=667)

Gender Coverage and Estimates:

- No Data: 23.1%
- Estimated: 2.5%
- Self-report: 74.4%
Career Development/Fellowship Participants Subgroup: S&T Policy Fellows (N=281)

Gender Coverage and Estimates:

- No Data: 0.4%
- Estimated: 0.0%
- Self-report: 99.6%
Career/Development Fellowship Selection Committees (N=259)

Gender Coverage and Estimates:

- No Data: 3.1%
- Estimated: 26.3%
- Self-report: 70.7%
Speakers and Presenters at Major AAAS Events (N=844)

Gender Coverage and Estimates:

- No Data: 1.9%
- Estimated: 13.3%
- Self-report: 84.8%
Volunteers (N=3,676)

Gender Coverage and Estimates:
- No Data: 14.5%
- Estimated: 69.1%
- Self-report: 16.4%
Science Family Authors and Reviewers (N=49,316)

Gender Coverage and Estimates:

- No Data: 33.2%
- Estimated: 53.6%
- Self-report: 13.2%
Science Family Authors and Reviewers Subgroup: Report Authors (N=33,453)

Gender Coverage and Estimates:

- No Data: 38.5%
- Estimated: 51.2%
- Self-report: 10.3%
Science Family Authors and Reviewers Subgroup: Review Authors (N=518)

Gender Coverage and Estimates:

- No Data: 18.3%
- Estimated: 65.3%
- Self-report: 16.4%
Science Family Authors and Reviewers Subgroup: Commentary Authors (N=1,133)

Gender Coverage and Estimates:

- No Data: 16.7%
- Estimated: 64.2%
- Self-report: 19.2%
Science Family Authors and Reviewers Subgroup: Reviewers (N=16,734)

Gender Coverage and Estimates:

- No Data: 22.8%
- Estimated: 57.0%
- Self-report: 20.2%
APPENDIX D: METHODOLOGY DETAILS
Step 1. Assemble Data for All AAAS/Science Functions and Science Family Authors and Reviewers

- Focus on AAAS and Science Family Functions that enable success and advancement in science and engineering.
- Obtained data for the “most recent” or “present” class of each AAAS and Science Family Function. For example:
  - 2020 Board of Directors.
  - 2020/21 class of S&T Policy Fellows.
  - 2019 class of Honorary Fellows.
  - Science Family Authors and Reviewers September 2019 through August 2020.
Step 2. Assess Assembled Demographic Data for Consistency Across Sources

A

OBTAIN DATA

All self-report
• Function or subgroup-provided
• Survey and membership data

B

ASSESS FOR CONSISTENCY

Set to missing if not consistent

C

MAXIMIZE COVERAGE

If not available from one source, is it available from another?
Step 3. Estimate Gender

A  GENDER DATA STILL MISSING?

B  APPLY STATISTICAL PACKAGE*

C  ACCEPT ESTIMATES WITH >95% CONFIDENCE

## Strengths and Weaknesses of “Gender R Package Version 0.5.2”

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
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<tbody>
<tr>
<td>Has at least 98% accuracy rate for our population.</td>
<td>Can only infer gender likely to have been assigned at birth based on the name.</td>
</tr>
<tr>
<td>The name dictionary on which the packages relies is diverse and multiethnic.</td>
<td>Less accurate without birth-year data because some names change gender association over time, although this is minimized by selecting only those estimates with ≥95% confidence.</td>
</tr>
</tbody>
</table>

For additional information: [https://docs.roopensci.org/gender/](https://docs.roopensci.org/gender/)
Step 4. Decide Categories for Gender and Race/Ethnicity

<table>
<thead>
<tr>
<th>Issue</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inconsistent use of “decline to answer” for ethnicity and/or gender across functions and subgroups.</td>
<td>Included “no data” category.</td>
</tr>
<tr>
<td>Some groups have race and ethnicity broken out into two questions where ethnicity identifies “Hispanic or Latinx” and race does not include this as an option; most have one race/ethnicity question where Hispanic/Latinx and “Two or more races/ethnicities” are options.</td>
<td>In cases where race and ethnicity are asked separately, If Hispanic or Latinx is selected, this designation supersedes the response to the second race question.</td>
</tr>
</tbody>
</table>
Step 5. Decide How to Count Individuals Within and Across Functions

