AAAS

Nurturing Diversity, Equity and Inclusion in the Scientific Enterprise

2021 REPORT

About This Report

The American Association for the Advancement of Science (AAAS) is publishing the second annual **Diversity, Equity and Inclusion (DEI) report** to hold ourselves accountable for the plan and actions we announced in July 2020 to drive lasting change.

Last year's inaugural report provided aggregate data on the demographic representation of career-enabling functions in AAAS and the *Science* family of journals. This data includes authors, editors, reviewers, award winners, fellows and other career-enabling functions at the organization. It is important for AAAS to make this data publicly available because we touch all science disciplines, and our actions matter to move the scientific enterprise forward. We make this data available because:

- Publishing in the *Science* family of journals or being interviewed in a *Science* news story provides a platform for scientists to amplify their impact
- Receiving recognition as an AAAS Honorary Fellow provides additional credibility and stature to accomplished members of the scientific and engineering community
- Earning an AAAS Science & Technology Policy Fellowship opens a pathway to a career in science policy
- Winning an AAAS award furthers a career in scientific leadership
- Serving on AAAS governing bodies builds networks and influence in science and engineering.

This year, in addition to reporting on demographic data, AAAS is providing updates on the actions we have taken to-date to raise awareness about the importance of DEI and make progress on the action plan we released in July 2020.

We invite you to email us at suggestionsforaaas@aaas.org about considerations and recommendations to address DEI in AAAS/*Science* and improve our data and methodology. AAAS Staff Leadership will evaluate and consider each submission.

Why It Matters

A More Diverse, Equitable and Inclusive Global Scientific Enterprise Benefits Society

The scientific enterprise should reflect the society we serve.

- The systems that govern the fields of science, engineering and medicine are not immune to the discrimination, subjugation and silencing of underrepresented colleagues and voices.
- Our community has a moral obligation to ensure everyone can participate in and benefit from science without leaving anyone behind.
- To best serve society, we need to enable the broadest possible access to scientific data and ensure that decision-making in science is informed by the most inclusive scientific data possible.

AAAS has a role to play to drive progress.

- AAAS and the *Science* family of journals are one of the largest enablers of careers, research and discoveries across science disciplines, geographies and institutions as the world's largest scientific society. If we do not amplify and enable a certain segment, it could get left out.
- As one of the longest serving scientific societies, we must acknowledge and learn from our history so we do not continue to enable systems that disadvantage various segments of our community.
- The scientific enterprise must seize on this opportunity for improvement and commit to playing an active and ongoing role in catalyzing change.

Diverse teams are critical to achieve scientific excellence.

- Complex problems require multifaceted, creative and innovative solutions, which are best addressed with diverse teams bringing a complete set of perspectives to tackle common challenges.
- Not all solutions work the same for all communities. It's important to build teams who represent a variety of cultures and communities to account for challenges that may impact segments of the population in different ways.

We should expand collaboration to solve global challenges.

- The world saw extraordinary collaboration across countries and laboratories to share data and test solutions to address the COVID-19 pandemic. We should model this behavior for future challenges that impact global public health.
- We should harness untapped potential from underrepresented groups and emerging countries to bolster how we tackle issues that cut across borders and populations where science can play a big role.

How We Do It

Three Tracks to Drive Progress

DEMOGRAPHIC REPORTING & ACCOUNTABILITY (MIRROR)

AAAS/*Science* collection of data on demographic representation in our functions that enable success and advancement in science and engineering

AAAS ADVOCACY & PROGRAMS (EXTERNAL)

AAAS/*Science* programs, initiatives and advocacy to increase diversity, equity and inclusion in science and engineering and address systemic challenges throughout the scientific enterprise

AAAS DEI ACTIONS (INTERNAL)

AAAS/*Science* actions to ensure diversity, equity and inclusion within the organization

Track One: Demographic Reporting & Accountability (Mirror)

Overview

- This track holds up a mirror to ensure accountability for increasing demographic representation throughout the scientific enterprise, starting with the career-enabling functions over which AAAS/*Science* has direct influence.
- We do this by reporting on the availability and quality of demographic data.
- This report includes the current status of and trends in demographic representation for career-enabling functions within AAAS/*Science*.

Objectives for 2021

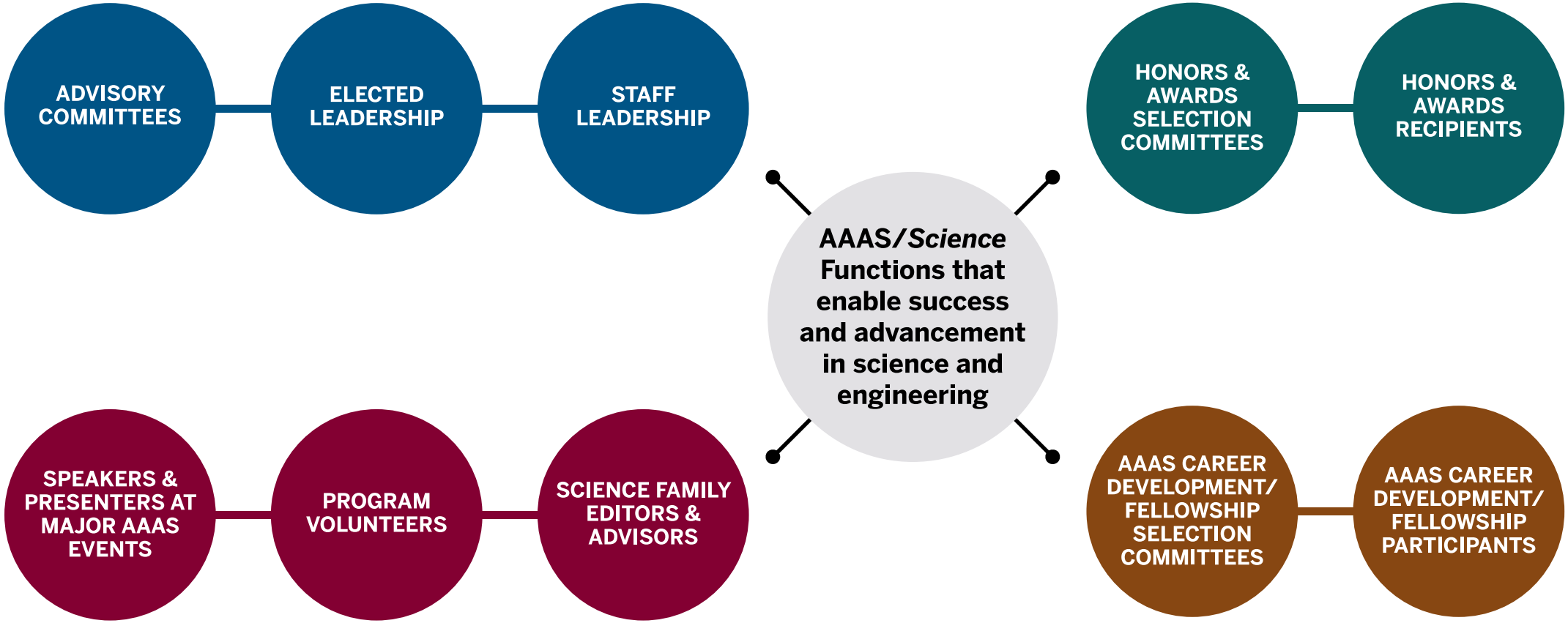
- Improve internal data submission process to increase efficiency.
- Assess and refine methodology for addressing missing values in gender and racial/ethnic identity data.
- Assemble internal Advisory Group to recommend final decisions pertaining to the 2021 report and efforts pertaining to this track.

Methodology & Limitations

- We collected demographic data from 10 AAAS/*Science* career-enabling functions as well as *Science* Family of Journals Authors and Reviewers, and we present the demographic representation for 2021 and trends between 2020 and 2021.
- The category for missing data includes both people who declined to respond and people from whom data was not collected. Due to the extent and non-random nature of missing data, we did not conduct tests of significance when comparing 2021 to 2020.
- To avoid inflating diversity, and to fully represent all identities, we present all identities separately and focus our comparison on the most prominent identity and the second-most-prominent identity.
- It is difficult to make year-over-year comparisons across all AAAS/Science Functions because in some instances 2020 data also includes data from prior years. We note the specific instances in Appendices B and C. Additional limitations include changes in data coverage and low data coverage.

Track One: Demographic Reporting & Accountability

Tracking AAAS/*Science* Career-Enabling Functions



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

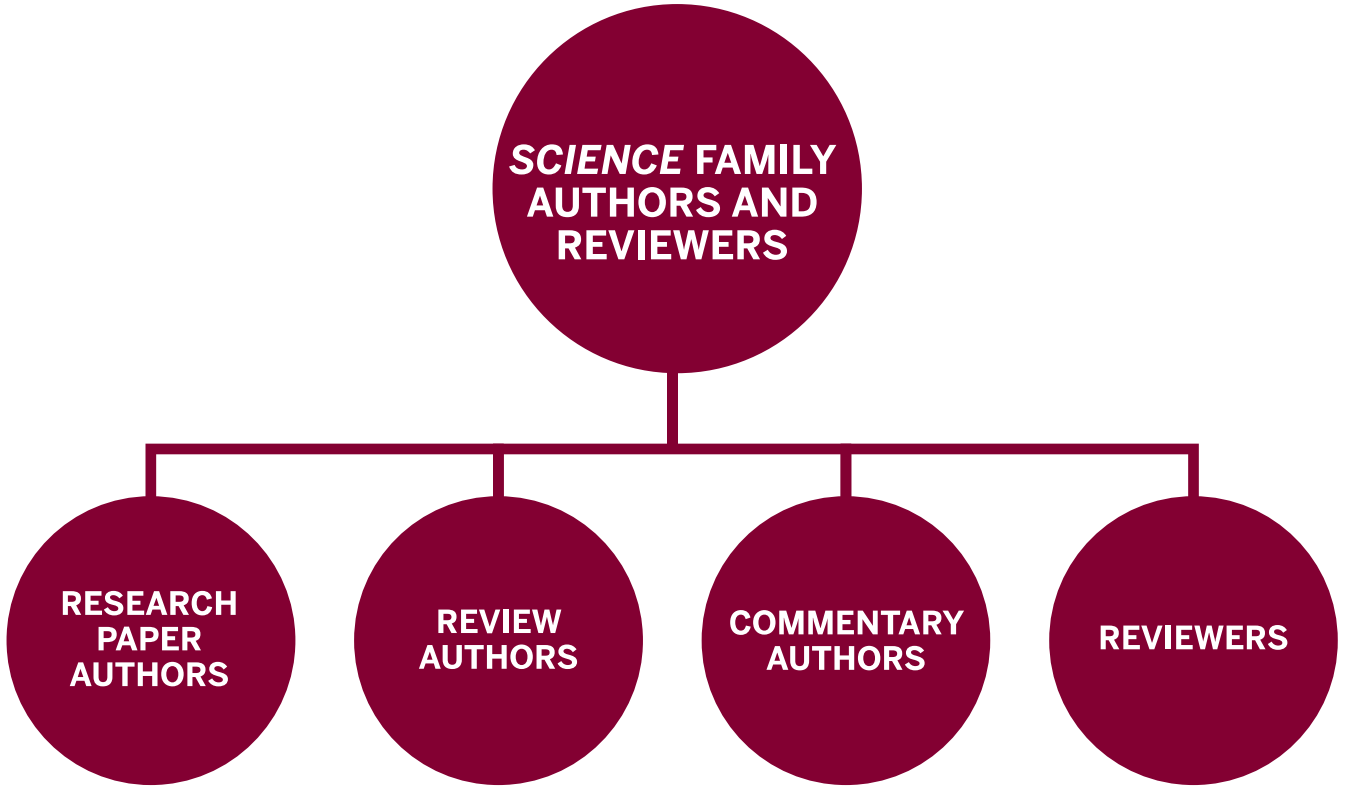
Track One: Demographic Reporting & Accountability

Additional Stand-alone AAAS Subgroups Presented

Notes: S&T: Science and Technology. Refer to Appendix B for additional detail.

Track One: Demographic Reporting & Accountability

Science Family of Journals: Authors and Reviewers



Track One: Demographic Reporting & Accountability

2021 Results Snapshot Across all Functions (1/3)

Factors Influencing Demographic Trends (2020 to 2021) – Overview

Function	Data coverage	Diversity in demographic representation: Gender Identity	Diversity in demographic representation: Racial/Ethnic Identity	Efforts to improve demographic representation	Inclusion of new subgroups
Advisory Committees (2020 N=74) (2021 N=97)	**G-DECREASED** Added subgroups with no gender identity data **E-INCREASED**	**SAME**	**INCREASED**	**YES**	**YES**
Elected Leadership (2020 N=404) (2021 N=290)	**INCREASED**	**INCREASED**	**SAME**	**YES**	**NO**
Board of Directors* (2020 N=15) (2021 N=14)	**SAME**	**INCREASED**	**INCREASED**	**YES**	**N/A**
Staff Leadership (2020 N=21) (2021 N=25)	**SAME**	**INCREASED**	**DECREASED** Change in demographic representation	**YES**	**NO**

Note: Refer to Appendix C for additional details. *Board of Directors is a subgroup of Elected Leadership

Track One: Demographic Reporting & Accountability

2021 Results Snapshot Across All Functions (2/3)

Factors Influencing Demographic Trends (2020 to 2021) – Overview

Functions	Data coverage	Diversity in demographic representation: Gender Identity	Diversity in demographic representation: Racial/Ethnic Identity	Efforts to improve demographic representation	Inclusion of new subgroups
Honors and Awards Selection Committees (2020 N=102) (2021 N=77)	**DECREASED** Self-reported data was used over data assumptions	**INCREASED**	**INCREASED**	**YES**	**NO**
Honors and Awards Recipients (2020 N=489) (2021 N=595)	**INCREASED**	**SAME**	**INCREASED**	**YES**	**NO**
Career Development/ Fellowship Selection Committees (2020 N=259) (2021 N=249)	**G-DECREASED** Change in the number of participants in two committees **E-INCREASED**	**SAME**	**INCREASED**	**YES**	**NO**
Career Development/ Fellowship Participants (2020 N=667) (2021 N=478)	**INCREASED**	**INCREASED**	**INCREASED**	**YES**	**YES**

Note: Refer to Appendix C for additional details.

Track One: Demographic Reporting & Accountability

2021 Results Snapshot Across All Functions (3/3)

Factors Influencing Demographic Trends (2020 to 2021) – Overview

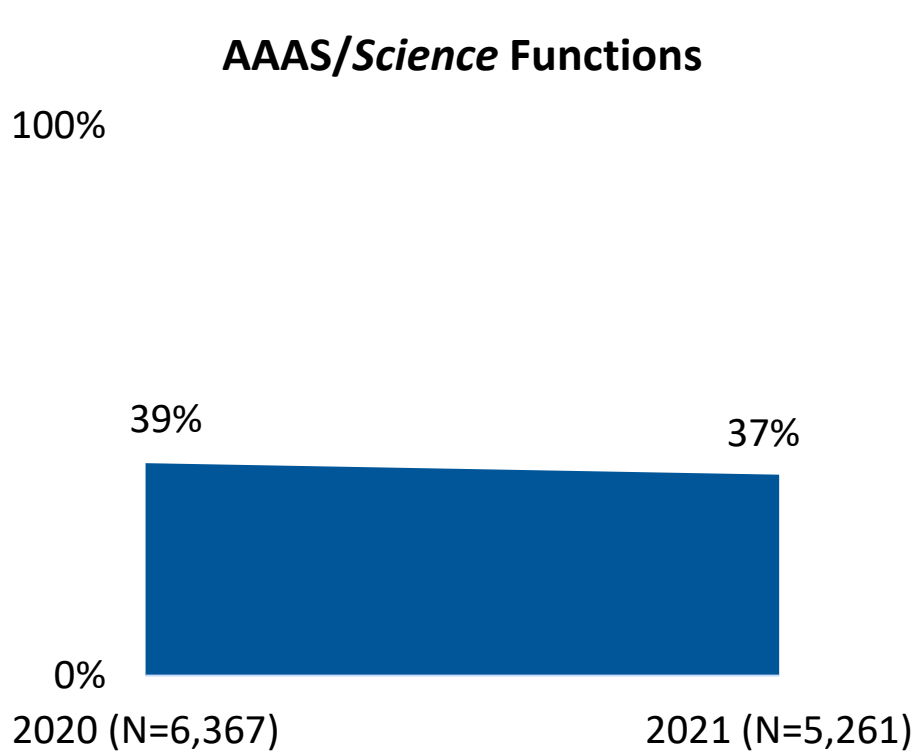
Functions	Data coverage	Diversity in demographic representation: Gender Identity	Diversity in demographic representation: Racial/Ethnic Identity	Efforts to improve demographic representation	Inclusion of new subgroups
Speakers and Presenters (2020 N=884) (2021 N=877)	**DECREASED** Subgroups added without self-reported data	**INCREASED**	**DECREASED** Subgroups added without self-reported data	**YES**	**YES**
Program Volunteers (2020 N=3,676) (2021 N=2,615)	**G-DECREASED** Decreased response due to pandemic **E-INCREASED**	**SAME**	**INCREASED**	**NO**	**NO**
***Science* Family Editors and Advisors** (2020 N=720) (2021 N=782)	**INCREASED**	**DECREASED** Likely related to increased data coverage	**INCREASED**	**YES**	**NO**
***Science* Family Authors and Reviewers** (2020 N=49,316) (2021 N=56,946)	**INCREASED**	**DECREASED** Likely related to increased data coverage	**INCREASED**	**YES**	**NO**

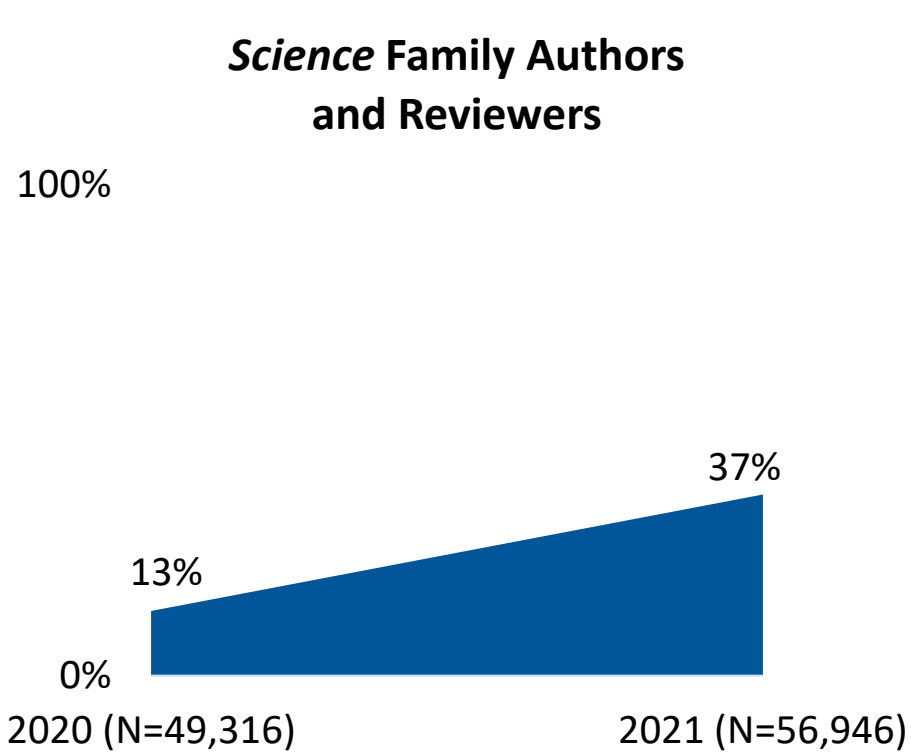
Note: Refer to Appendix C for additional details.

Track One: Demographic Reporting & Accountability

Gender Identity: Trends in Data Coverage

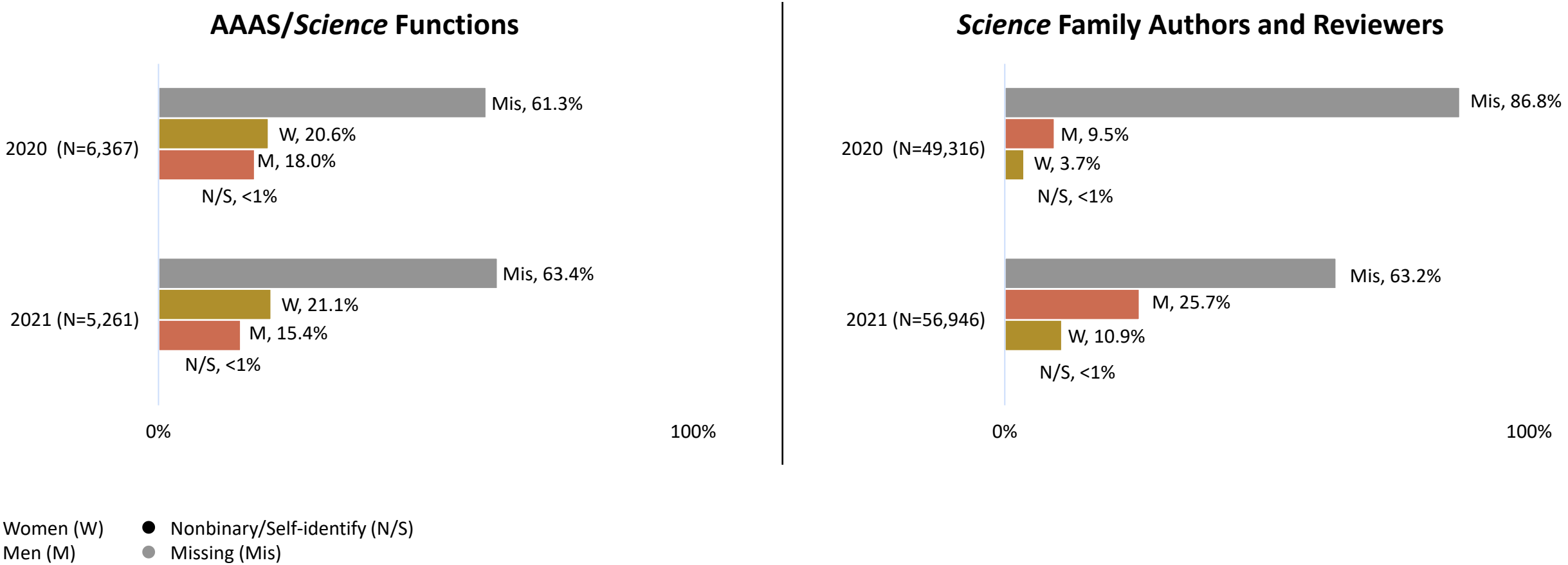
Some functions experienced a decrease in coverage for gender identity due to the addition of subgroups without self-reported data, stricter adherence to guidelines requiring self-reported data, and decreased response due to the pandemic.





Track One: Demographic Reporting & Accountability

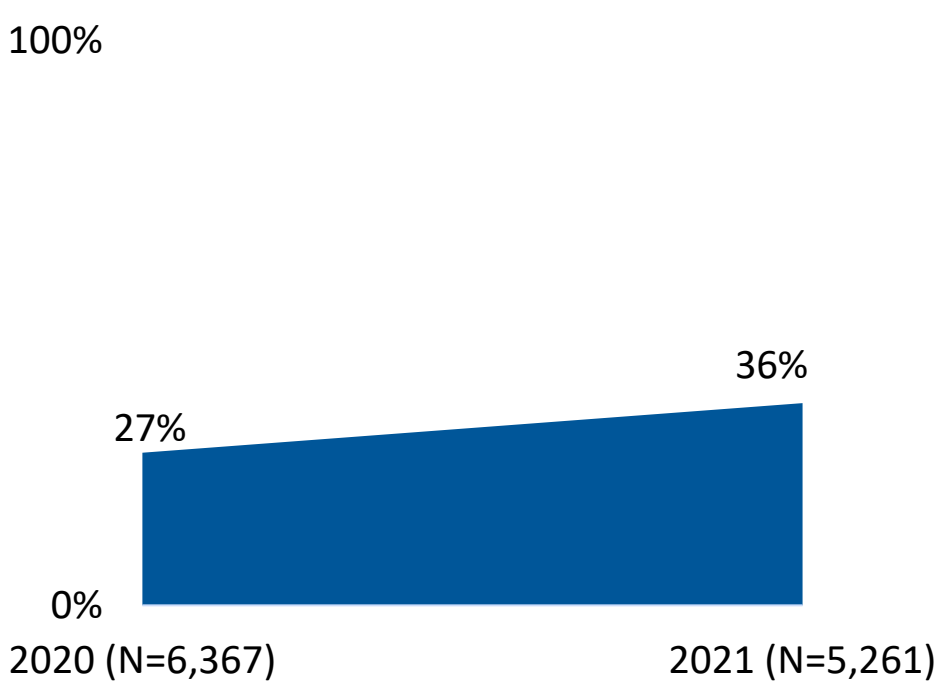
Gender Identity: Trends in Representation

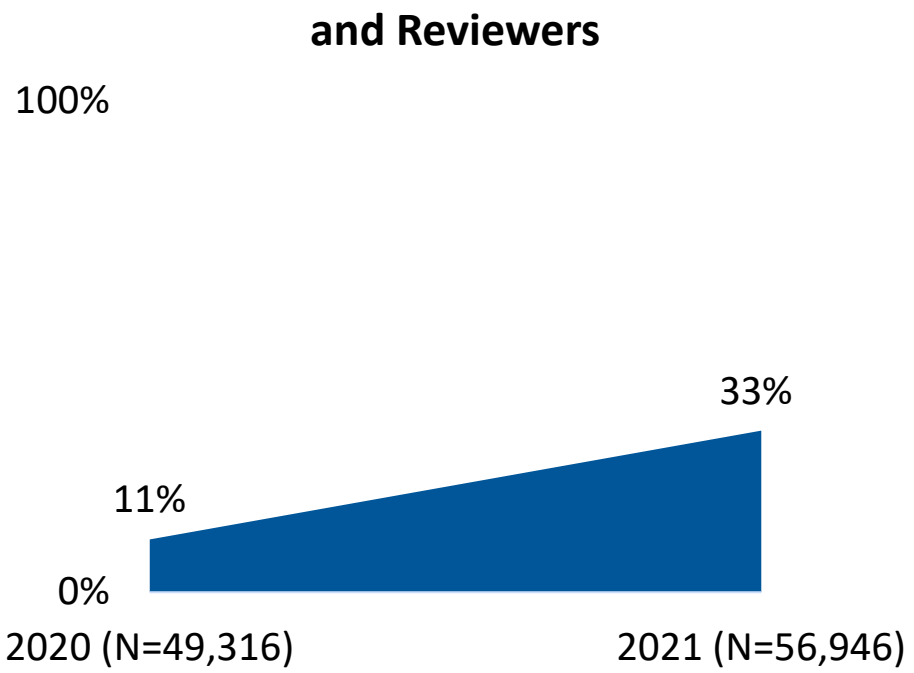


Notes: Missing data includes both people who declined to respond and people from whom data was not collected. Due to rounding, percentages may not sum to 100.

Track One: Demographic Reporting & Accountability

Racial/Ethnic Identity: Trends in Data Coverage

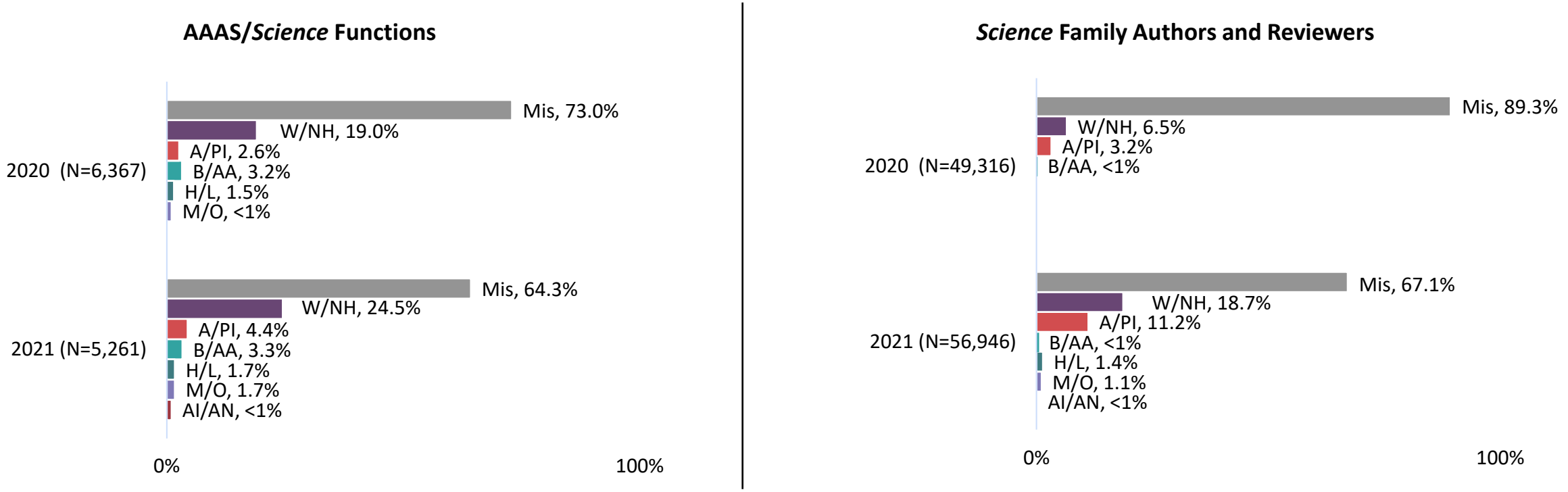




Track One: Demographic Reporting & Accountability

Racial/Ethnic Identity: Trends in Representation

Change of second-most-prominent racial/ethnic identity from Black or African American to Asian or Pacific Islander is likely due to improved data coverage (i.e., improved accuracy). This may continue to shift as we continue to improve data coverage.



Notes: Missing data includes both people who declined to respond and people from whom data was not collected. Due to rounding, percentages may not sum to 100.

Track One: Demographic Reporting & Accountability

Summary of Results (1/2)

Data Coverage: Room for Improvement.

- Overall and within most functions, there was a general improvement in data coverage from 2020 to 2021.
- It is difficult to discern whether shifts in demographic representation occurred due to changes in data coverage or due to efforts to improve demographic data representation. Until we have consistently high data coverage across categories and can compare year-over-year results, we will not have an accurate picture of our population.
- We determined conducting tests of significance between 2020 and 2021 would be prohibitive due to the extent of missing data and the strong likelihood that data is missing not at random.

Representation of Gender Identities.

- We do not have a complete picture to reach definitive conclusions about apparent changes in demographic representation for gender identities. Following are inferences based on available data.
- In both 2020 and 2021, women and men appear to be equally represented in the available data for **AAAS/*Science* Functions**. Additionally, representation of women appears to have increased in 2021.
- Women appear to be underrepresented in ***Science* Family Authors and Reviewers** in both 2020 and 2021.

Track One: Demographic Reporting & Accountability

Summary of Results (2/2)

Underrepresented Racial/Ethnic Identities.

- We do not have a complete picture to reach definitive conclusions about apparent changes in demographic representation for racial/ethnic identities. Following are inferences based on available data.
- People of underrepresented racial/ethnic identities appear to have increased representation overall and in several **AAAS/*Science* Functions**. Across these combined functions, the second-most-prominent racial/ethnic identity shifted from Black or African American in 2020 to Asian or Pacific Islander in 2021, likely due to improved accuracy with increased data coverage. This may continue to shift as we continue to improve data coverage.
- One notable trend is that the proportion of people with underrepresented racial/ethnic identities decreased for **AAAS Staff Leadership**. Because it is a small group (2020 N=21; 2021 N=25), slight changes are amplified when expressed as percentages or ratios. However, it is likely an actual shift occurred, since given data coverage was high and stable. It appears that while AAAS Staff Leadership was expanded such that more women are included, most of the additions identify as White (non-Hispanic). Despite this shift, people with underrepresented racial/ethnic identities currently hold some of the most influential positions among AAAS Staff Leadership (e.g., the CEO and CFO).
- Improved data coverage for ***Science* Family Authors and Reviewers** is associated with increased representation for all racial/ethnic identities, but especially for those who identify as Asian or Pacific Islander. Notably, representation of people who identify as White (non-Hispanic) *decreased* and representation of those who identify as Asian or Pacific Islander *increased* for all subgroups within this function.

Track Two: AAAS Advocacy & Programs (External)

AAAS OFFICE OF SCIENCE, POLICY AND SOCIETY PROGRAMS (OSPSP):

The Office of Science, Policy and Society Programs oversees eight program areas that serve society, government and the research community. These programs advance the work of scientists, improve the effectiveness of science in the promotion of human welfare, and foster scientific freedom and responsibility. DEI efforts are imbedded across programs and – in some cases – are at the heart of what these programs do. Examples include:

Inclusive STEMM* Ecosystems for Equity & Diversity (ISEED) is an umbrella initiative for 20 grant-funded projects that foster inclusive systems, structures and organizations to support representation of all people in STEMM.

AAAS's SEA Change Initiative, which falls under ISEED, guides universities through a proven self-assessment process to catalyze and sustain institutional change to create inclusive, equitable, and diverse colleges and universities and STEMM pathways.

AAAS IF/THEN® Ambassadors program brings together 125 women from a variety of STEMM careers to serve as high-profile role models for middle-school girls, show them different career pathways they can pursue and demonstrate how STEMM impacts their lives every day

Scientific Responsibility, Human Rights & Law (SRHRL) addresses ethical, legal and human rights issues related to the conduct of science and its application, such as applying science and technology to document human rights violations and promoting responsible research practices.

Dialogue on Science, Ethics & Religion (DoSER) facilitates meaningful communication between the scientific and religious communities on science, technology and society.

Science & Technology Policy Fellowships (STPF) offer an annual yearlong program for close to 280 accomplished scientists and engineers to participate in and contribute to the federal policymaking process while learning firsthand about the intersection of science and policy in Washington, D.C.

AAAS OFFICE OF GOVERNMENT RELATIONS (OGR)

AAAS and our members advocate for federal, state and local policies that not only are based on scientific evidence, but also do not exclude or disadvantage members of the science and engineering community because of their identity characteristics.

SCIENCE FAMILY OF JOURNALS

Editorial and News leadership are committed to improving demographic data collection methods and encouraging a more diverse scientific pool of editors, advisors, authors, peer-reviewers and published research.

*STEMM: Science, technology, engineering, mathematics, and medicine

Track Two: AAAS Advocacy & Programs (External)

Highlights: Actions Driving Progress (1/2)

AAAS Overall	• AAAS is evaluating the composition of career-enabling functions to seek and engage a balance regarding gender and racial/ethnic diversity and, where possible, disciplinary backgrounds, institutional sectors and geographic locations. • AAAS is participating in efforts to advance DEI in science and engineering with other scientific societies such as the Societies Consortium on Sexual Harassment in STEMM (AAAS is a founding sponsor and Executive Committee member). • AAAS is supporting Historically Black Colleges and Universities (HBCUs) in their advocacy for increased federal support of research and enhanced research infrastructure through targeted strategies such as National Science Foundation (NSF) "Established Program to Stimulate Competitive Research" (EPSCoR) program.
Dialogue on Science, Ethics & Religion (DoSER)	• AAAS received two planning grants in 2021 to expand engagement with Black, Latinx, Asian and Indigenous Christian communities; Muslim communities; Jewish communities; followers of Eastern traditions; and those who identify as "spiritual but not religious".
Inclusive STEMM Ecosystems for Equity & Diversity (ISEED)	• AAAS is guiding and developing STEMM Professional Society Self-Assessment pilot with four scientific disciplinary societies. • AAAS and EducationCounsel, with the support of the Alfred P. Sloan Foundation, rolled out policy and law resources to universities in October 2021 to accelerate DEI in STEMM higher education. • AAAS works with the NSF on the NSF Robert Noyce Teacher Scholarship Program and the Improving Undergraduate STEM Education (IUSE) Initiative to build capacity and enable STEM educators to adopt inclusive evidence-based teaching and learning methods for K-12 and undergraduate levels.

Track Two: AAAS Advocacy & Programs (External)

Highlights: Actions Driving Progress (2/2)

Science & Technology Policy Fellowships (STPF)	• Prioritize, strategically plan, recruit and devote resources to ensure annual fellowship classes represent a broad range of scientific disciplines, ages, backgrounds and abilities
***Science* Family of Journals and Office of Government Relations (OGR)**	• Advocate for an open access model for publishing scientific research that does not lock in long-standing systemic challenges or disadvantage equity across geography, discipline and institution
***Science* Family of Journals**	• Expanding recruitment tactics to diversify professional and academic editors • Changed policy to encourage editors to add new advisors who do not identify as White (non-Hispanic) men without having to retire existing advisors (advisors review four research papers a week) • Encouraging editors to suggest reviewers from underrepresented groups • Revised policy in February 2021 to support the privacy of authors who decide to change their name on research previously published across the *Science* Family of Journals • Updated language and added a prompt in February 2021 to encourage authors to submit demographic data, boosting data collection to 33% (up from 15% the year prior)

Track Two: AAAS Advocacy & Programs (External)

Highlights: Efforts to Raise Awareness about the Importance of DEI (1/3)

AAAS Overall	• Staff Leadership and OSPSP Program Directors use their leadership roles and platforms to speak about DEI issues externally. • The Committee on Opportunities in Science (COOS), an AAAS Board-appointed committee established in 1973, advises AAAS and the Board of Directors on issues related to DEI and facilitates two AAAS mentor awards.
Dialogue on Science, Ethics & Religion (DoSER)	• Highlighted scientists and religious leaders who visit all faith communities to make congregants feel more comfortable about taking COVID-19 vaccines. • Hosting discussions at scientific societies about the importance of considering faith, religion and spirituality when engaging the public on science. • Organizing symposia featuring experts with diverse scientific expertise, religious backgrounds, racial/ethnic identities and gender identities.
Office of Government Relations (OGR)	• Dr. Sudip Parikh provided congressional testimony on DEI in STEMM, and AAAS has been commenting on policies related to DEI and submitted four letters for public comment on DEI issues at several federal agencies. For example, AAAS advocates for higher salaries and employee-like benefits for graduate and postdoc students. • The 46th annual AAAS Forum on Science and Technology Policy held in October 2021 focused on "The Essentiality of DEI to Innovation: Pathways to Excellence." The Forum delved into the importance of driving diversity of thought derived from diversity of experience to give the U.S. research and innovation system a critical advantage in the global competitive landscape.

Track Two: AAAS Advocacy & Programs (External)

Highlights: Efforts to Raise Awareness About the Importance of DEI (2/3)

Inclusive STEMM Ecosystems for Equity & Diversity (ISEED)

- AAAS DEI subject matter experts advise Staff Leadership and OSPSP Program Directors on how to approach programs and challenges with an inclusive mindset.
- The L'Oréal USA Fellowships for Women in Science awards five U.S.-based women researchers $60,000 each at the beginning of their scientific careers to put toward their postdoctoral research. As a partner, AAAS helps manage the program's application and peer-review process.
- The Marion Milligan Mason Fund, made possible by a $2.2 million bequest by chemist and longtime AAAS Member Marion Tuttle Milligan Mason, provides four grants of $55,000 every other year to earl-career women researchers engaged in basic research in the chemical sciences. The program also provides leadership development and mentoring opportunities.
- AAAS, with funding from the NSF, supports students and faculty from HBCUs to participate in the annual Making & Innovation Showcase. Participating teams design and implement hardware and software prototypes to address one of the 17 United Nations Sustainable Development Goals. Each year, students and faculty attend Showcase workshops in D.C. on invention, intellectual property protection and communication.
- AAAS, ISEED and the NSF Education and Human Resources Division of Human Resource Development (EHR/HRD) host the annual Emerging Researchers National (ERN) Conference in STEM for college and university students who participate in programs funded by EHR/HRD, including underrepresented groups and persons with disabilities.

Track Two: AAAS Advocacy & Programs (External)

Highlights: Efforts to Raise Awareness About the Importance of DEI (3/3)

Science & Technology Policy Fellowships (STPF)	• Overhauled the STPF Professional Development program for the 2021-2022 fellowship class to weave DEI learning goals and topics into seminars and workshops over the course of the two-week orientation as well as professional development activities throughout the year
***Science* Family of Journals**	• *Science* publishes research on the importance of a diverse scientist pool; runs issues and articles that look at diversity-related issues around sexism and systemic racism in policing, mass incarceration, diversity within innovation and other areas; and highlights essays from diverse voices among early-career scientists in a weekly "Working Life" section. • *Science* co-founded two awards in 2021: the NOMIS & *Science* Young Explorer Award and the Michelson Philanthropies & *Science* Prize for Immunology. The former will recognize young bold researchers who ask fundamental questions about the social sciences, have catalyzed cross-field collaboration, or have taken risks to drive creative approaches regardless of the outcome. The latter will award one young scientist, eligible from a wide range of scientific disciplines, who has performed research over the past three years that will have a lasting impact on vaccines and immunotherapy.

Track Three: AAAS DEI Actions (Internal)

RECRUITMENT	COMPENSATION	TRAINING & DEVELOPMENT	EMPLOYEE RESOURCE GROUPS (ERGs)	ACCOUNTABILITY MEASURES
• Hired DEI manager • Providing annual manager recruitment training session to ensure inclusive hiring • Created a consistent interview plan to ensure bias is reduced • Standardized phone screen questions to enable equal footing for candidates • Increased outreach methods to diversify candidate pool (e.g., expanded job boards, direct outreach to diversity-focused organizations and universities)	• Reviewing merit increase process to provide more consistent evaluation • Examining salary data to ensure equitable compensation across levels and titles	• Engaged a DEI learning and education company, The Winters Group, to host required DEI learning series for staff leadership, people managers and all staff to get everyone aligned on key terms, concepts and cultural competencies • Required DEI session on cultural competencies in the workplace via LinkedIn Learning to new employees	AAAS has the following employee-led groups: • Arts Committee (est. 2010) • Inclusion, Diversity, Equity and Access (IDEA) Committee (est. 2017) • Social Committee (est. 2017) • LGBTQ Group (est. 2019)	• The AAAS Board of Directors and Staff Leadership review monthly demographic data of AAAS staff to ensure transparency and help inform decision-making processes

Where We Go From Here

Priorities for 2022 and Beyond

- Prioritize efforts to advance DEI in science as part of AAAS long-term strategic planning
- Expand the DEI landing page on AAAS.org to include a more comprehensive look at DEI efforts across the three tracks

DEMOGRAPHIC REPORTING & ACCOUNTABILITY (MIRROR)	AAAS ADVOCACY & PROGRAMS (EXTERNAL)	AAAS DEI ACTIONS (INTERNAL)

• Leverage internal Advisory Group to guide major decisions including:
  • Affirming Demographic Reporting & Accountability mission
  • Reviewing and revising demographic data collection items
  • Standardizing the demographic data collection process across functions
• Continue streamlining internal data submission processes
• Improve internal data storage and management process
• Make demographic data available on AAAS.org in a more interactive format
	• Participate in the SEA Change self-assessment
	• Advocate for research and infrastructure needs and partner with HBCUs and other institutions serving underrepresented groups to advance DEI across the scientific enterprise
	• Promote structurally underfunded science and scientists
	• Advocate for a change in how we determine tenure and leadership positions at academic institutions
	• Increase representation of women and other underrepresented groups among *Science* Family reviewers and invited authors
	• Publish research in *Science* journals that raises awareness about where bias is unintentionally impacting scientific progress (e.g., artificial intelligence, medical devices)
		• Offer additional DEI training sessions and resources for staff to practice inclusive and equitable behavior in the workplace
		• Continue efforts to expand diversified recruitment sources
		• Focus on retention efforts that foster a sense of belonging and inclusion among staff
		• Increase staff engagement by providing more opportunities for staff to connect with and support one another

APPENDIX A:

DEMOGRAPHIC REPORTING AND ACCOUNTABILITY

METHODOLOGY

Changes from 2020 to 2021

Changes in Function Composition.

We thoroughly reviewed all functions included in this report and added 10 new subgroups across the functions. Due to the pandemic and other challenges, we dropped five subgroups across the functions. Details are presented in Appendix B.

Discontinued Use of Gender Estimate.

We discontinued use of a statistical package to estimate gender based on first name primarily because it does not account for people who identify as nonbinary or self-identify their gender. We also conducted a thorough review of options for addressing missing values and determined that the best option was to simply present missing values as their own category.

Excluded All Honorary Fellows Who Are Active Members.

In 2020, we included all Honorary Fellows who are Active Members to get a historic sense of demographic representation in this important subgroup. Starting this year, we applied our rule of focusing on the current or most recent class. For this report's analysis, the historically focused subgroup was excluded from both the 2020 and 2021 data. Only the Classes of 2019 and 2020 are included.

Methodology: Overview and Comparison to 2020 (1/2)

DATA COLLECTION AND ANALYSIS PROCESS OVERVIEW	
Description	**Comparison to 2020**
Assemble data for all AAAS/*Science* Functions and *Science* Family Authors and Reviewers.	**Same:** Obtained data for most recent or current class of each function.
Assess for consistency of demographic data.	**Same:** Filled in self-reported data from Membership data and across functions. Set records with conflicting values to missing.
Report missing values as their own category.	**Different:** Stopped using Gender Estimation R Package Version 0.5.4 in favor of self-reported data only.

Methodology: Overview and Comparison to 2020 (2/2)

DATA COLLECTION AND ANALYSIS PROCESS OVERVIEW

Description	Comparison to 2020
Identify categories for gender and racial/ethnic identity.	**Same:** Combined all types of missing values into one category. In cases where race and ethnicity are asked separately, if Hispanic or Latinx is selected, this designation supersedes the response to the second race/ethnicity question.
Maintain 2020 approach to counting individuals within and across functions.	**Same:** Individuals in multiple subgroups within a function are counted once per function; individuals in multiple functions are counted in each function, but counted once in overall results.
Calculate frequency distributions and trends.	**Different:** Added trends.

APPENDIX B:

DEMOGRAPHIC REPORTING AND ACCOUNTABILITY

SUBGROUPS INCLUDED IN EACH FUNCTION

Description of Appendix Contents

Each table lists the subgroups included in each function, as well as the number of people included in each subgroup in the 2020 and 2021 data. Function totals may not equal the sum of all subgroups. Each person is counted only once per function. Some people may be in multiple subgroups within a function.