<table>
<thead>
<tr>
<th>Issue</th>
<th>Example</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals show up multiple times within a function.</td>
<td>In Staff Leadership, all Advisory Council members are also on the Leadership Team.</td>
<td>Counted once within the function</td>
</tr>
<tr>
<td>Individuals show up multiple times across functions.</td>
<td>An Elected Leader also is part of an award selection committee.</td>
<td>Counted in each function</td>
</tr>
<tr>
<td>Overall presentation of results.</td>
<td>Individuals show up in multiple functions and multiple subgroups.</td>
<td>Counted once for overall results</td>
</tr>
</tbody>
</table>
Step 6. Present Results

**RACE/ETHNICITY**

- **AMERICAN INDIAN OR ALASKA NATIVE**: 0.0%
- **ASIAN OR PACIFIC ISLANDER**: 4.2%
- **BLACK OR AFRICAN AMERICAN**: 2.0%
- **HISPANIC OR LATINO**: 1.2%
- **MULTI-RACIAL OR OTHER**: 1.2%
- **WHITE (NON-HISPANIC)**: 44.5%
- **NO DATA**: 46.9%

**GENDER**

- **FEMALE**: 30.3%
- **MALE**: 60.0%
- **NONBINARY-/SELF-IDENTIFY**: 0.1%
- **NO DATA**: 9.7%
APPENDIX E: LIMITATIONS
LIMITATIONS AND CONCERNS
Limitations and Concerns

- DATA COVERAGE
- DATA CONSISTENCY
- ESTIMATED GENDER DATA
- CONFIDENTIALITY
- ETHICAL CONCERNS
Assessment of Limitations and Concerns

EXPOSING DATA ISSUES NOW WILL LIKELY LEAD TO IMPROVED DATA OVER TIME.

THIS WILL BE AN IMPERFECT PROCESS.

TRANSPARENCY IS KEY.
APPENDIX F:
RESULTS, SUMMARY, NEXT STEPS
RESULTS
Order of Results

▪ Reminder on Functions

▪ Executive Summary

▪ Data Coverage

▪ Results Overview

▪ Summary and Next Steps
RESULTS: REMINDER ON FUNCTIONS AND SUBGROUPS
Reminder on AAAS/Science Functions

Functions are not limited to AAAS staff members but include elected leadership, award winners, program participants, award and program selection committees, etc.; Science Family Authors and Reviewers are examined separately.

Note: Refer to slides 5-7 and Appendix A for details.
RESULTS: EXECUTIVE SUMMARY
Executive Summary: Coverage of Demographic Variables

Data coverage (usable data available, including estimated data) for gender is high for AAAS/Science Functions and moderate for Science Family Authors and Reviewers.

Race/ethnicity coverage is moderate for AAAS/Science Functions and low for Science Family Authors and Reviewers.

Note: High coverage: > 80%; moderate coverage: 50-79%; low coverage: <50%
Executive Summary: Gender Representation

AAAS has some functions in which the ratio of males to females is balanced or favors females, but overall, males outnumber females 2:1.

*Science* Family Authors and Reviewers’ ratio of males to females is 2:1 in favor of males.

Note: These ratios exclude missing data.
People who are White (non-Hispanic) outnumber people of all other ethnicities 12:1 for Honors and Awards Recipients, a nomination-based AAAS/Science Function.

People who are White (non-Hispanic) outnumber people of all other ethnicities 5:1 for Career Development/Fellowship Participants, an application-based AAAS/Science Function.

It is difficult to assess ethnicity representation for Science Family Authors and Reviewers due to missing data, but what we have indicates that White (non-Hispanic) people outnumber people of all other ethnicities by at least 2:1.