Advisory Committees (1/2)

SUBGROUP	2020	2021
National Conference on Lawyers and Scientists (NCLS)	6	14
Committee on Scientific Freedom and Responsibility (CSFR)	14	5
Committee on Science & Technology Engagement with the Public (CoSTEP)	11	13
Committee on Science, Engineering and Public Policy (COSEPP)	12	13
Committee on Opportunities in Science (COOS)	10	9

Advisory Committees (2/2)

SUBGROUP	2020	2021
Annual Meeting Scientific Program Committee	16	15
EPI Center Advisory Board	N/A	9
SciLine Advisory Board	N/A	15
SEA Change Advisory Councils	N/A	7
Total	**74**	**97**

Note: N/A indicates data not included in 2020.

Elected Leadership

SUBGROUP	2020	2021
Board of Directors	15	14
AAAS Council	46	28
Section Leadership: Steering Groups	190	147
Section Leadership: Committee on Nominations	8	8
Electorate Nominating Committee	145	94
Total	**404**	**290**

Staff Leadership

SUBGROUP	2020	2021
Executive Leadership Team	21	25
Total	**21**	**25**

Honors and Awards Selection Committees (1/2)

SUBGROUP	2020	2021
Award for Science Diplomacy	4	5
Award for Scientific Freedom and Responsibility	5	14
Early Career Award for Public Engagement with Science	11	7
Kavali Science Journalism Award	10	10

Honors and Awards Selection Committees (2/2)

SUBGROUP	2020	2021
Mani L. Bhaumik Award for Engagement with Science	11	0
Mentor Awards	6	7
Newcomb Cleveland Winners	35	5
Philip Hauge Abelson Prize	4	10
AAAS/Subaru SB&F Prize for Excellence in Science Books	20	19
Total	**102**	**77**

Honors and Awards Recipients

SUBGROUP	2020	2021
Honorary Fellows, All Active Members (removed for 2021)	0	0
Honorary Fellows, most recent class (2019, 2020)	435	490
2020 Award winners	21	66
Kavali Science Journalism Award	34	39
Total	**489**	**595**

Career Development/Fellowship Program Selection Committees

SUBGROUP	2020	2021
S&T Policy Fellows	86	95
Mass Media Fellows	45	49
Leshner Leadership Fellows	10	10
IF/THEN Ambassadors	110	N/A
Lemelson Invention Ambassadors	11	N/A
L'Oréal USA for Women in Science Fellowships	6	93
News from Science Internships Selection Committee	0	2
Total	**259**	**249**

Notes: N/A: IF/THEN Ambassadors is a two-year program and did not have a selection committee in 2021. The Lemelson Invention Ambassadors program was not held in 2021.

Career Development/Fellowship Program Participants (1/2)

SUBGROUP	2020	2021
S&T Policy Fellows	281	287
Mass Media Fellows	28	29
Leshner Leadership Fellows	12	12
News from Science Internships	2	2
Diverse Voices	2	6

Career Development/Fellowship Program Participants (2/2)

SUBGROUP	2020	2021
IF/THEN Ambassadors	125	125
Catalyzing Advocacy in Science and Engineering (CASE) Workshop Participants	173	N/A
LemEleson Invention Ambassadors	40	N/A
L'Oréal USA for Women in Science Fellowships	5	5
AAAS/Subaru – book award authors	0	2
Total	**667**	**478**

Notes: N/A indicates program was not held in 2021.

Speakers and Presenters at Major AAAS Events (1/2)

SUBGROUP	2020	2021
Annual Meeting Speakers	625	764
S&T Policy Forum Speakers	56	38
ERN Speakers	159	3
Noyce Summit Keynote Speakers	6	13
S-STEM Symposium Speakers	0	7

Speakers and Presenters at Major AAAS Events (2/2)

SUBGROUP	2020	2021
HBCU Making and Innovation Showcase and HBCU Innovation Technology Meeting	0	17
Riley Memorial Lecture Speakers	0	6
IUSE Speakers	0	8
IUSE Workshop Presenters	0	12
IUSE Blog Authors	0	12
Total	**844**	**877**

AAAS Program Volunteers

SUBGROUP	2020	2021
Scientists Engaged by SciLine	1,982*	844
On-call Scientists	1,495	1,555
STEM Volunteers	204	217
Total	**3,676**	**2,615**

*Note: Includes data from years prior to and including 2020.

Science Family Editors and Advisors

SUBGROUP	2020	2021
Professional Editors	47	52
Academic Editors	279	339
Advisors	397	394
Total	**720**	**782**

Science Family Authors and Reviewers

SUBGROUP	2020	2021
Science Family of Journals: Reviewers	16,734	16,771
Science Family of Journals: Commentary Authors	1,133	2,560
Science Family of Journals: Research Paper Authors	33,453	39,883
Science Family of Journals: Review Authors	518	721
Total	**49,316**	**56,946**

APPENDIX C:

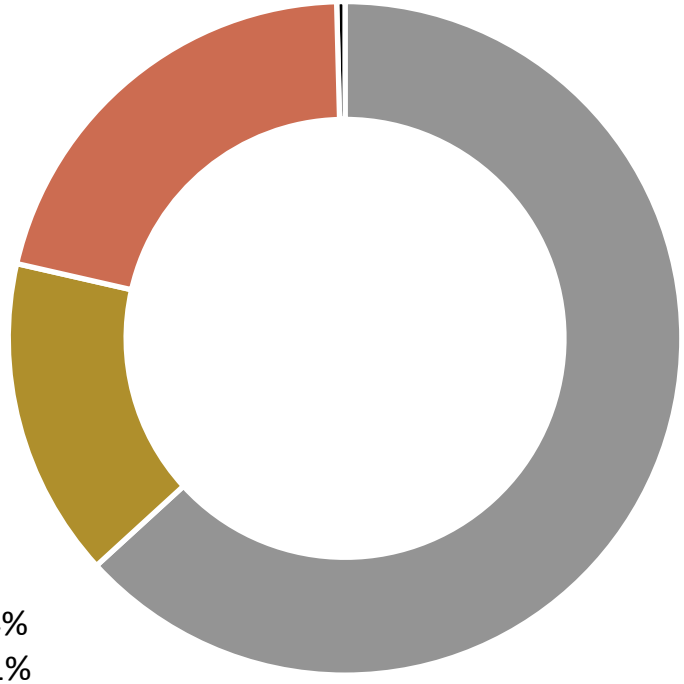
DEMOGRAPHIC REPRESENTATION IN EACH FUNCTION

DETAILED RESULTS

2021 Demographic Representation Overview

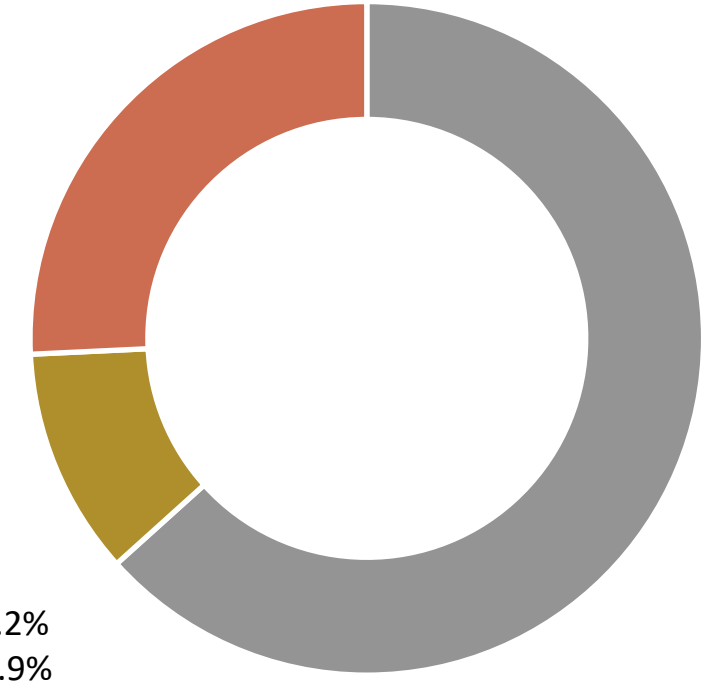
Gender Identities

AAAS/*Science* Functions (N=5,261)



- Missing: 63.4%
- Women: 21.1%
- Men: 15.4%
- Nonbinary/Self-identify: <1%

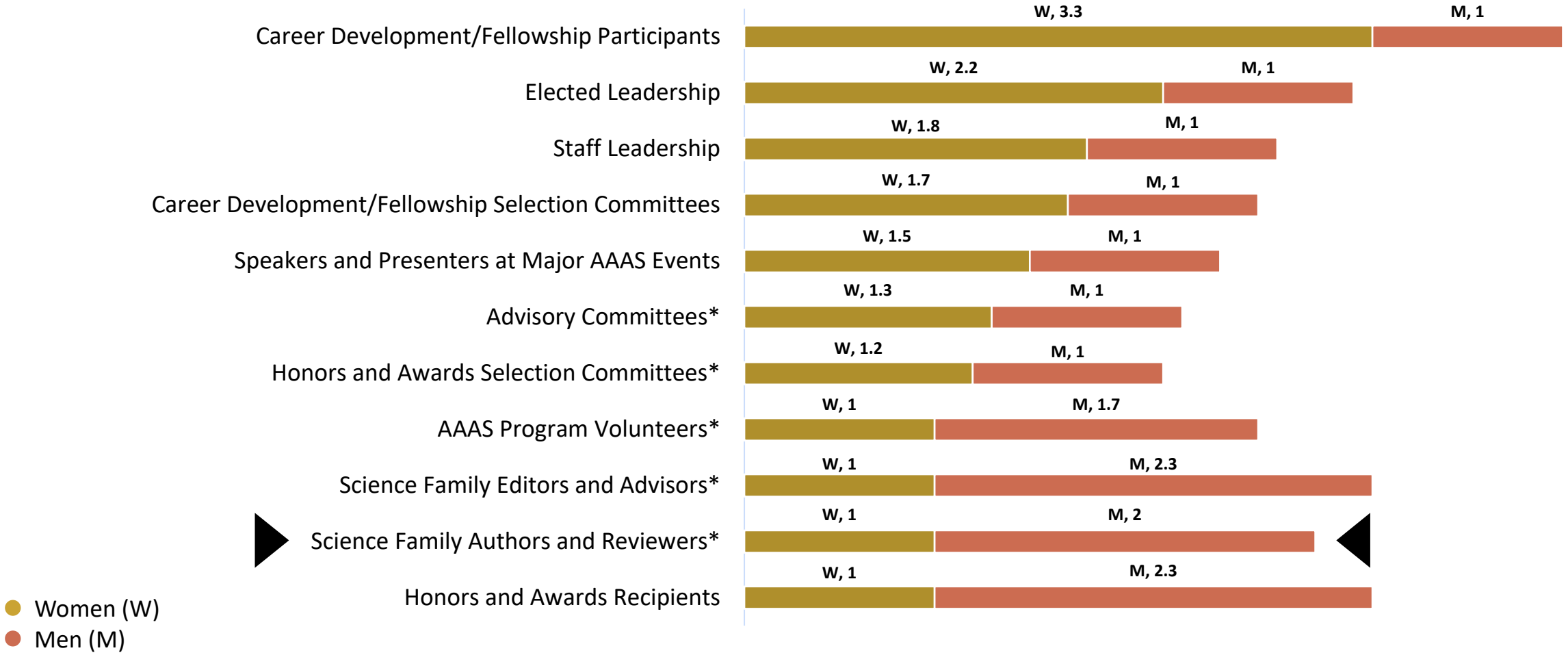
Science Family Authors and Reviewers (N=56,946)



- Missing: 63.2%
- Women: 10.9%
- Men: 25.7%
- Nonbinary/Self-identify: <1%

2021 Demographic Representation Overview

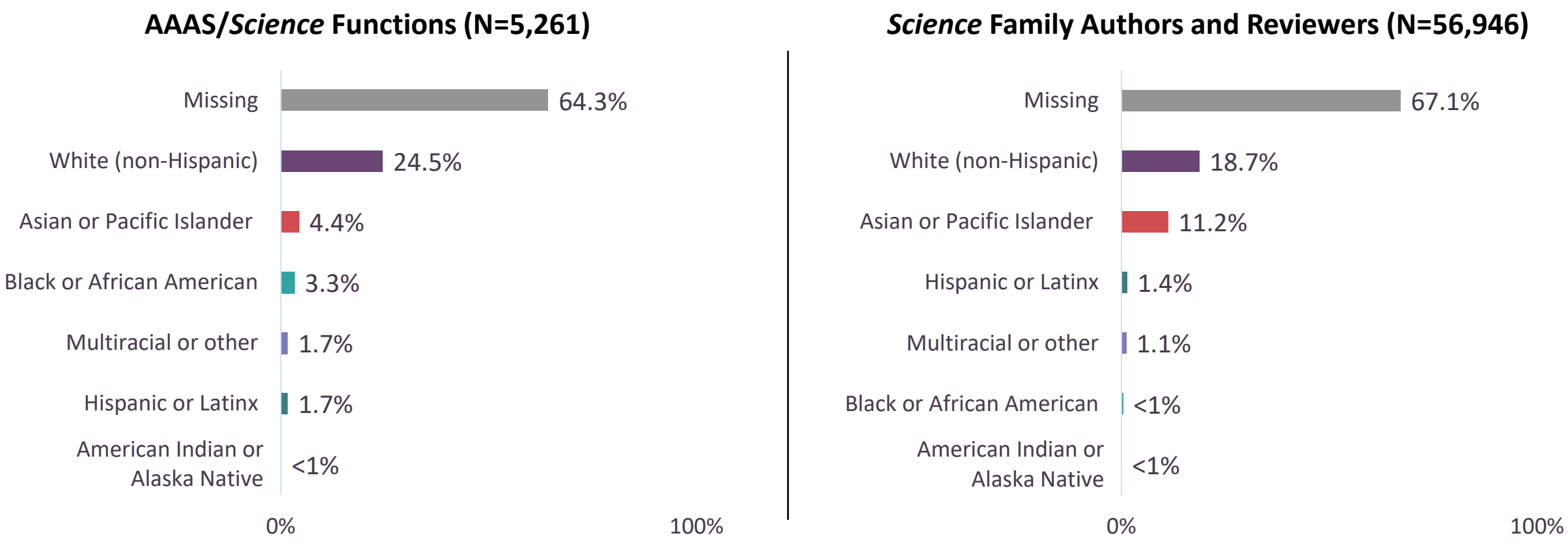
Ratios of Gender Identities



Notes: Each bar presents the ratio of men to women, with available data. For example, the top bar shows that women outnumber men 3.3:1 among Career Development/Fellowship Participants. *Interpret with caution; data coverage <50%.

2021 Demographic Representation Overview

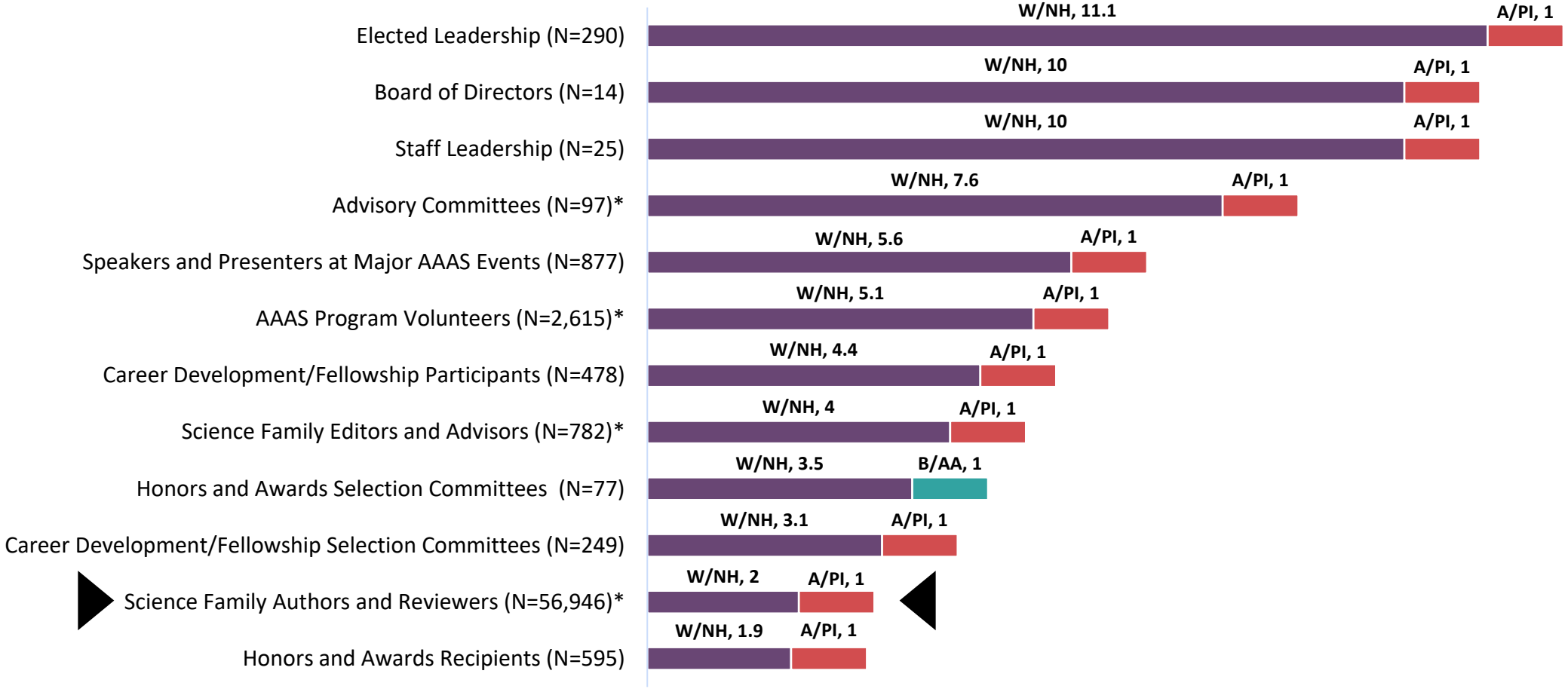
Racial/Ethnic Identities



Notes: Missing data includes both people who declined to respond and people from whom data was not collected. Due to rounding, percentages may not sum to 100.

2021 Demographic Representation Overview

Ratios of Racial/Ethnic Identities

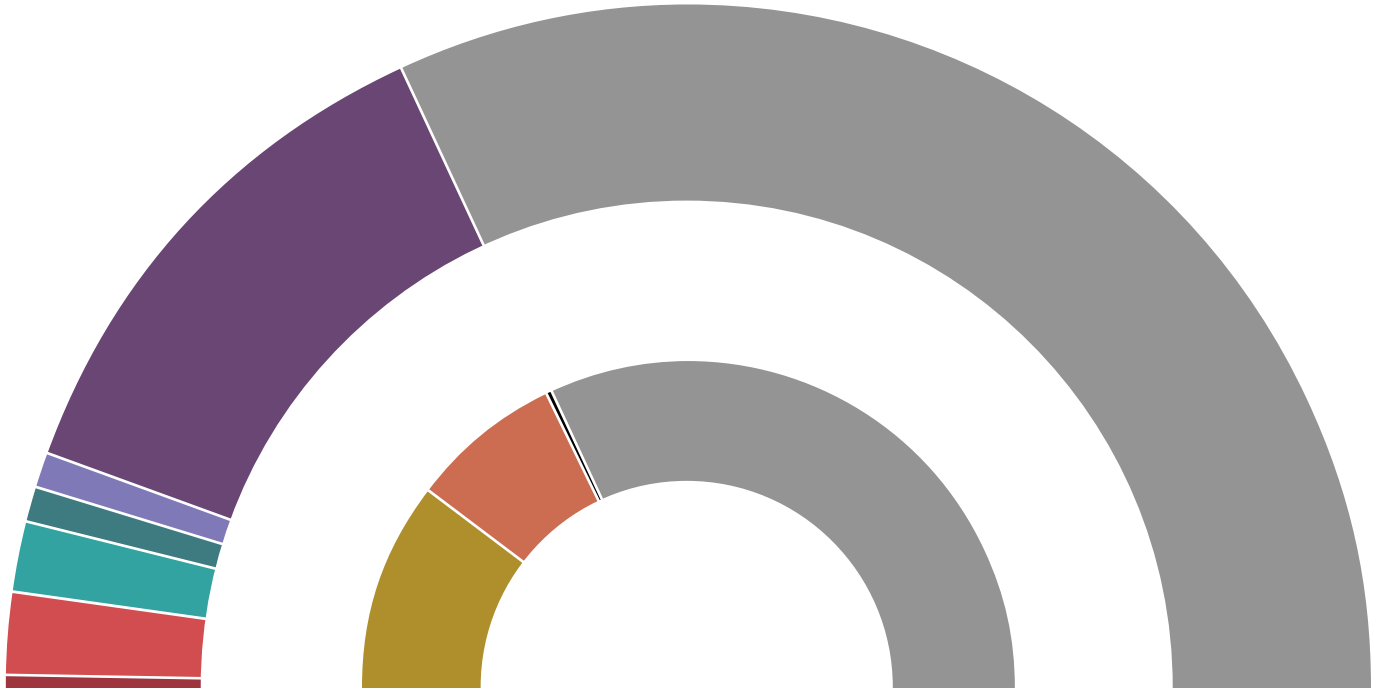


Notes: Each bar presents the ratio of people who identify as White (non-Hispanic) to the second-most-prominent racial/ethnic identity, with available data. For example, the top bar shows that people who identify as White (non-Hispanic) outnumber people who identify as Asian or Pacific Islander by 11.1:1 among Elected Leadership. *Interpret with caution; data coverage <50%.

2021 AAAS/*Science* Functions (N=5,261)

RACIAL / ETHNIC IDENTITY

- **<1.0%** American Indian or Alaska Native
- **4.4%** Asian or Pacific Islander
- **3.3%** Black or African American
- **1.7%** Hispanic or Latinx
- **1.8%** Multiracial or other
- **24.5%** White (non-Hispanic)
- **64.2%** Missing



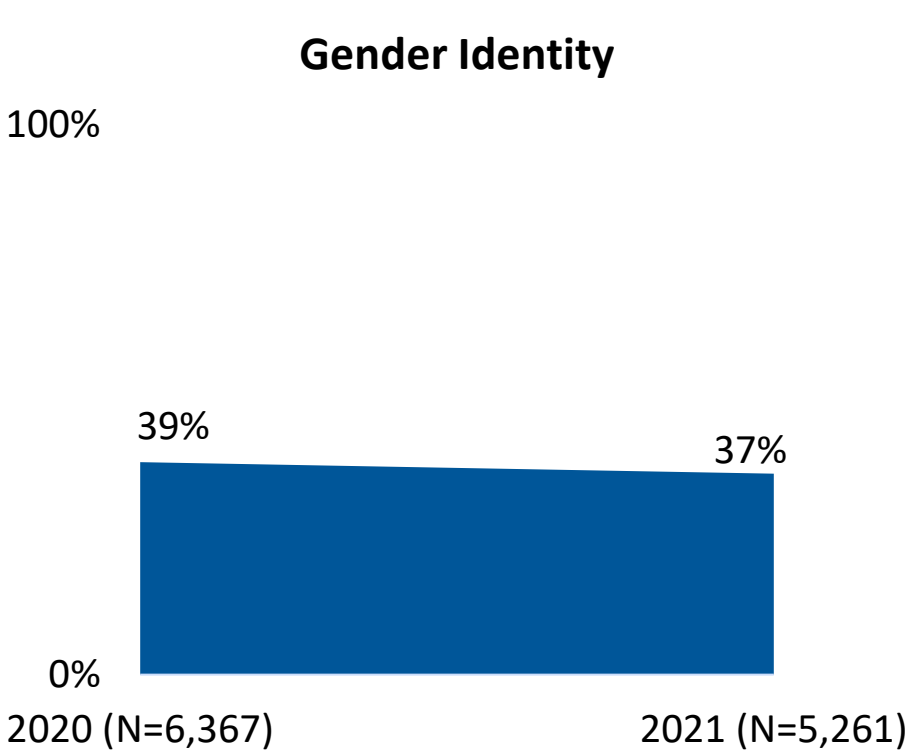
GENDER IDENTITY

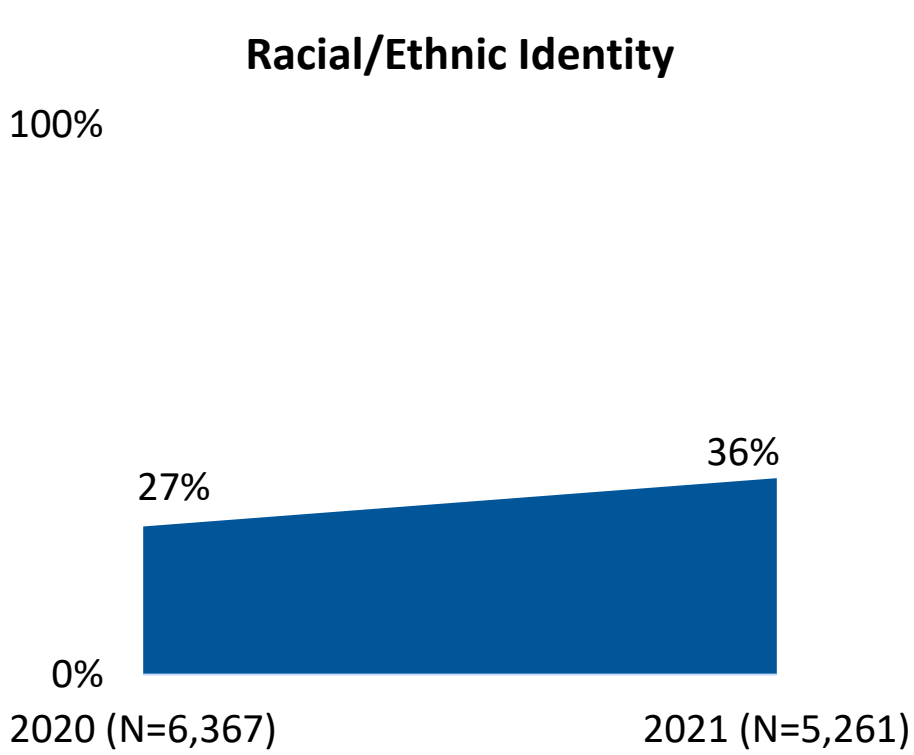
- **21.1%** Women
- **15.4%** Men
- **<1.0%** Nonbinary/ Self-identify
- **63.4%** Missing

AAAS/*Science* Functions

Trends in Data Coverage

Some functions experienced a decrease in coverage for gender identity due to the addition of subgroups without self-reported data, stricter adherence to guideline requiring self-reported data, and decreased response due to the pandemic.

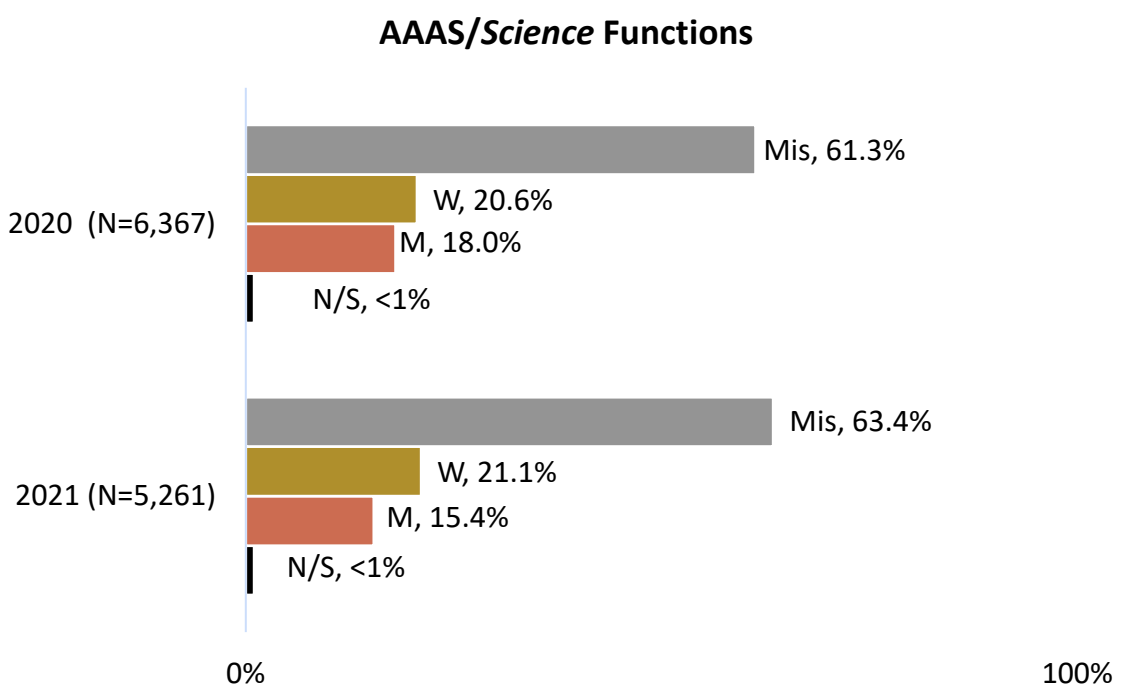


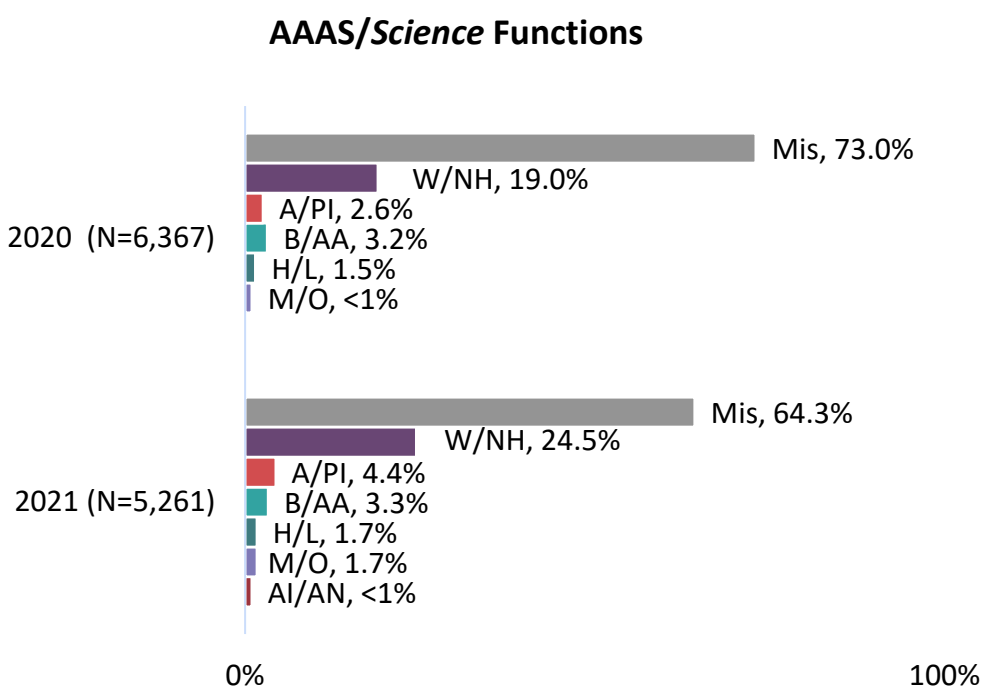


AAAS/*Science* Functions

Trends in Representation

Change of second-most-prominent racial/ethnic identity from Black or African American to Asian or Pacific Islander is likely due to improved data coverage (i.e., improved accuracy). This may continue to shift as we continue to improve data coverage.





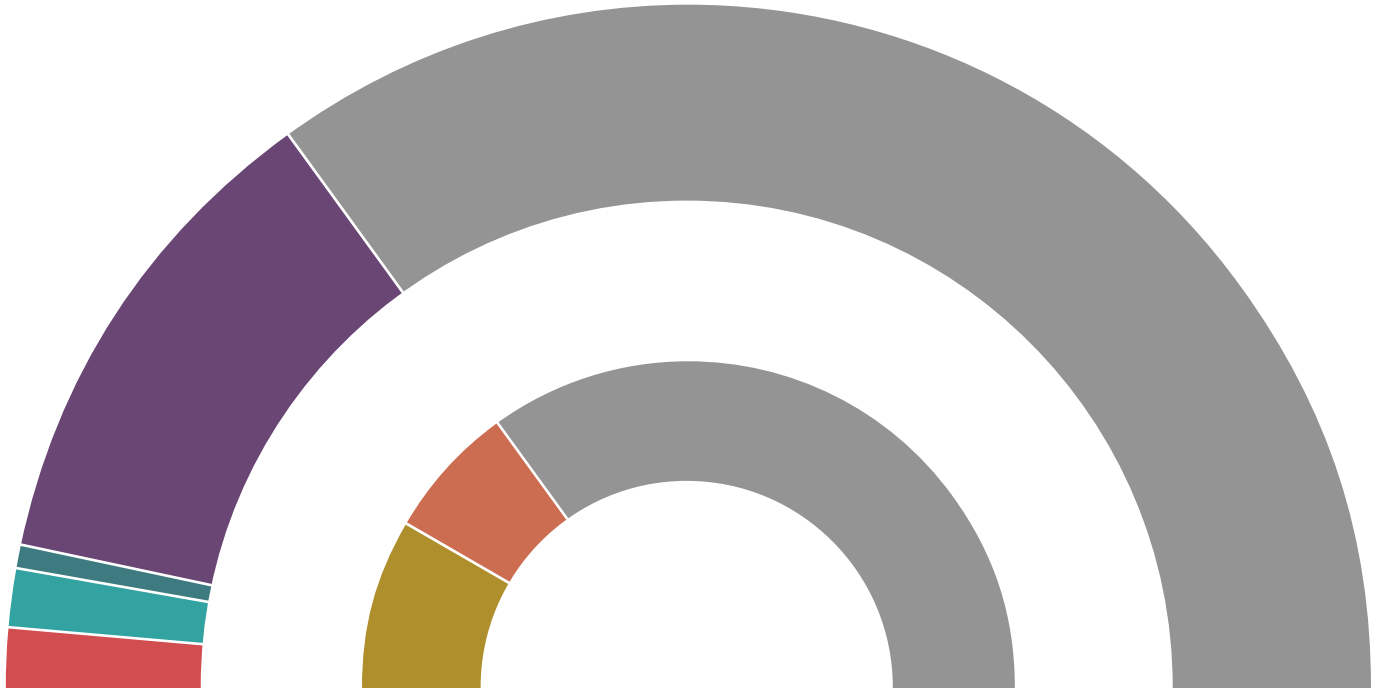
- Women (W)
- Men (M)
- Nonbinary/Self-identify (N/S)
- Missing (Mis)
- American Indian or Alaska Native (AI/AN)
- Asian or Pacific Islander (A/PI)
- Black or African American (B/AA)
- Hispanic or Latinx (H/L)
- Multiracial or other (M/O)
- White (non-Hispanic) (W/NH)

Notes: Missing data includes both people who declined to respond and people from whom data was not collected. Due to rounding, percentages may not sum to 100.

2021 Advisory Committees (N=97)

RACIAL / ETHNIC IDENTITY

- **0.0%** American Indian or Alaska Native
- **3.1%** Asian or Pacific Islander
- **3.1%** Black or African American
- **1.0%** Hispanic or Latinx
- **0.0%** Multiracial or other
- **23.7%** White (non-Hispanic)
- **69.1%** Missing



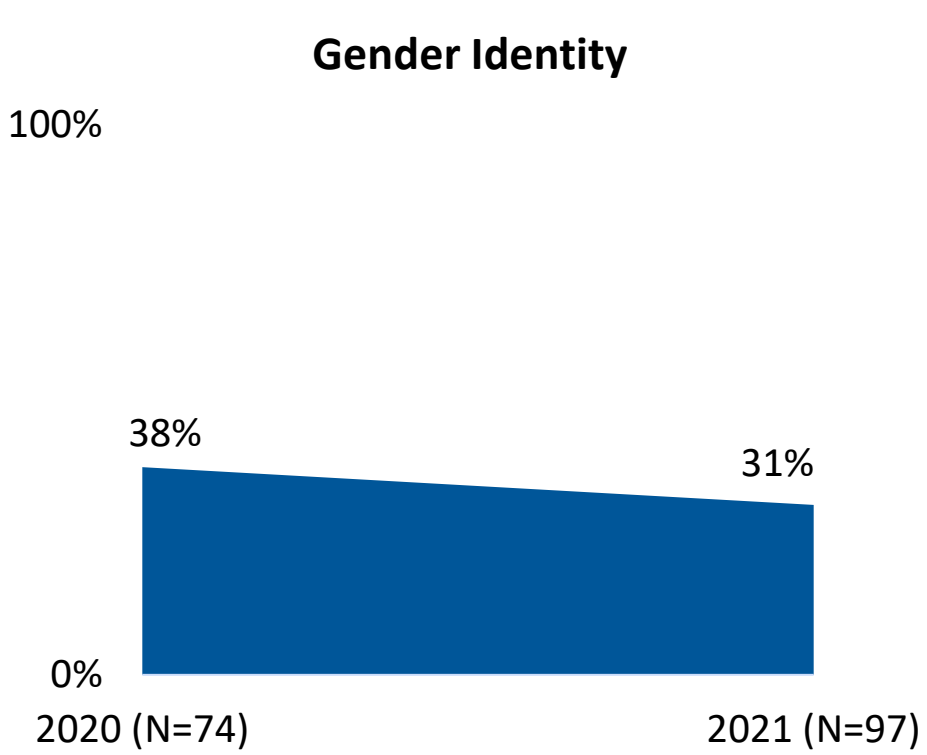
GENDER IDENTITY

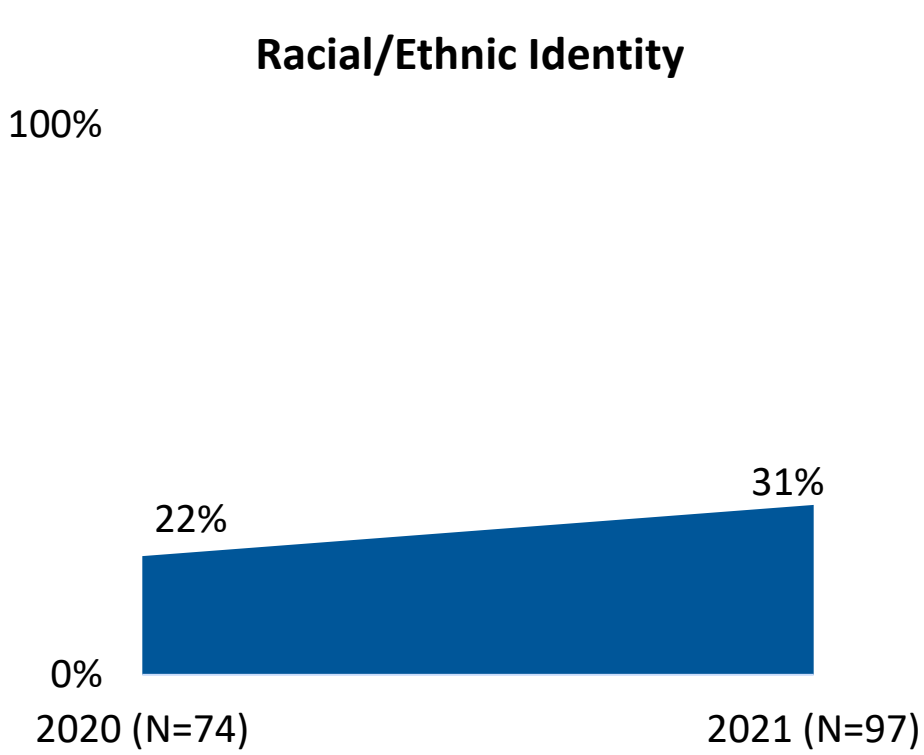
- **17.5%** Women
- **13.4%** Men
- **0.0%** Nonbinary/ Self-identify
- **69.1%** Missing

Advisory Committees

Trends in Data Coverage

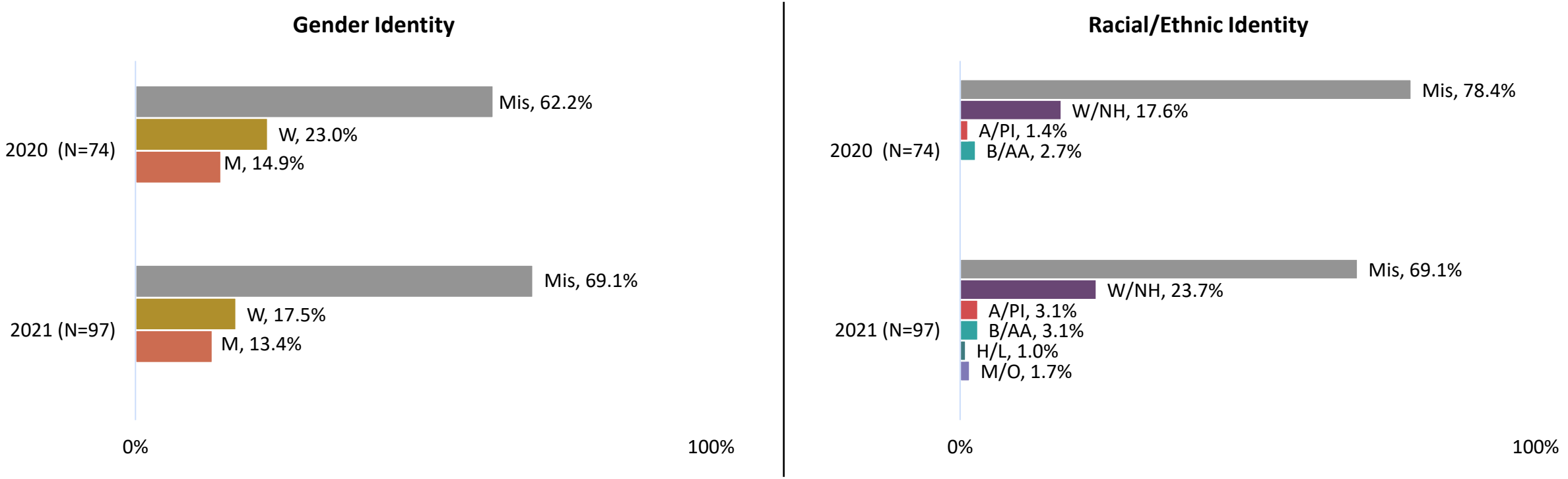
Composition of the Advisory Committee's function changed to include three additional subgroups, none of which had self-reported gender or racial/ethnic identity. The other subgroups increased coverage for racial/ethnic identity but not gender identity from 2020 to 2021. Thus, we see a slight decrease in coverage for gender identity, and a slight increase in coverage for racial/ethnic identity for this function.





Advisory Committees

Trends in Representation



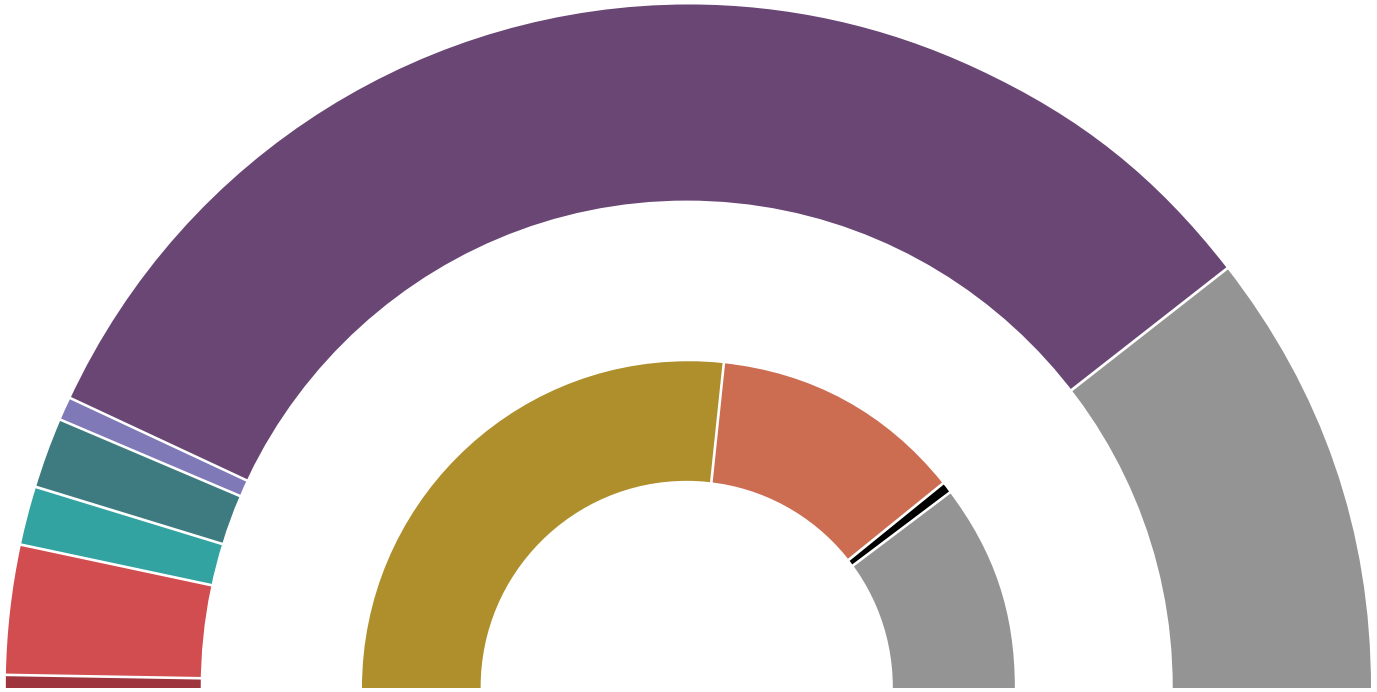
- Women (W)
- Men (M)
- Nonbinary/Self-identify (N/S)
- Missing (Mis)
- American Indian or Alaska Native (AI/AN)
- Asian or Pacific Islander (A/PI)
- Black or African American (B/AA)
- Hispanic or Latinx (H/L)
- Multiracial or other (M/O)
- White (non-Hispanic) (W/NH)

Notes: Missing data includes both people who declined to respond and people from whom data was not collected. Due to rounding, percentages may not sum to 100.