Note: These ratios exclude missing data.
Executive Summary: Next Steps, Improve Data & Processes

- Improve/develop systems for collecting demographic data for all AAAS/Science Functions and Science Family Authors and Reviewers
  - Improve coverage with self-report data

- Develop system for linking data AAAS/Science Functions and Science Family Authors and Reviewers
  - Improve consistency and facilitate analyses

- Identify reliable and ethical methods for estimating race/ethnicity
  - Improve coverage
RESULTS: DATA COVERAGE
Data Coverage: Overall Gender

**AAAS/Science Functions (N=13,480)**
- No Data: 9.7%
- Covered: 90.3%

**Science Family Authors and Reviewers (N=49,316)**
- No Data: 33.2%
- Covered: 66.8%

Note: “Covered” means usable gender data (including estimated data) are available; “no data” means gender data are missing.
Data Coverage: Overall Race/Ethnicity

**AAAS/Science Functions (N=13,480)**
- No Data: 46.9%
- Covered: 53.1%

**Science Family Authors and Reviewers (N=49,316)**
- No Data: 87.8%
- Covered: 12.2%

Note: “Covered” means usable race/ethnicity data are available; “no data” means race/ethnicity data are missing.
RESULTS: OVERVIEW
Overview: Gender Representation

**AAAS/Science Functions (N=13,480)**
- No Data: 9.7%
- Female: 30.3%
- Male: 60.0%
- Non-binary/Self-identify: 0.1%

**Science Family Authors and Reviewers (N=49,316)**
- No Data: 33.2%
- Female: 20.3%
- Male: 46.4%
- Non-binary/Self-identify: < 0.1%
Overview: Gender Ratios

Note: Each bar presents the ratio of males to females, excluding missing data. For example, the top bar shows that females outnumber males by nearly 3:1 among Career Development/Fellowship Participants. The bottom bar shows that males outnumber females nearly 4:1 among Honors and Awards Recipients.
# Overview: Race/Ethnicity Representation

## AAAS/Science Functions (N=13,480)

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Data</td>
<td>46.9%</td>
</tr>
<tr>
<td>White (non-Hispanic)</td>
<td>44.5%</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>4.2%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>2.0%</td>
</tr>
<tr>
<td>Multi-racial or other</td>
<td>1.2%</td>
</tr>
<tr>
<td>Hispanic or Latinx</td>
<td>1.2%</td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

## Science Family Authors and Reviewers (N=49,316)

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Data</td>
<td>87.8%</td>
</tr>
<tr>
<td>White (non-Hispanic)</td>
<td>7.7%</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>3.5%</td>
</tr>
<tr>
<td>Multi-racial or other</td>
<td>0.5%</td>
</tr>
<tr>
<td>Hispanic or Latinx</td>
<td>0.5%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>0.1%</td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

*Indicates <0.1%
Overview: Race/Ethnicity Ratios

<table>
<thead>
<tr>
<th>Group</th>
<th>Ratio</th>
<th>Next Most Prevalent Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honors and Awards Recipients</td>
<td>12.2</td>
<td>White (non-Hispanic)</td>
</tr>
<tr>
<td>Elected Leadership</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Volunteers*</td>
<td>8.8</td>
<td></td>
</tr>
<tr>
<td>Staff Leadership</td>
<td>7.6</td>
<td></td>
</tr>
<tr>
<td>Advisory Committees*</td>
<td>6.8</td>
<td></td>
</tr>
<tr>
<td>Honors and Awards Selection Committees</td>
<td>6.7</td>
<td></td>
</tr>
<tr>
<td>Science Family Editors and Advisors*</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>Career Development/Fellowship Selection Committees</td>
<td>4.9</td>
<td></td>
</tr>
<tr>
<td>Career Development/Fellowship Participants</td>
<td>4.6</td>
<td></td>
</tr>
<tr>
<td>Speakers</td>
<td>3.7</td>
<td></td>
</tr>
<tr>
<td>Science Family Authors and Reviewers*</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Each bar presents the ratio of White (non-Hispanic) function members to the next most prominent race/ethnicity, excluding missing data. For example, the top bar shows that White (non-Hispanic) members outnumber any other race/ethnicity by at least 12:1 among Honors and Awards Recipients. *Interpret with caution; coverage for ethnicity was <50 percent.
SUMMARY AND NEXT STEPS
Summary

Data coverage for both gender and ethnicity has room for improvement.

Males outnumber females 2:1 across all AAAS/Science Functions (total) and Science Family Authors and Reviewers.

All AAAS/Science Functions and Science Family Authors and Reviewers are predominately White (non-Hispanic).

Nomination-based functions and subgroups are more lopsided toward males and White (non-Hispanic) people than application-based functions and subgroups.
Next Steps: AAAS will improve...

- Data for future reports of AAAS’ demographics
- Data collection processes and storage systems
- Coverage of demographic variables