2021 AAAS Elected Leadership (N=290)

RACIAL / ETHNIC IDENTITY

- **<1.0%** American Indian or Alaska Native
- **5.9%** Asian or Pacific Islander
- **2.8%** Black or African American
- **3.4%** Hispanic or Latinx
- **1.4%** Multiracial or other
- **65.5%** White (non-Hispanic)
- **20.7%** Missing

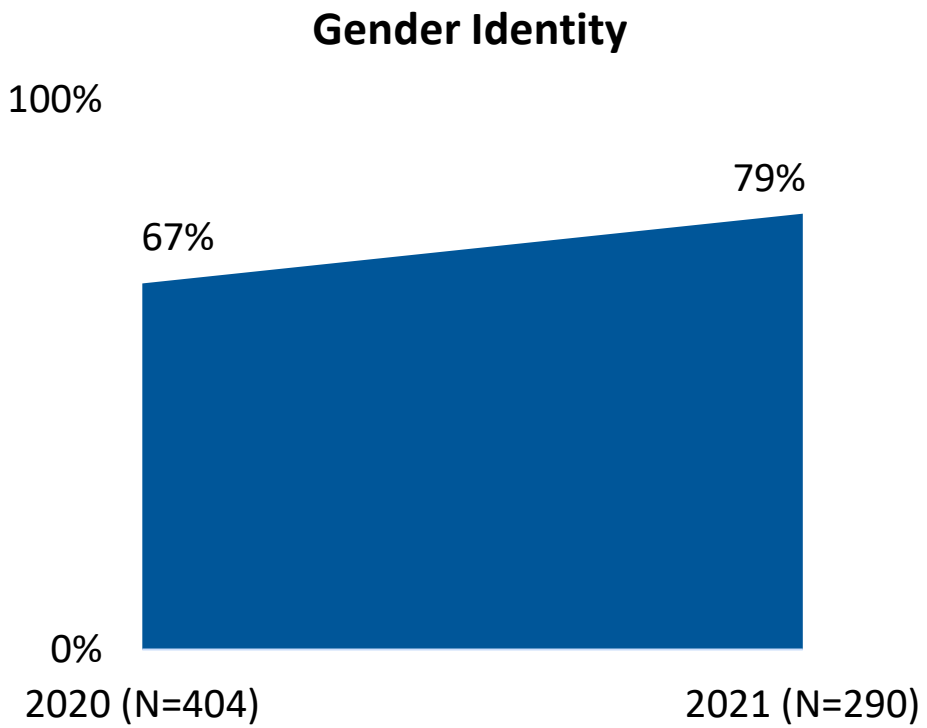


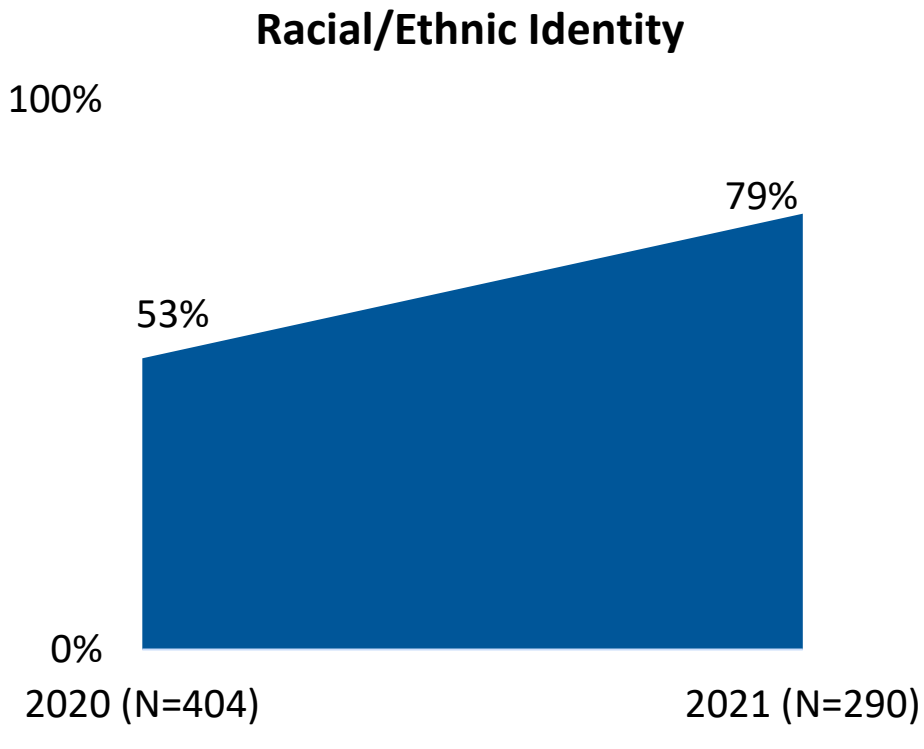
GENDER IDENTITY

- **54.1%** Women
- **24.8%** Men
- **<1.0%** Nonbinary/ Self-identify
- **20.7%** Missing

AAAS Elected Leadership

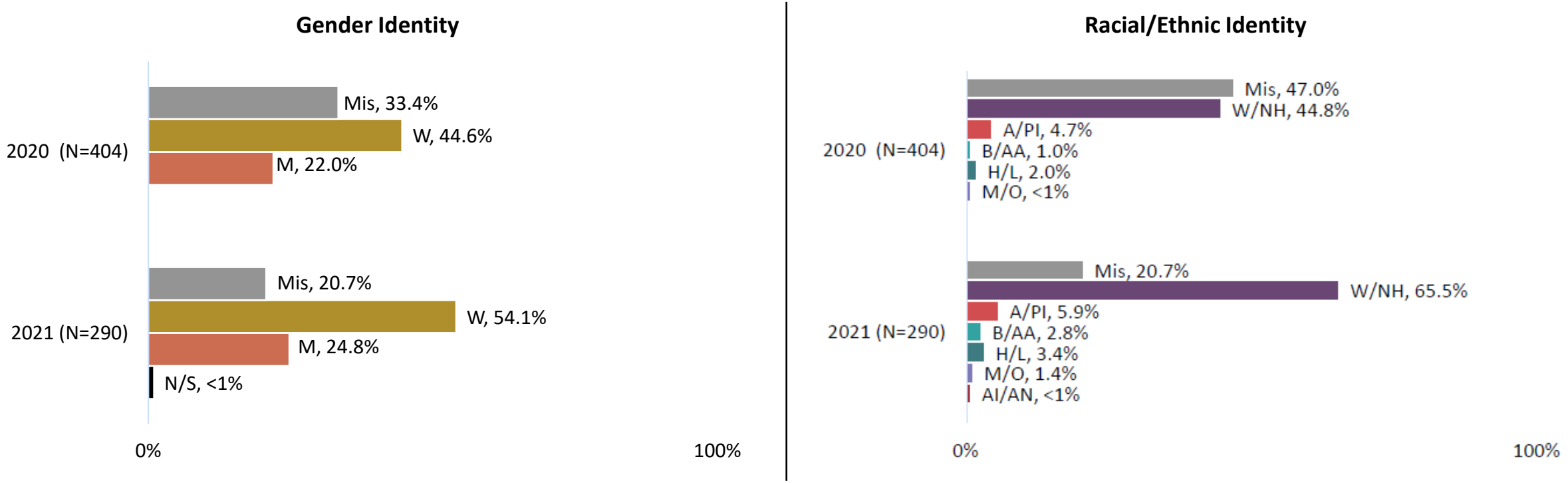
Trends in Data Coverage





AAAS Elected Leadership

Trends in Representation



- Women (W)
- Men (M)
- Nonbinary/Self-identify (N/S)
- Missing (Mis)
- American Indian or Alaska Native (AI/AN)
- Asian or Pacific Islander (A/PI)
- Black or African American (B/AA)
- Hispanic or Latinx (H/L)
- Multiracial or other (M/O)
- White (non-Hispanic) (W/NH)

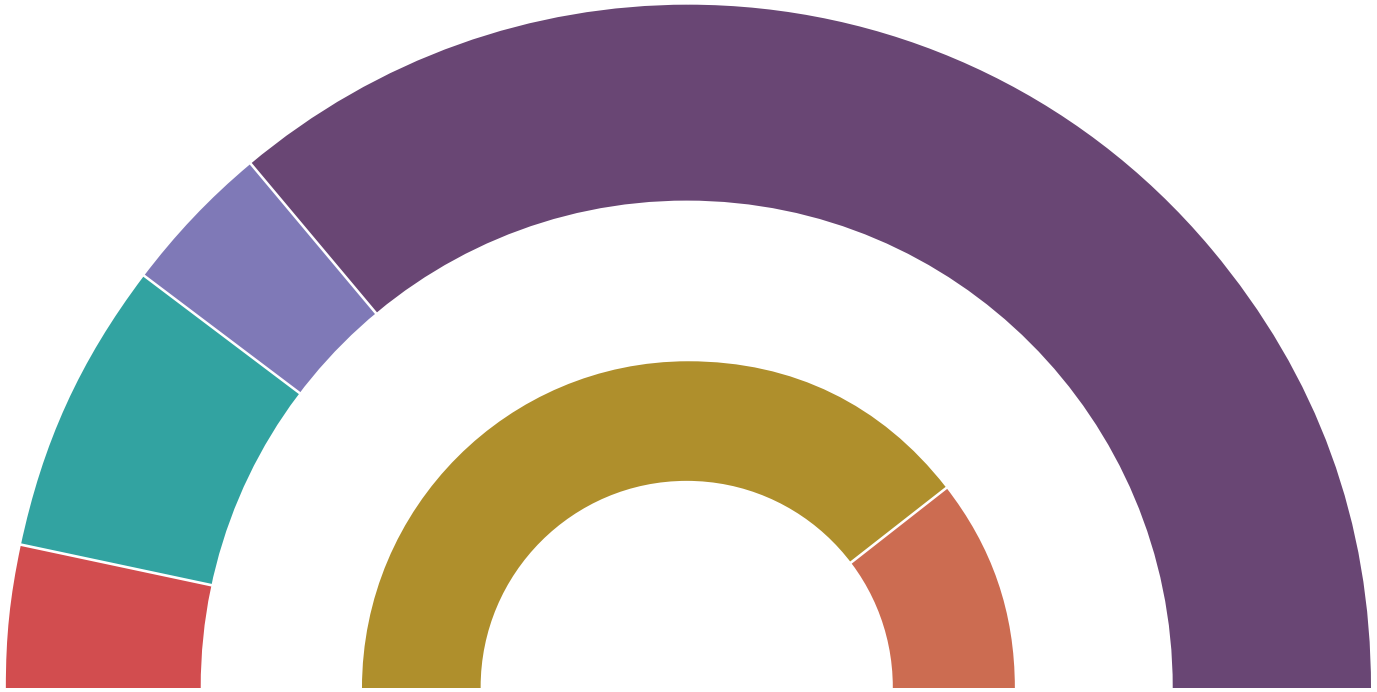
Note: Due to rounding, percentages may not sum to 100.

2021 Elected Leadership

Board of Directors (N=14)

RACIAL / ETHNIC IDENTITY

- **0.0%** American Indian or Alaska Native
- **7.1%** Asian or Pacific Islander
- **14.3%** Black or African American
- **0.0%** Hispanic or Latinx
- **7.1%** Multiracial or other
- **71.4%** White (non-Hispanic)
- **0.0%** Missing

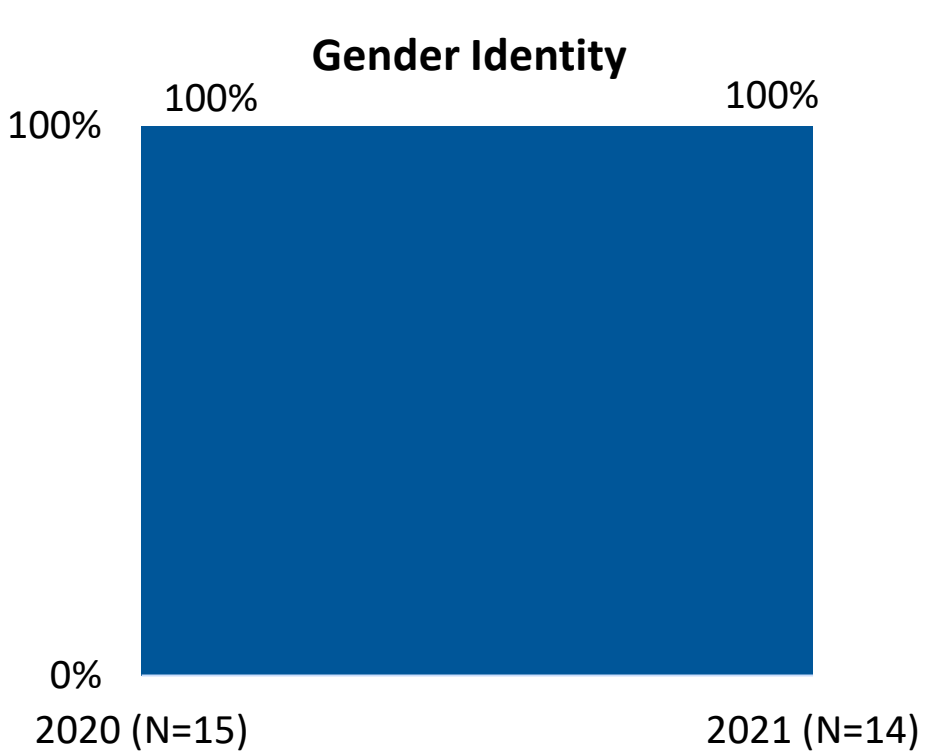


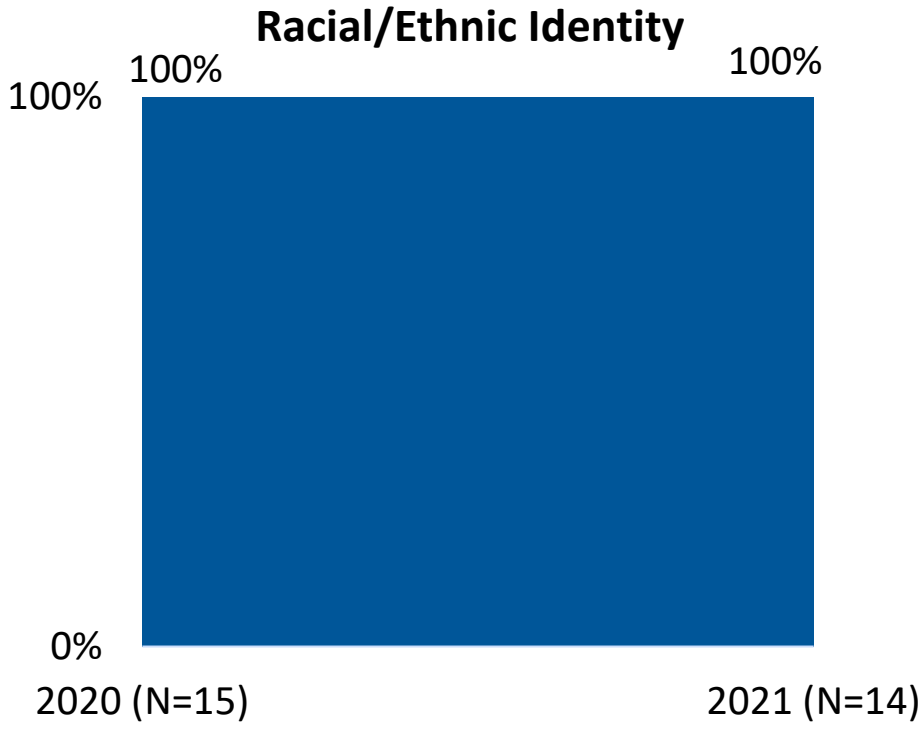
GENDER IDENTITY

- **78.6%** Women
- **21.4%** Men
- **0.0%** Nonbinary/ Self-identify
- **0.0%** Missing

2021 Elected Leadership

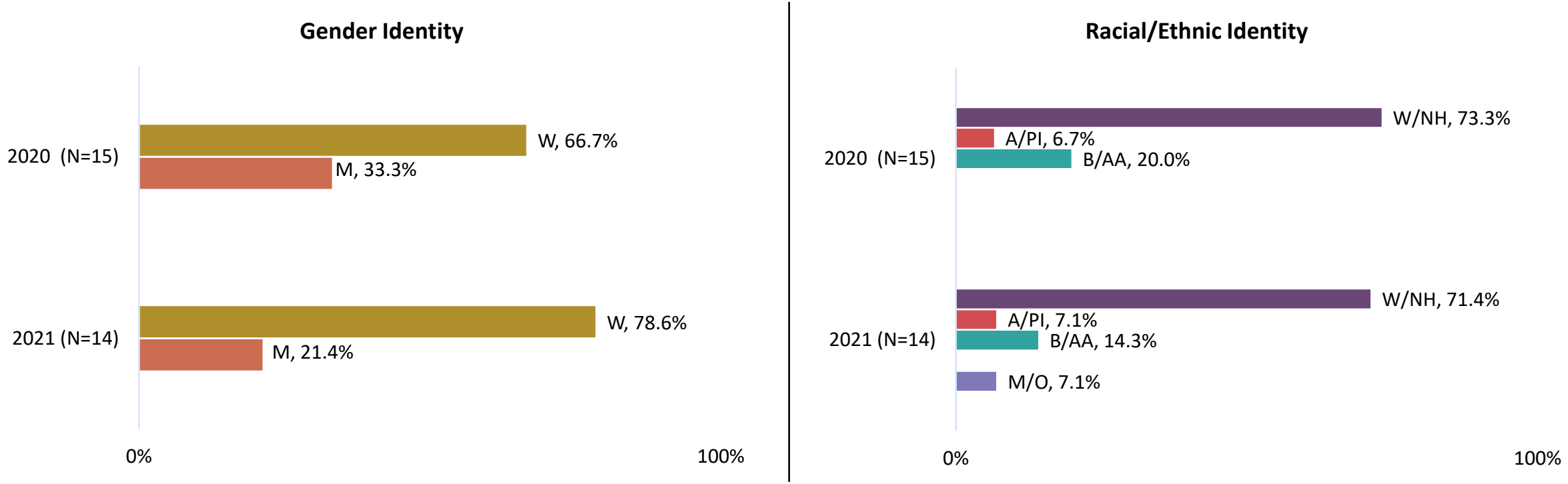
Board of Directors (N=14): Trends in Data Coverage





2021 Elected Leadership

Board of Directors: Trends in Representation



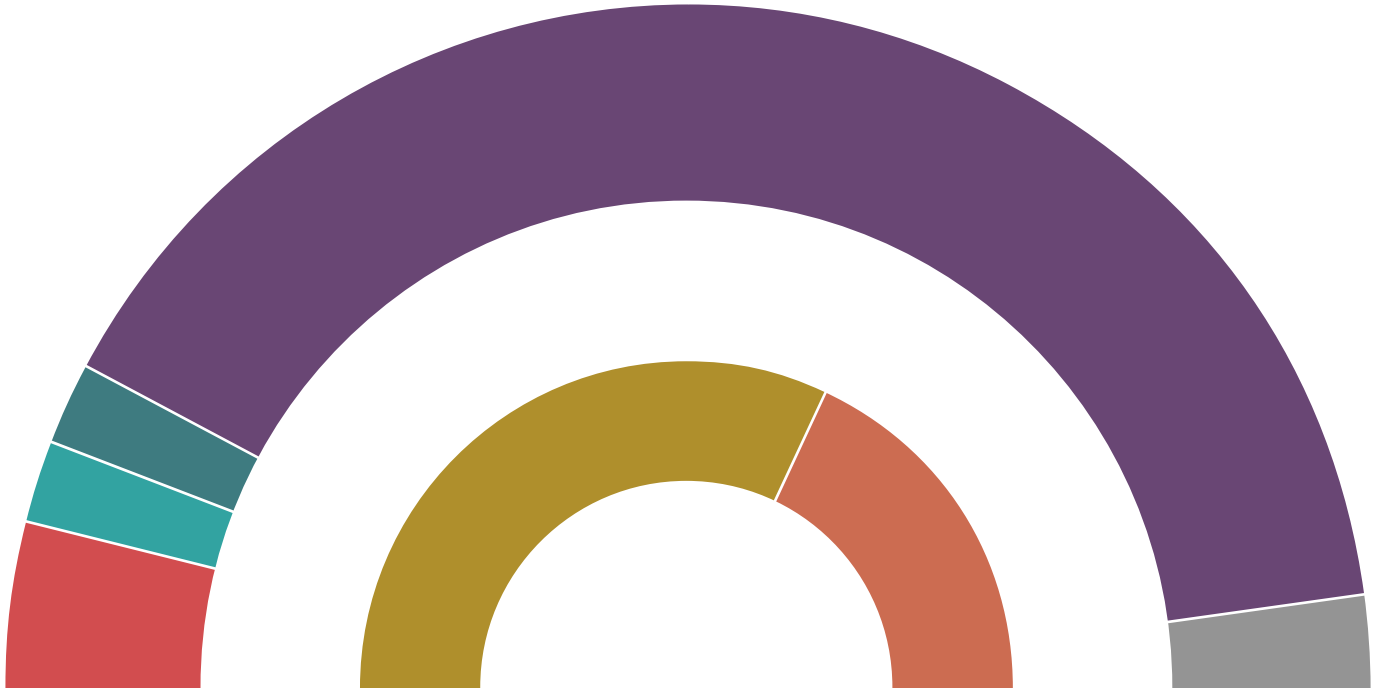
- Women (W)
- Men (M)
- Nonbinary/Self-identify (N/S)
- Missing (Mis)
- American Indian or Alaska Native (AI/AN)
- Asian or Pacific Islander (A/PI)
- Black or African American (B/AA)
- Hispanic or Latinx (H/L)
- Multiracial or other (M/O)
- White (non-Hispanic) (W/NH)

Notes: Missing data includes both people who declined to respond and people from whom data was not collected. Due to rounding, percentages may not sum to 100.

AAAS Staff Leadership (N=25)

RACIAL / ETHNIC IDENTITY

- 0.0% American Indian or Alaska Native
- 8.0% Asian or Pacific Islander
- 4.0% Black or African American
- 4.0% Hispanic or Latinx
- 0.0%% Multiracial or other
- 80.0% White (non-Hispanic)
- 4.0% Missing

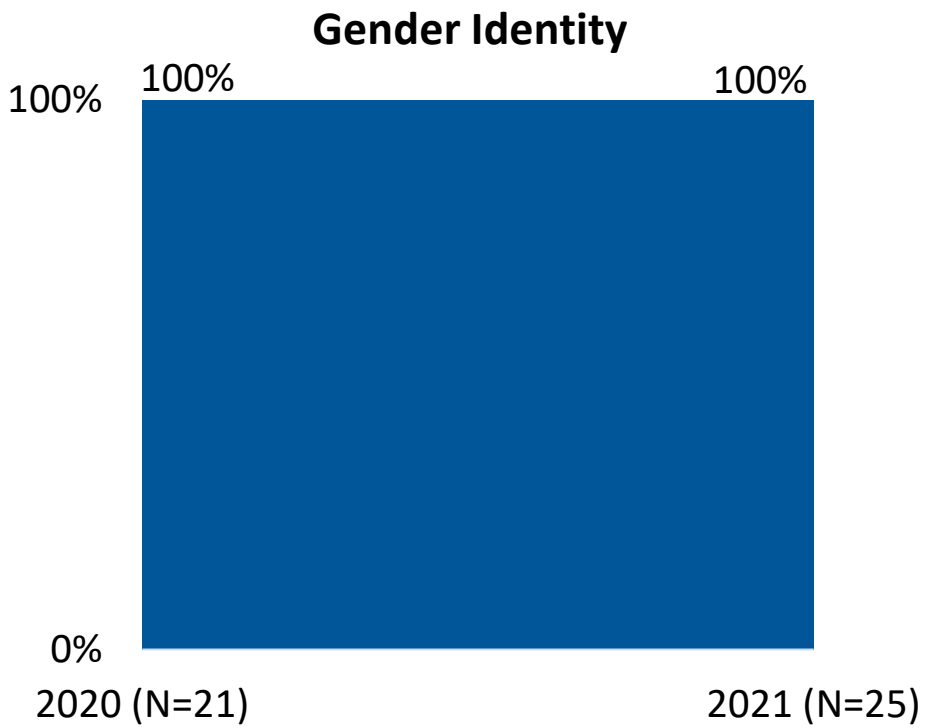


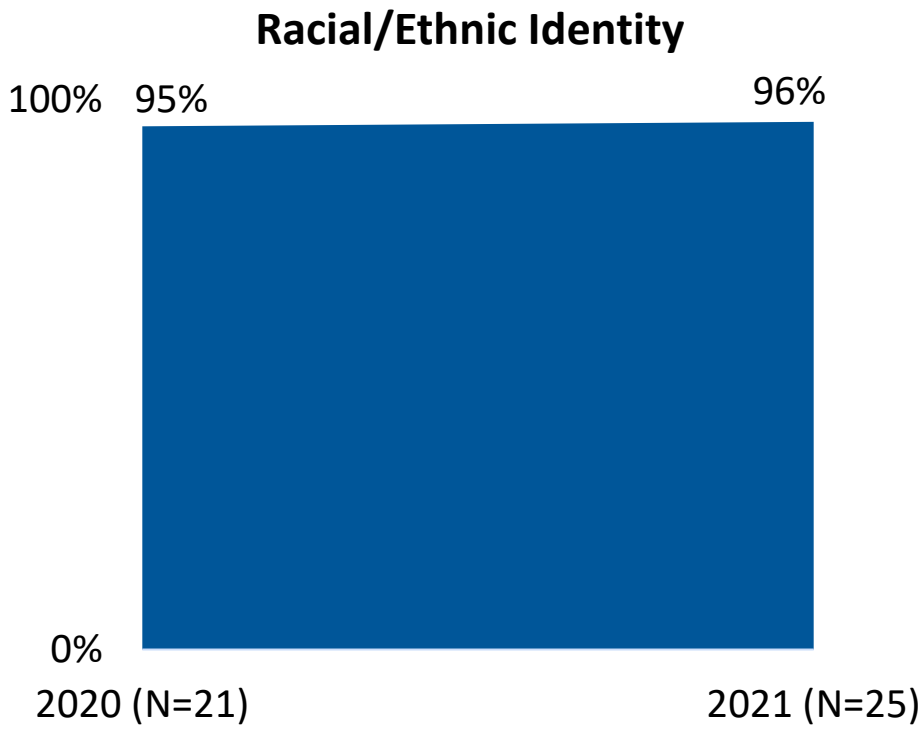
GENDER IDENTITY

- 64.0% Women
- 36.0% Men
- 0.0% Nonbinary/ Self-identify
- 0.0% Missing

AAAS Staff Leadership

Trends in Data Coverage

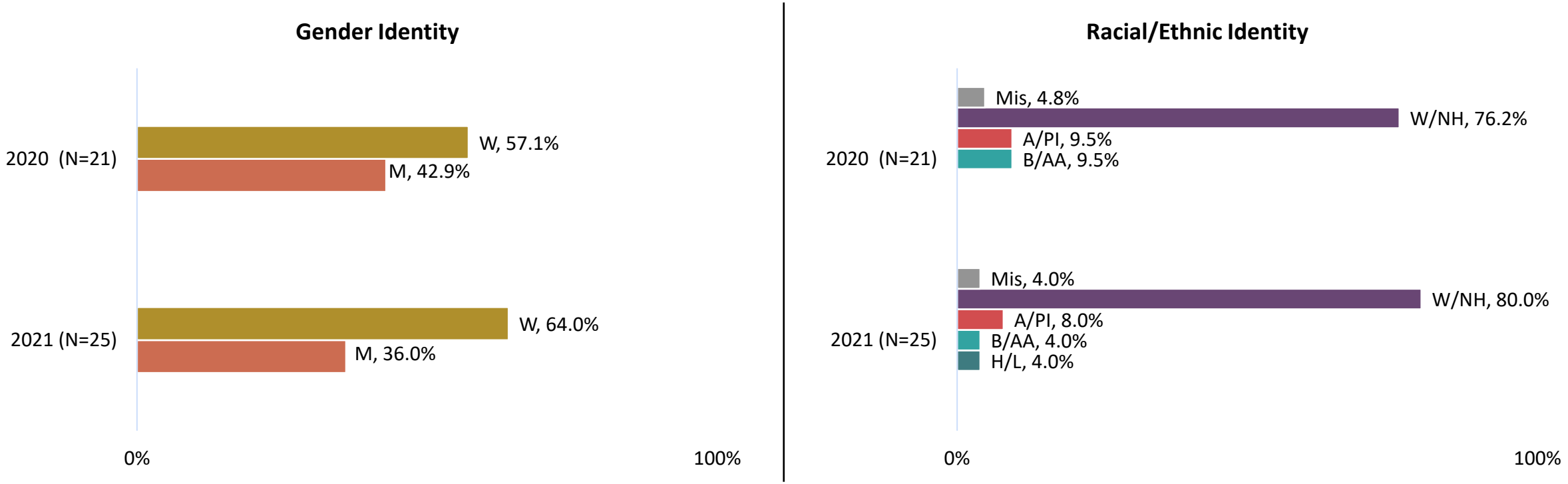




AAAS Staff Leadership

Trends in Representation

Data coverage is 100% for both years; thus, increased representation of people who identify as White (non-Hispanic) among Staff Leadership is likely an actual shift in demographic representation.

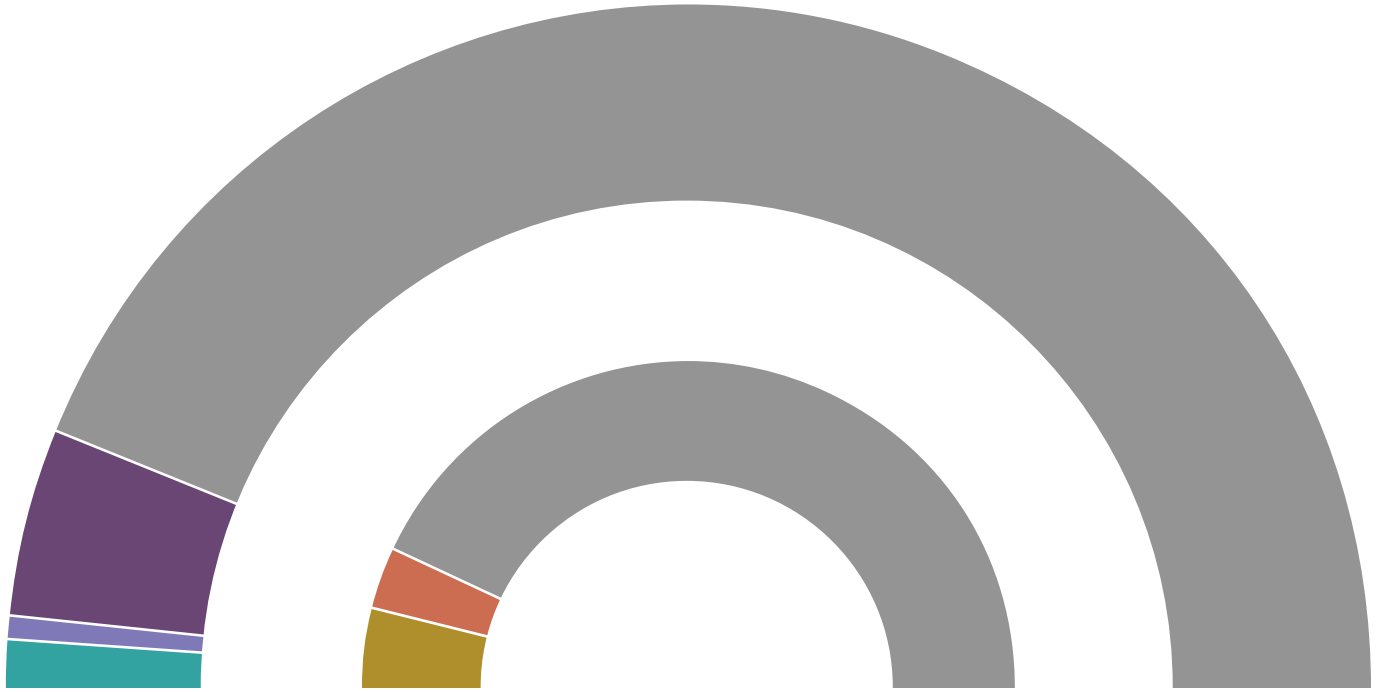


Note: Due to rounding, percentages may not sum to 100.

2021 Honors and Awards Selection Committees (N=77)

RACIAL / ETHNIC IDENTITY

- **0.0%** American Indian or Alaska Native
- **0.0%** Asian or Pacific Islander
- **2.6%** Black or African American
- **0.0%** Hispanic or Latinx
- **1.3%** Multiracial or other
- **9.1%** White (non-Hispanic)
- **87.0%** Missing



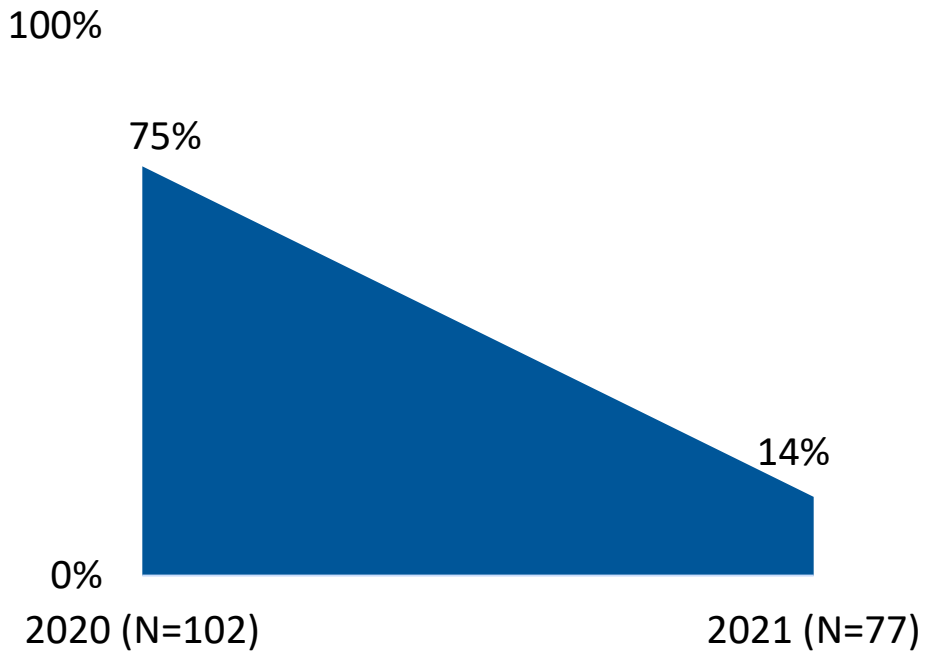
GENDER IDENTITY

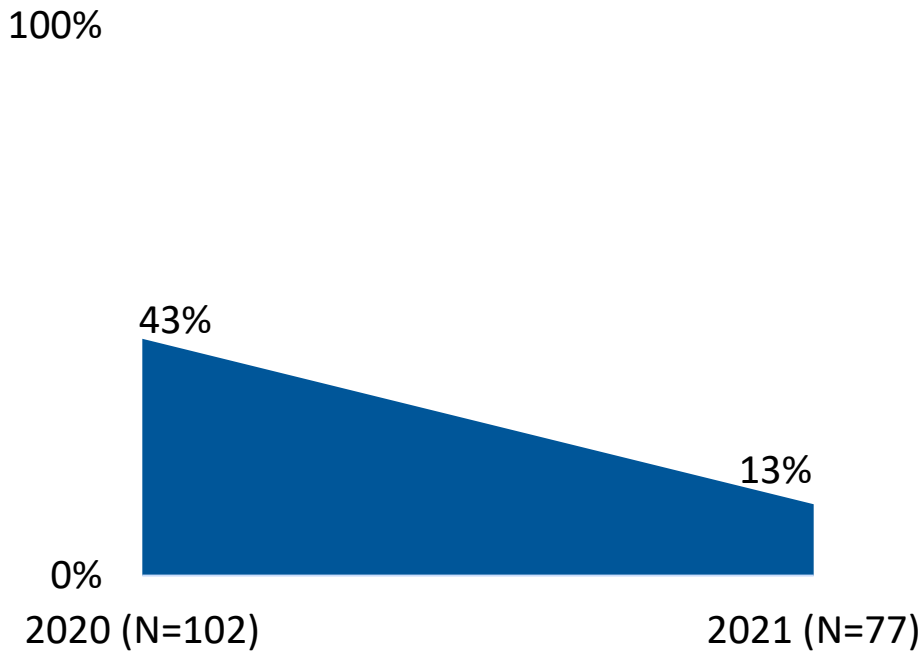
- **7.8%** Women
- **6.5%** Men
- **0.0%** Nonbinary/ Self-identify
- **85.7%** Missing

Honors and Awards Selection Committees

Trends in Data Coverage

Decreased data coverage for Honors and Awards Selections Committees is likely due to a stricter adherence to guidelines requiring use of only self-reported data in 2021.

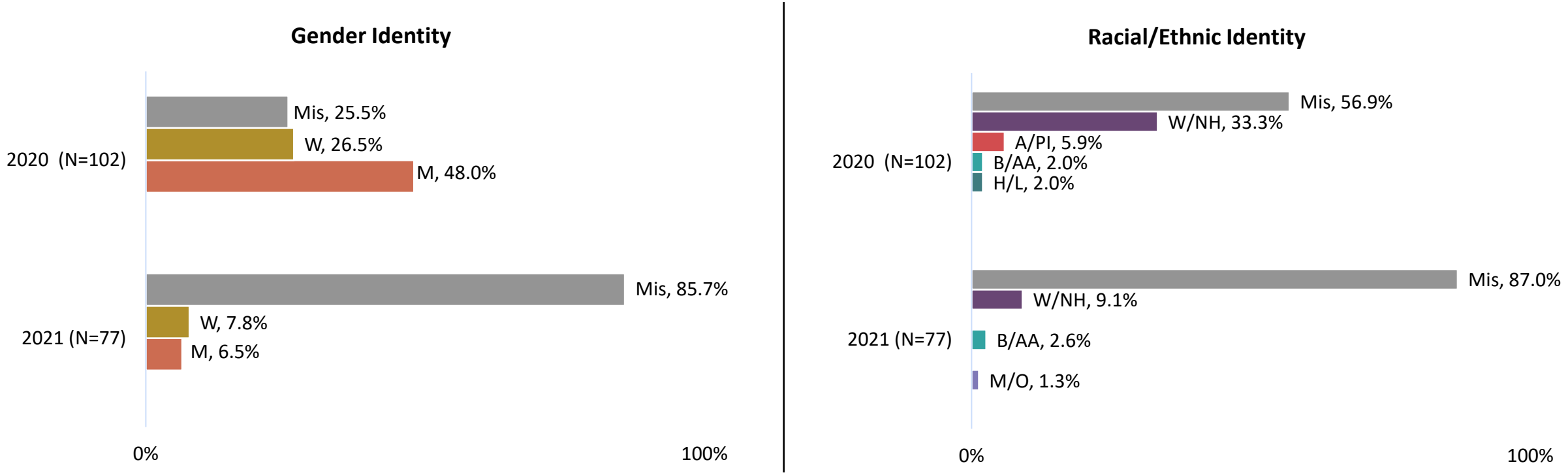




Honors and Awards Selection Committees

Trends in Representation

The extent of missing data makes it challenging to interpret any apparent shifts in demographic representation.



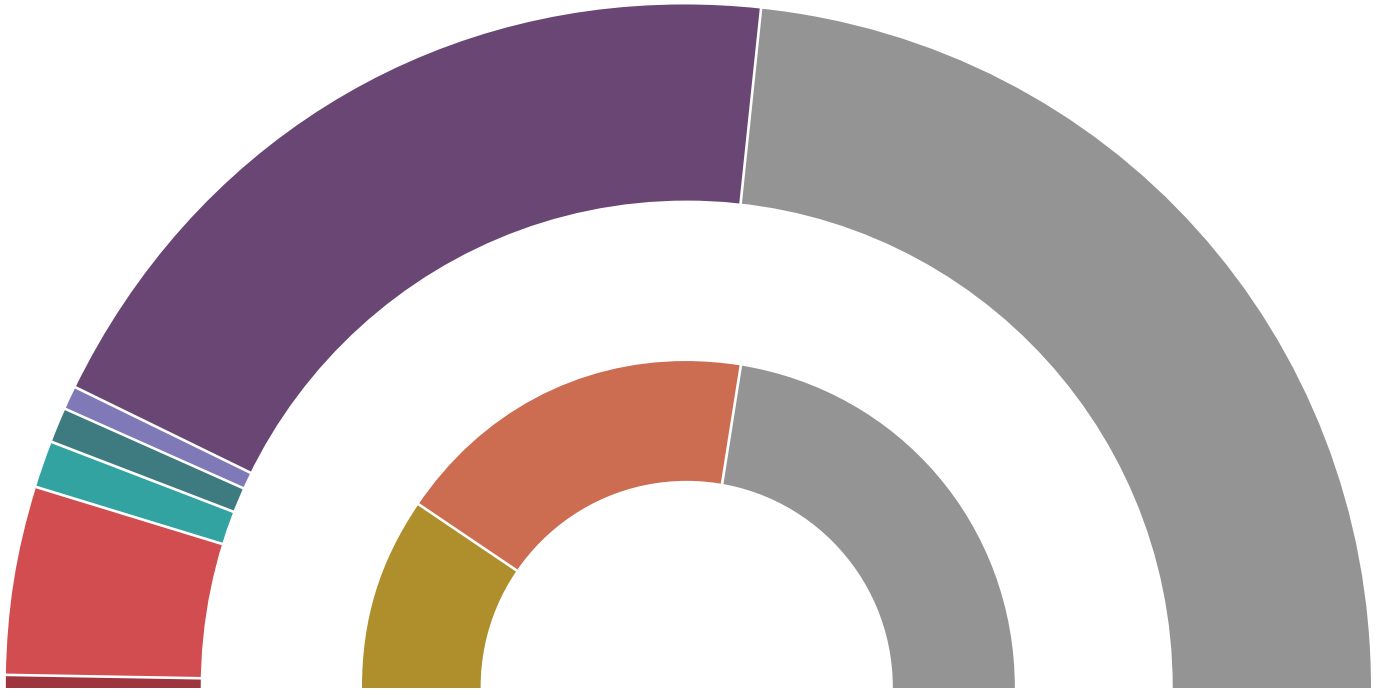
- Women (W)
- Men (M)
- Nonbinary/Self-identify (N/S)
- Missing (Mis)
- American Indian or Alaska Native (AI/AN)
- Asian or Pacific Islander (A/PI)
- Black or African American (B/AA)
- Hispanic or Latinx (H/L)
- Multiracial or other (M/O)
- White (non-Hispanic) (W/NH)

Notes: Missing data includes both people who declined to respond and people from whom data was not collected. Due to rounding, percentages may not sum to 100.

2021 Honors and Awards Recipients (N=595)

RACIAL / ETHNIC IDENTITY

- **<1.0%** American Indian or Alaska Native
- **9.4%** Asian or Pacific Islander
- **2.0%** Black or African American
- **1.8%** Hispanic or Latinx
- **1.2%** Multiracial or other
- **39.0%** White (non-Hispanic)
- **46.4%** Missing

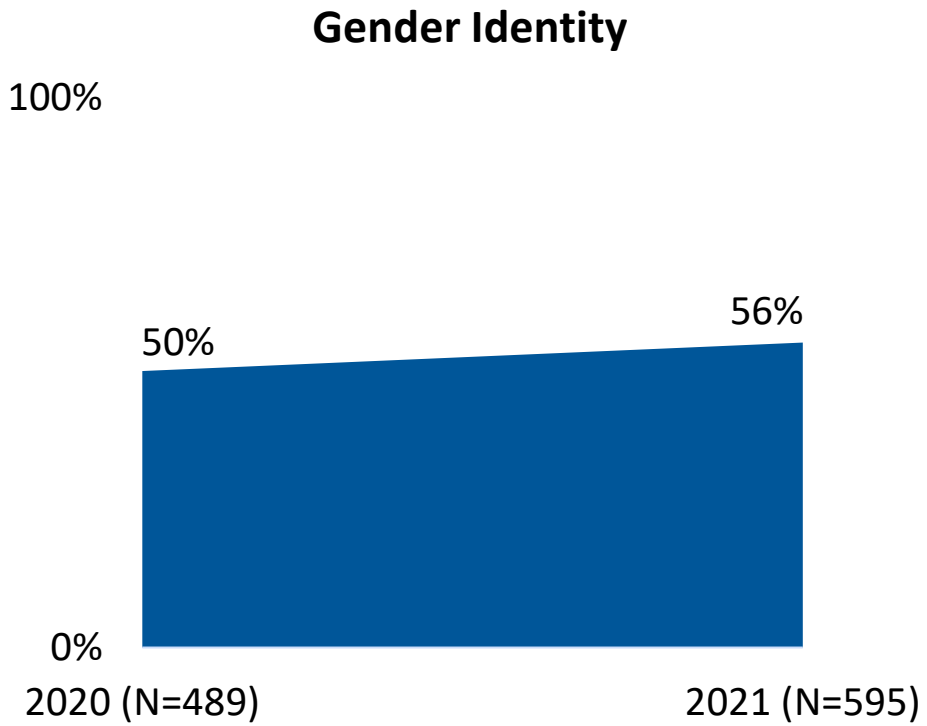


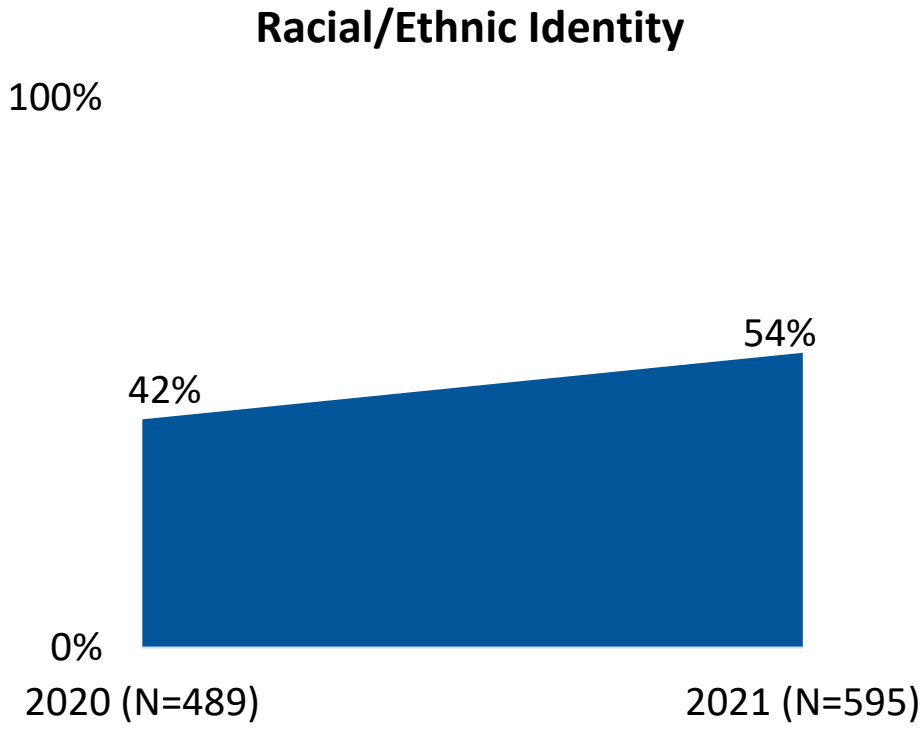
GENDER IDENTITY

- **19.2%** Women
- **36.3%** Men
- **0.0%** Nonbinary/ Self-identify
- **44.5%** Missing

Honors and Awards Recipients

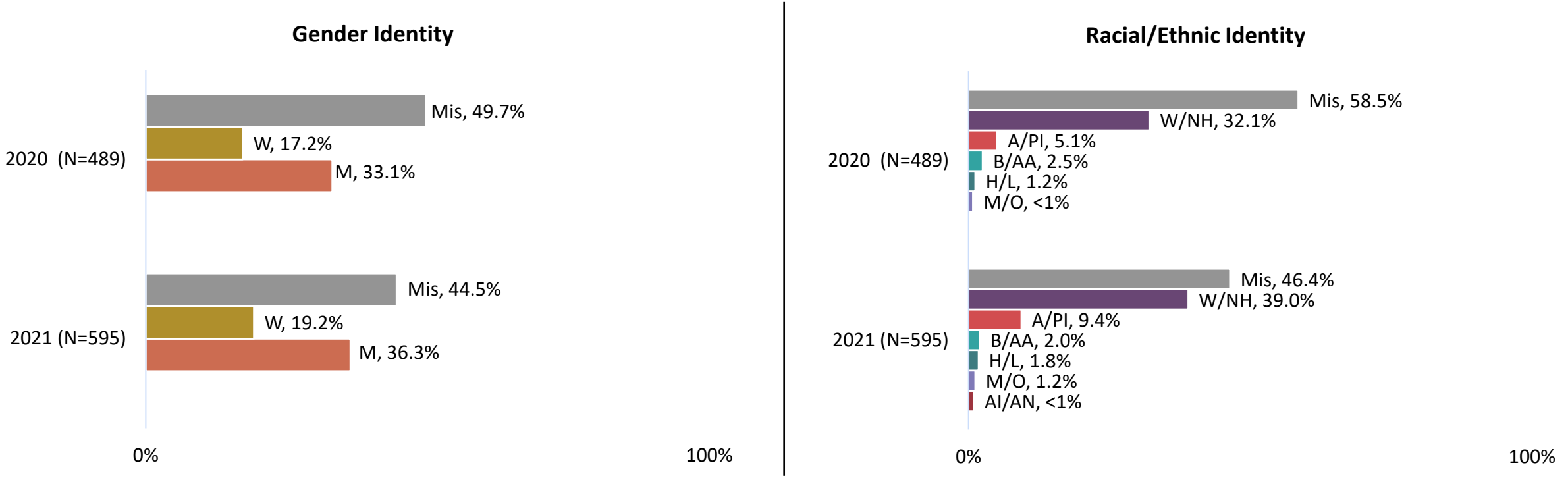
Trends in Data Coverage





Honors and Awards Recipients

Trends in Representation



- Women (W)
- Men (M)
- Nonbinary/Self-identify (N/S)
- Missing (Mis)
- American Indian or Alaska Native (AI/AN)
- Asian or Pacific Islander (A/PI)
- Black or African American (B/AA)
- Hispanic or Latinx (H/L)
- Multiracial or other (M/O)
- White (non-Hispanic) (W/NH)

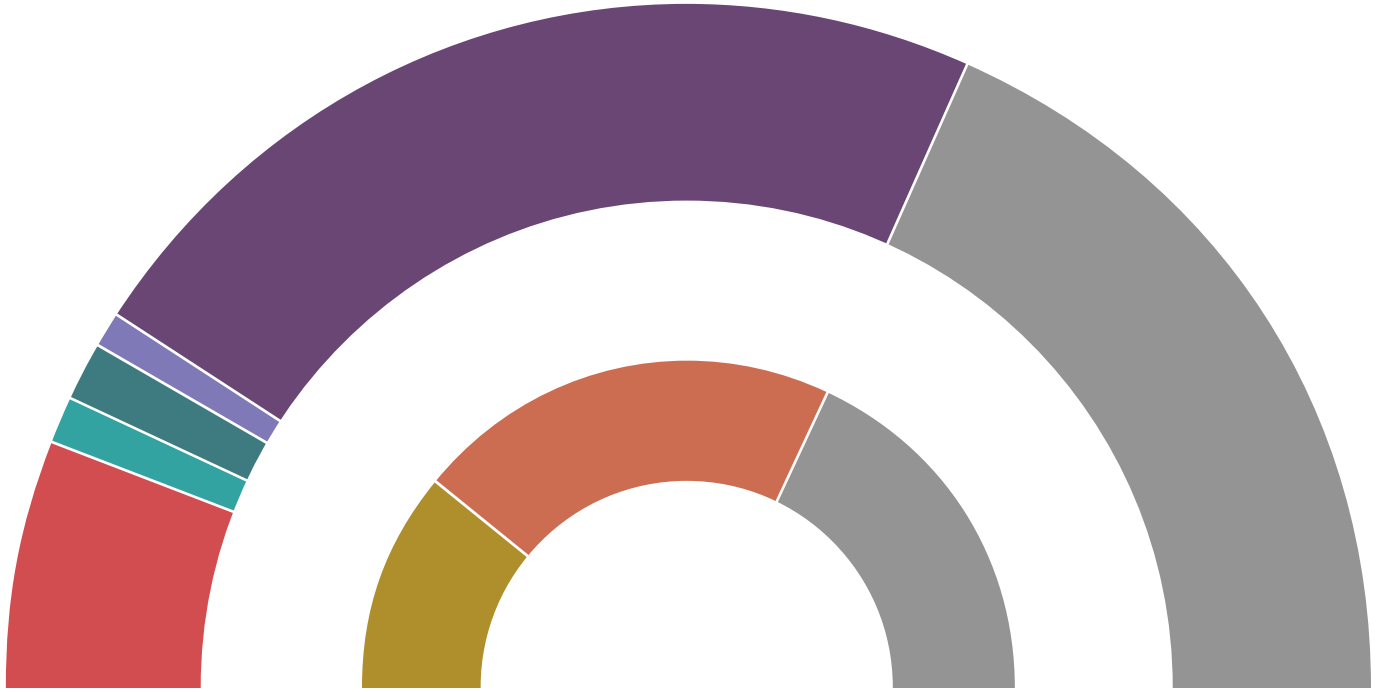
Notes: Missing data includes both people who declined to respond and people from whom data was not collected. Due to rounding, percentages may not sum to 100.

2021 Honors and Awards Recipients

Honorary Fellows, Class of 2021 (N=490)

RACIAL / ETHNIC IDENTITY

- **0.0%** American Indian or Alaska Native
- **11.4%** Asian or Pacific Islander
- **1.8%** Black or African American
- **2.0%** Hispanic or Latinx
- **1.4%** Multiracial or other
- **45.5%** White (non-Hispanic)
- **37.8%** Missing

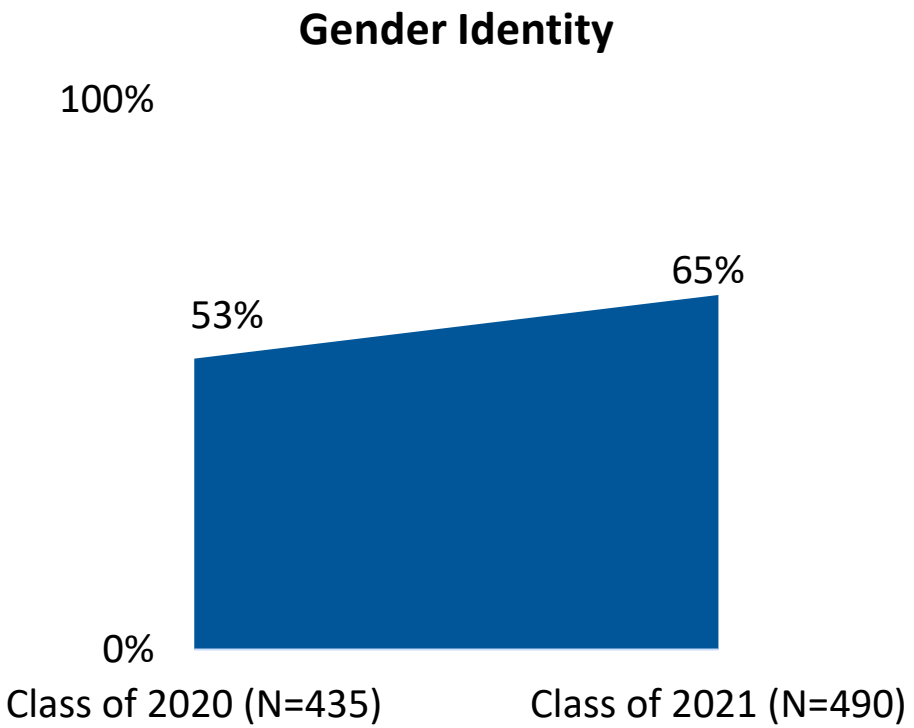


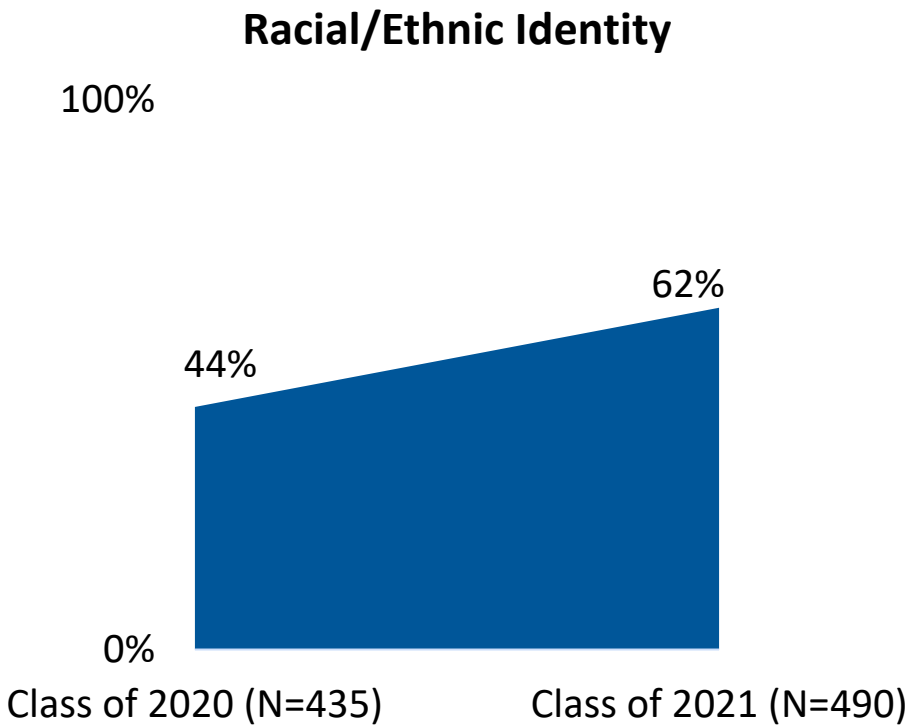
GENDER IDENTITY

- **22.0%** Women
- **42.4%** Men
- **0.0%** Nonbinary/ Self-identify
- **35.5%** Missing

2021 Honors and Awards Recipients

Honorary Fellows, Class of 2021: Trends in Data Coverage





2021 Honors and Awards Recipients

Honorary Fellows, Class of 2021: Trends in Representation

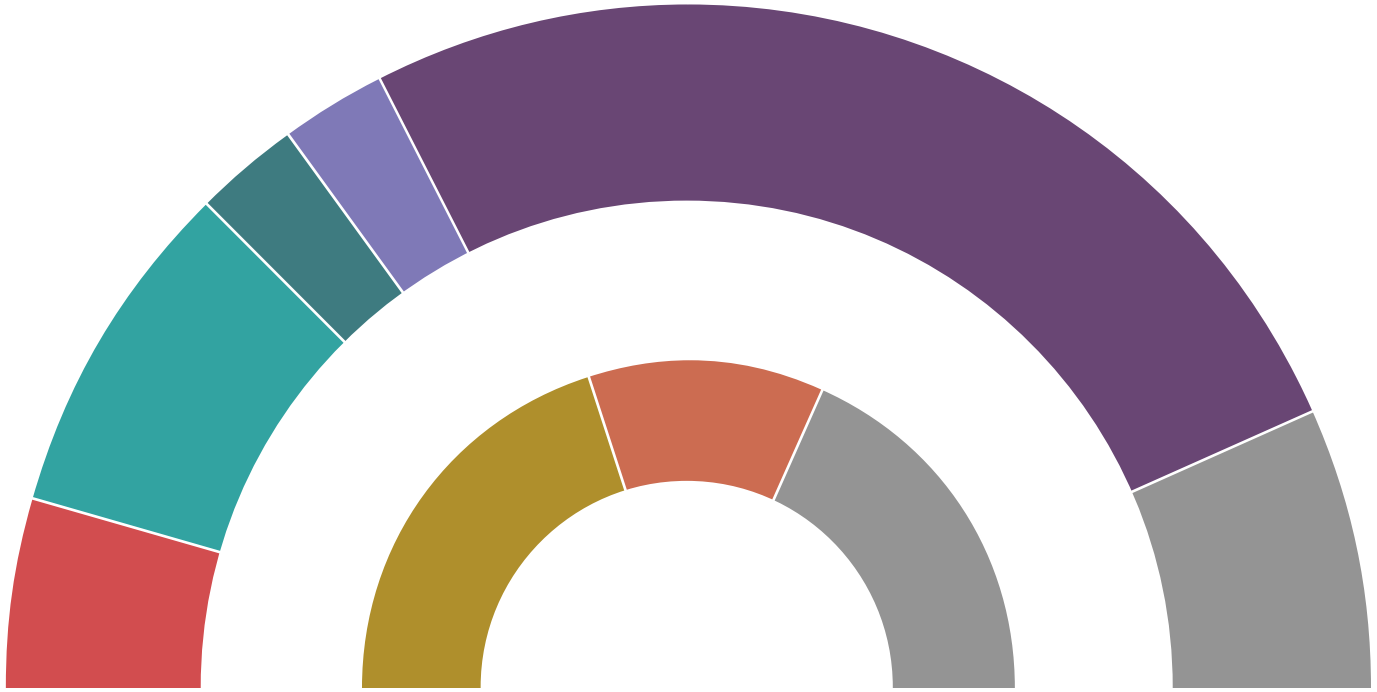
- Women (W)
- Men (M)
- Nonbinary/Self-identify (N/S)
- Missing (Mis)
- American Indian or Alaska Native (AI/AN)
- Asian or Pacific Islander (A/PI)
- Black or African American (B/AA)
- Hispanic or Latinx (H/L)
- Multiracial or other (M/O)
- White (non-Hispanic) (W/NH)

Note: Due to rounding, percentages may not sum to 100.

2021 Career Development/Fellowship Selection Committees (N=249)

RACIAL / ETHNIC IDENTITY

- **0.0%** American Indian or Alaska Native
- **8.8%** Asian or Pacific Islander
- **16.5%** Black or African American
- **5.2%** Hispanic or Latinx
- **4.8%** Multiracial or other
- **51.8%** White (non-Hispanic)
- **12.9%** Missing



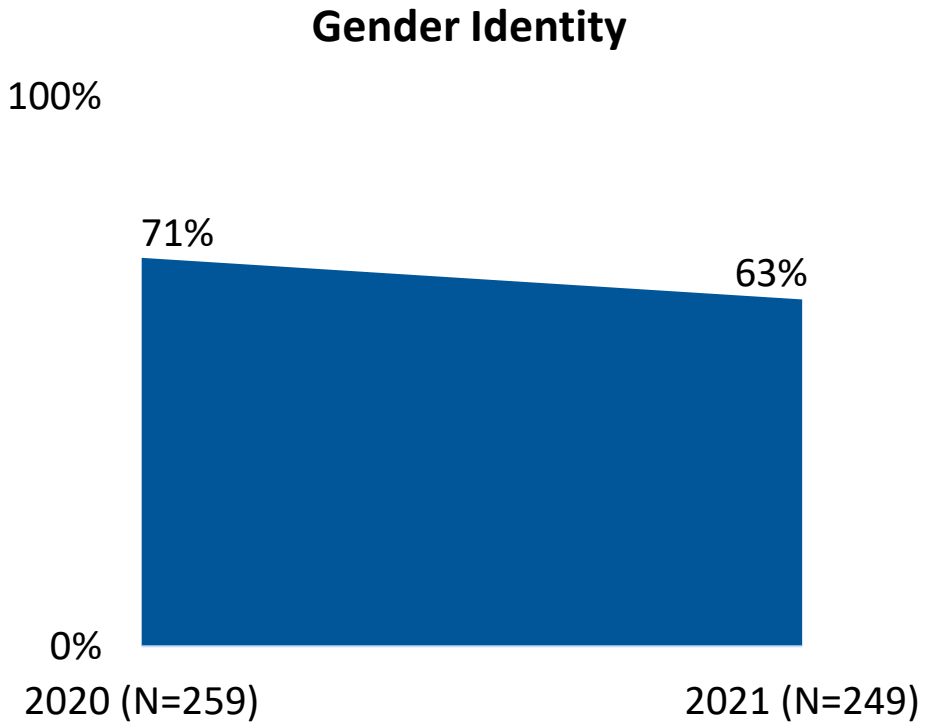
GENDER IDENTITY

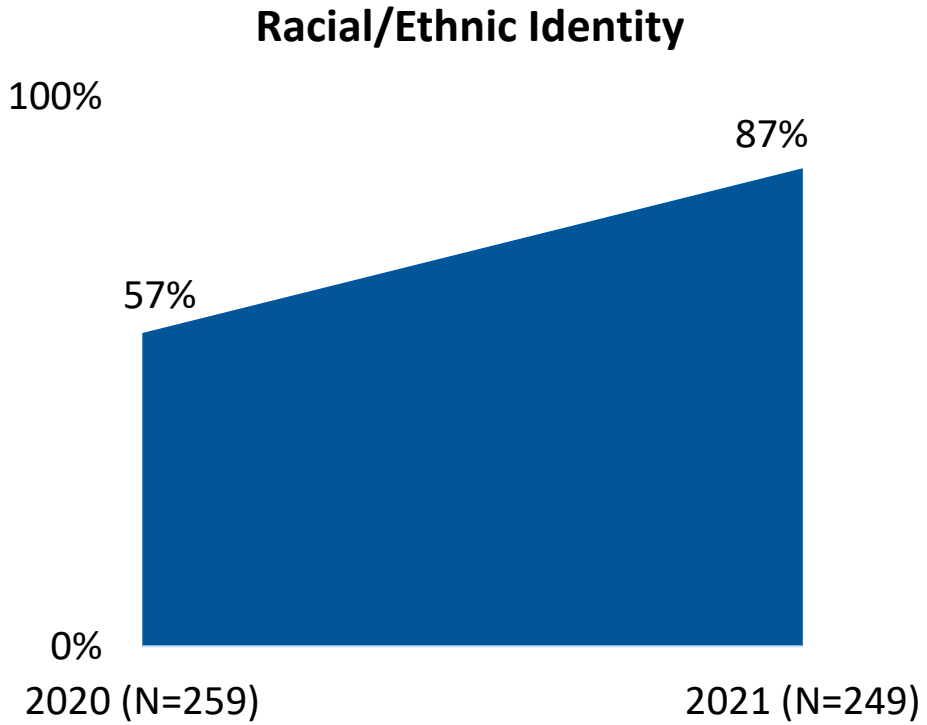
- **39.4%** Women
- **23.7%** Men
- **0.0%** Nonbinary/ Self-identify
- **36.9%** Missing

Career Development/Fellowship Selection Committees

Trends in Data Coverage

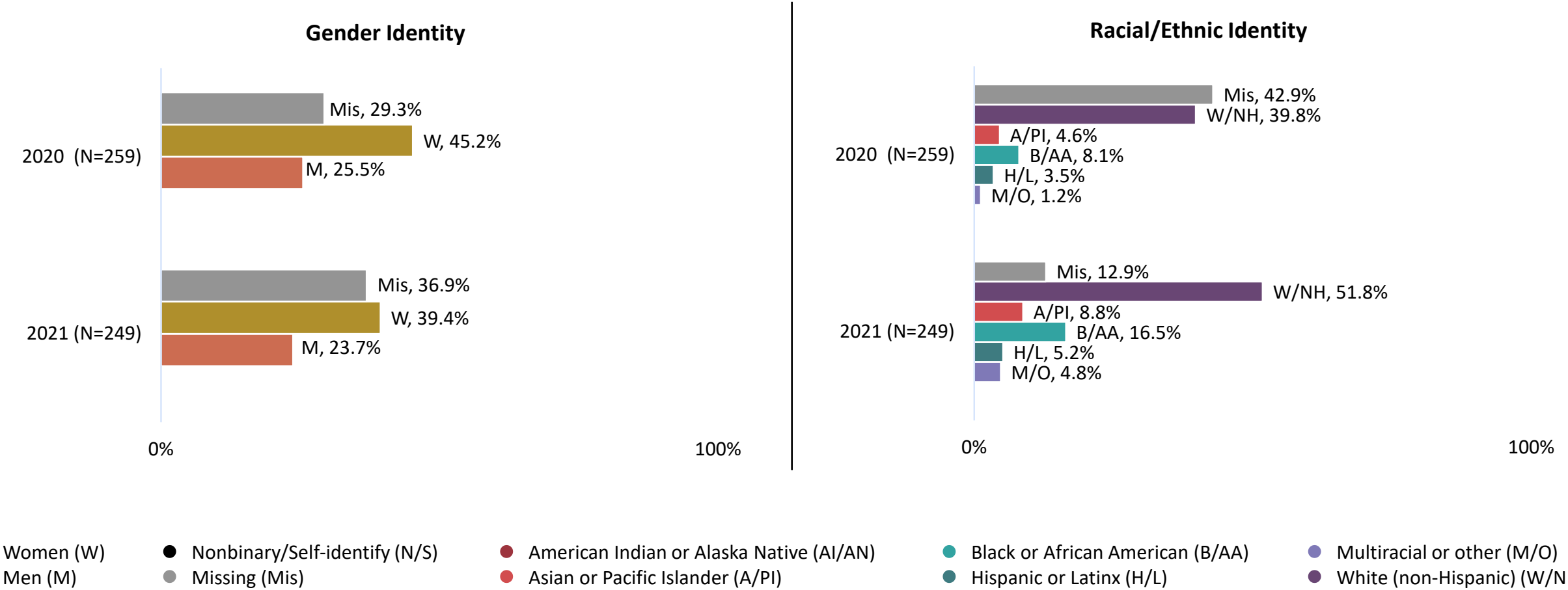
The decrease in data coverage for gender identity and increase in data coverage for racial/ethnic identity for Career Development/ Fellowship Selection Committees appear to be due to a change in the composition of the function. One subgroup included in 2020 was not included in 2021. Another subgroup grew from less than 10 people in 2020 to nearly 100 people in 2021. This subgroup did not have self-reported data on gender identity but did have self-reported data on racial/ethnic identity.





Career Development/Fellowship Selection Committees

Trends in Representation



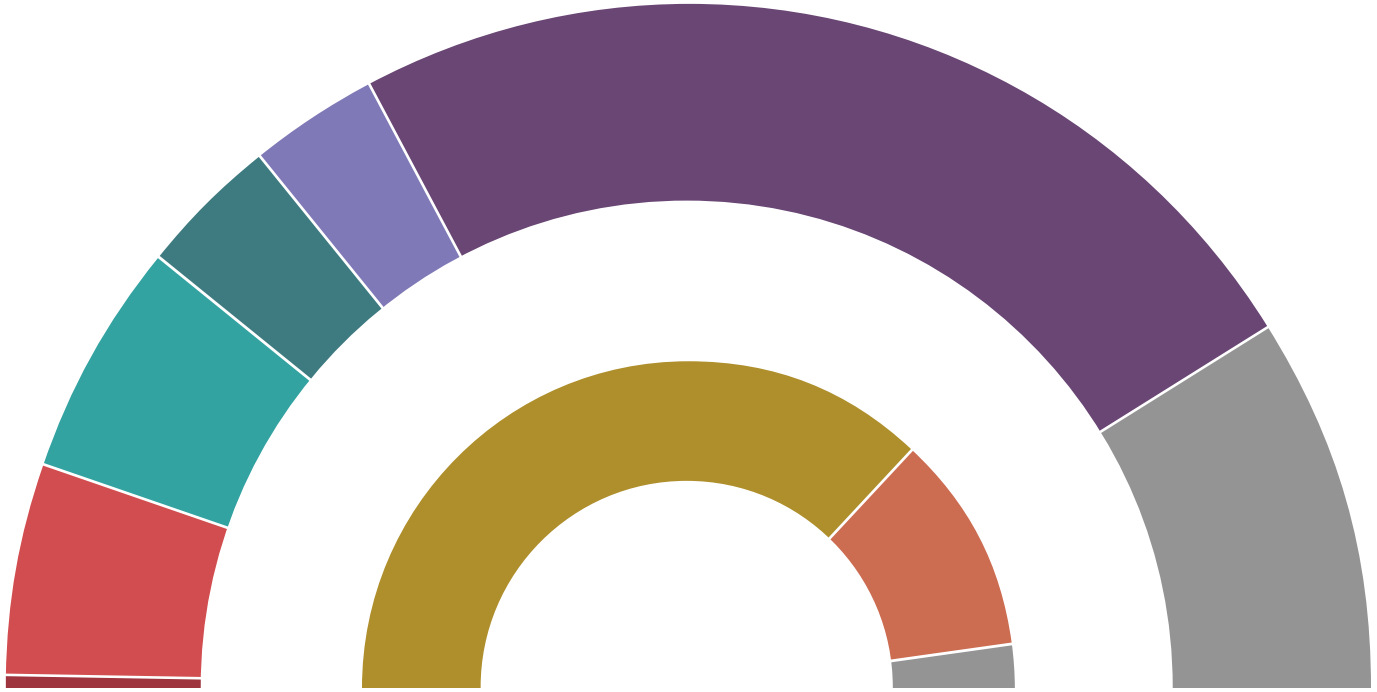
- Women (W)
- Men (M)
- Nonbinary/Self-identify (N/S)
- Missing (Mis)
- American Indian or Alaska Native (AI/AN)
- Asian or Pacific Islander (A/PI)
- Black or African American (B/AA)
- Hispanic or Latinx (H/L)
- Multiracial or other (M/O)
- White (non-Hispanic) (W/NH)

Notes: Missing data includes both people who declined to respond and people from whom data was not collected. Due to rounding, percentages may not sum to 100.

2021 Career Development/Fellowship Participants (N=478)

RACIAL / ETHNIC IDENTITY

- **<1.0%** American Indian or Alaska Native
- **10.0%** Asian or Pacific Islander
- **10.9%** Black or African American
- **6.5%** Hispanic or Latinx
- **5.9%** Multiracial or other
- **48.1%** White (non-Hispanic)
- **18.4%** Missing

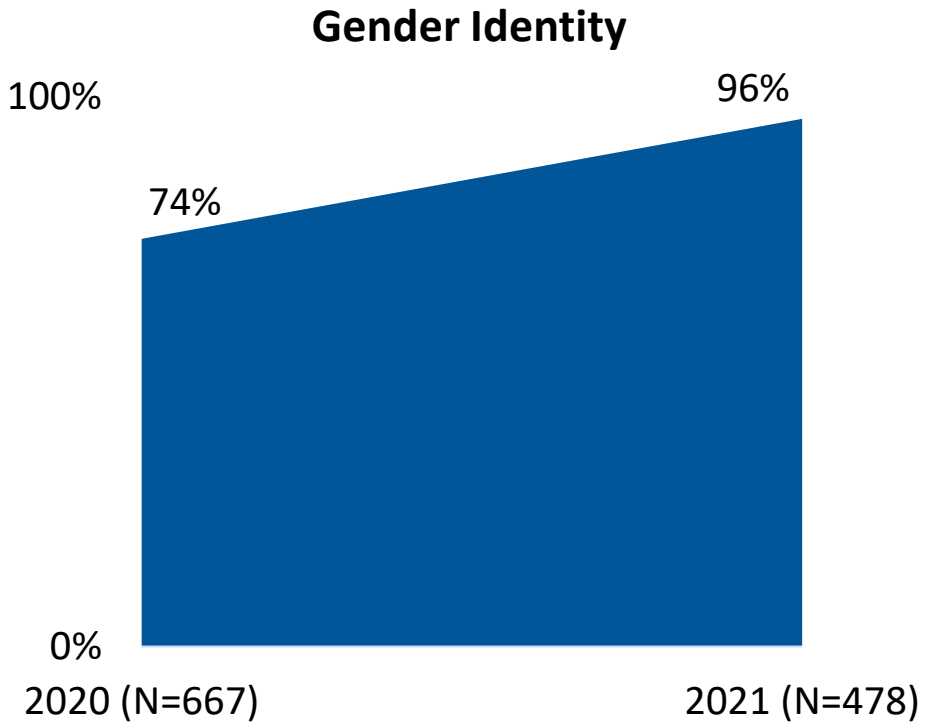


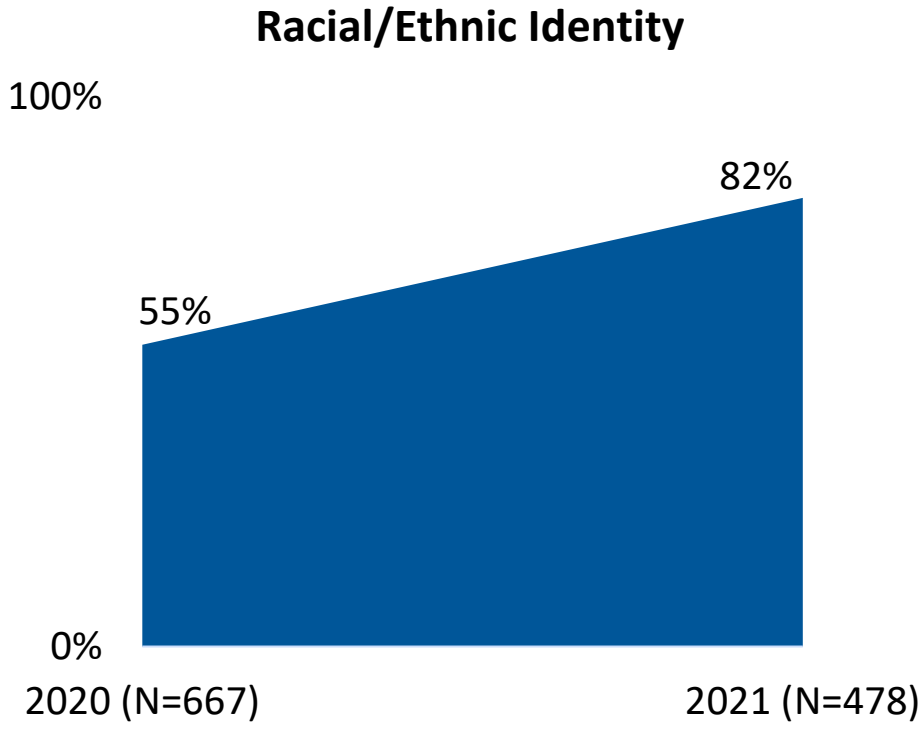
GENDER IDENTITY

- **73.6%** Women
- **22.4%** Men
- **0.0%** Nonbinary/ Self-identify
- **4.0%** Missing

Career Development/Fellowship Participants

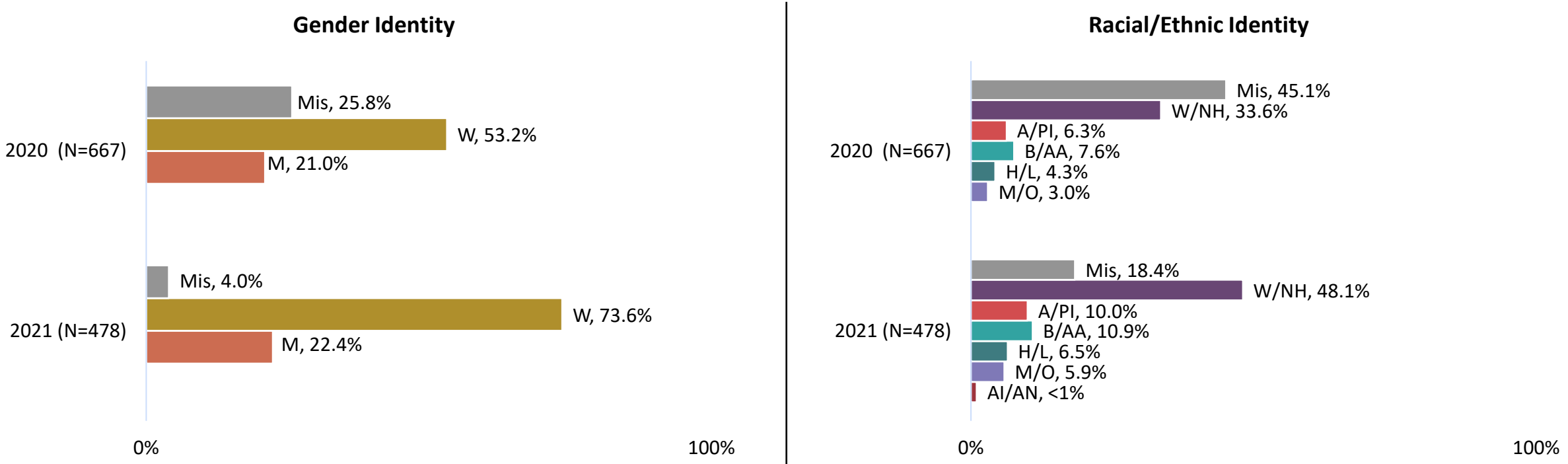
Trends in Data Coverage





Career Development/Fellowship Participants

Trends in Representation



- Women (W)
- Men (M)
- Nonbinary/Self-identify (N/S)
- Missing (Mis)
- American Indian or Alaska Native (AI/AN)
- Asian or Pacific Islander (A/PI)
- Black or African American (B/AA)
- Hispanic or Latinx (H/L)
- Multiracial or other (M/O)
- White (non-Hispanic) (W/NH)

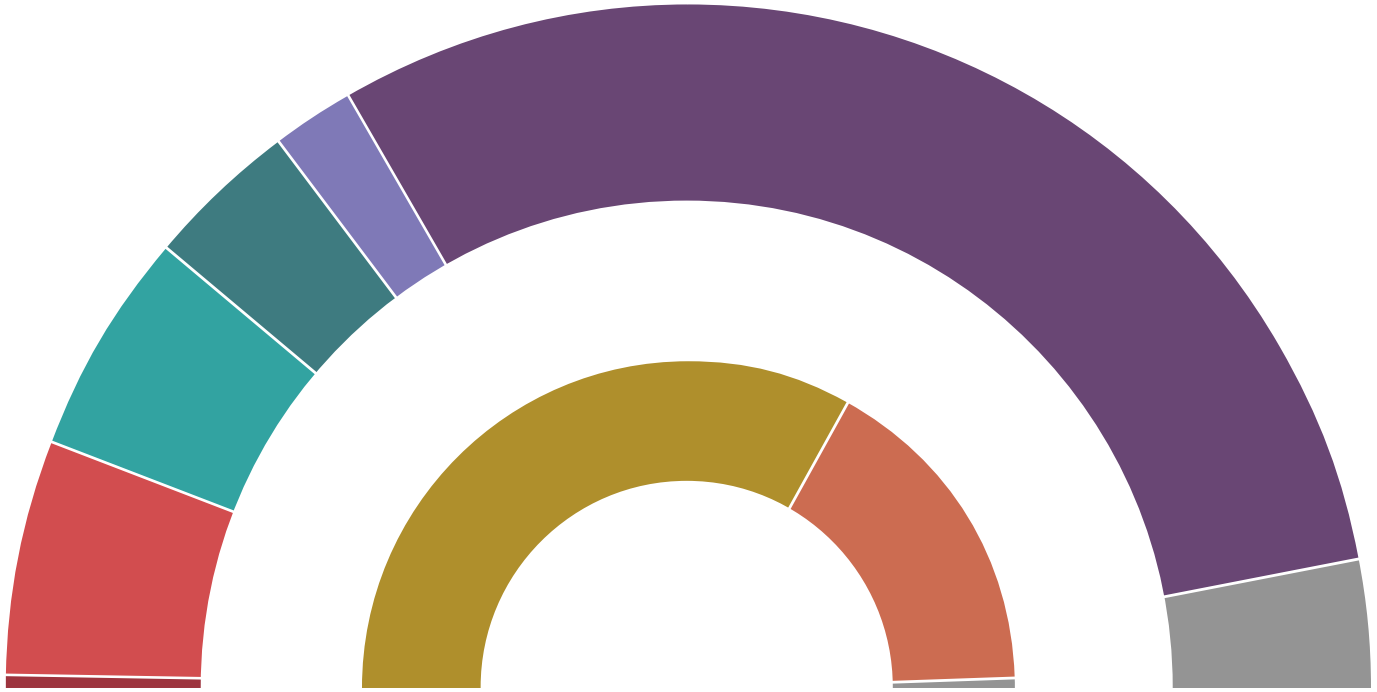
Note: Due to rounding, percentages may not sum to 100.

Career Development/Fellowship Participants

S&T Policy Fellows Class of 2021-2022 (N=287)

RACIAL / ETHNIC IDENTITY

- **<1.0%** American Indian or Alaska Native
- **11.1%** Asian or Pacific Islander
- **10.5%** Black or African American
- **6.6%** Hispanic or Latinx
- **4.9%** Multiracial or other
- **61.0%** White (non-Hispanic)
- **5.6%** Missing

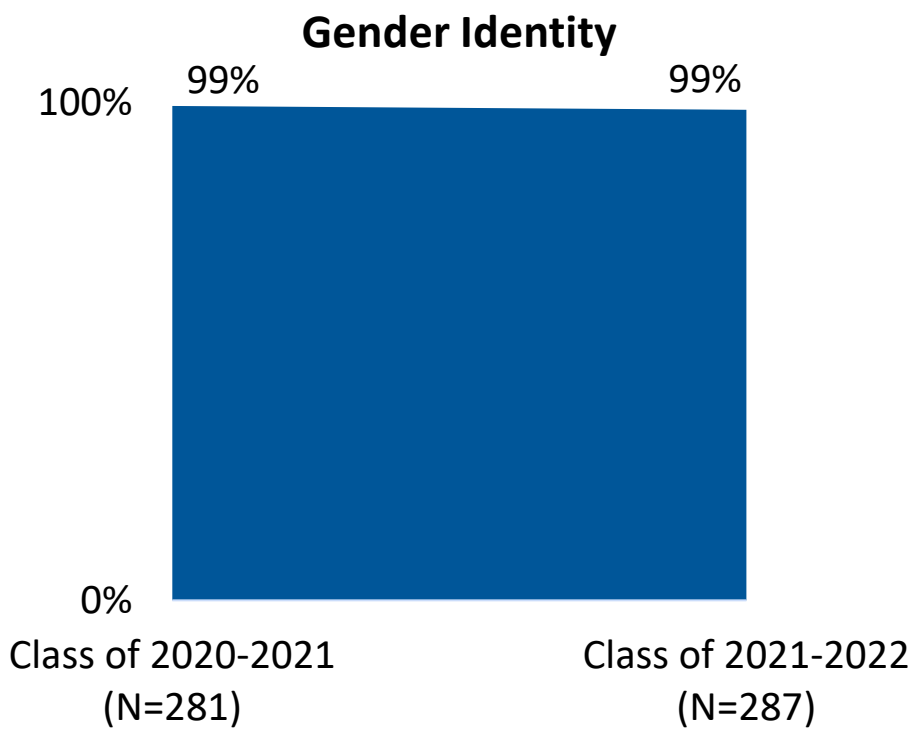


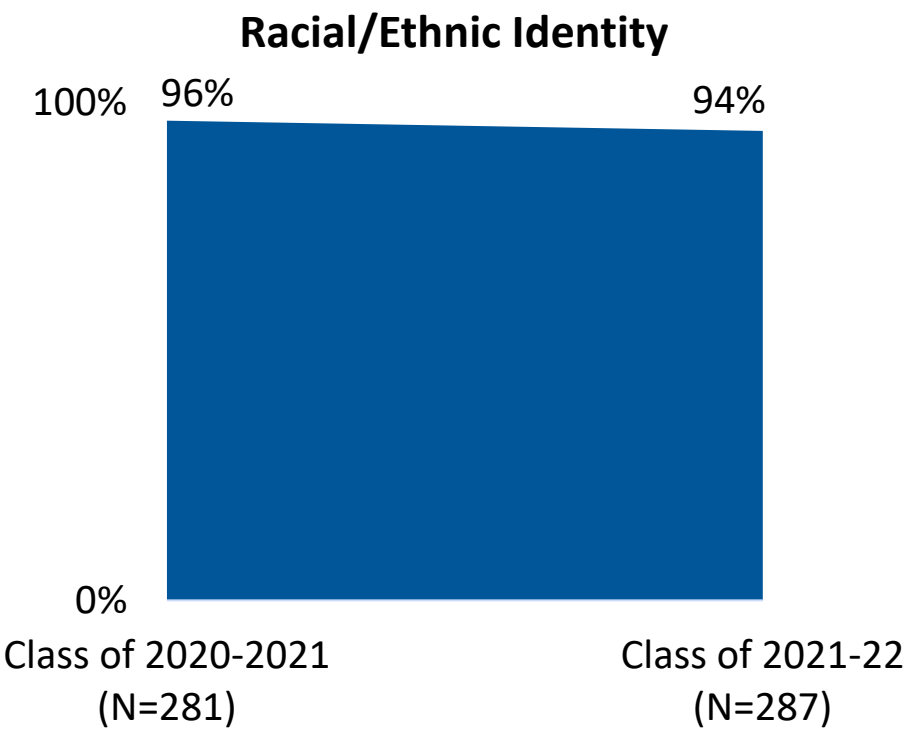
GENDER IDENTITY

- **65.9%** Women
- **32.8%** Men
- **0.0%** Nonbinary/ Self-identify
- **1.4%** Missing

Career Development/Fellowship Participants

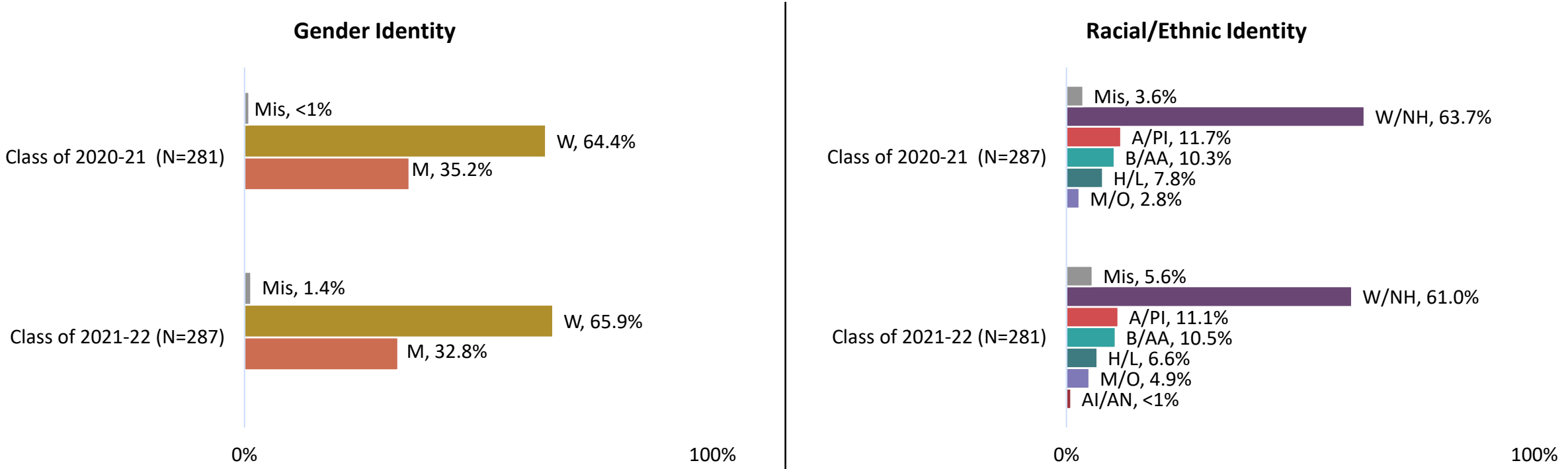
S&T Policy Fellows Class of 2021-2022: Trends in Data Coverage





Career Development/Fellowship Participants

S&T Policy Fellows Class of 2021-22: Trends in Representation



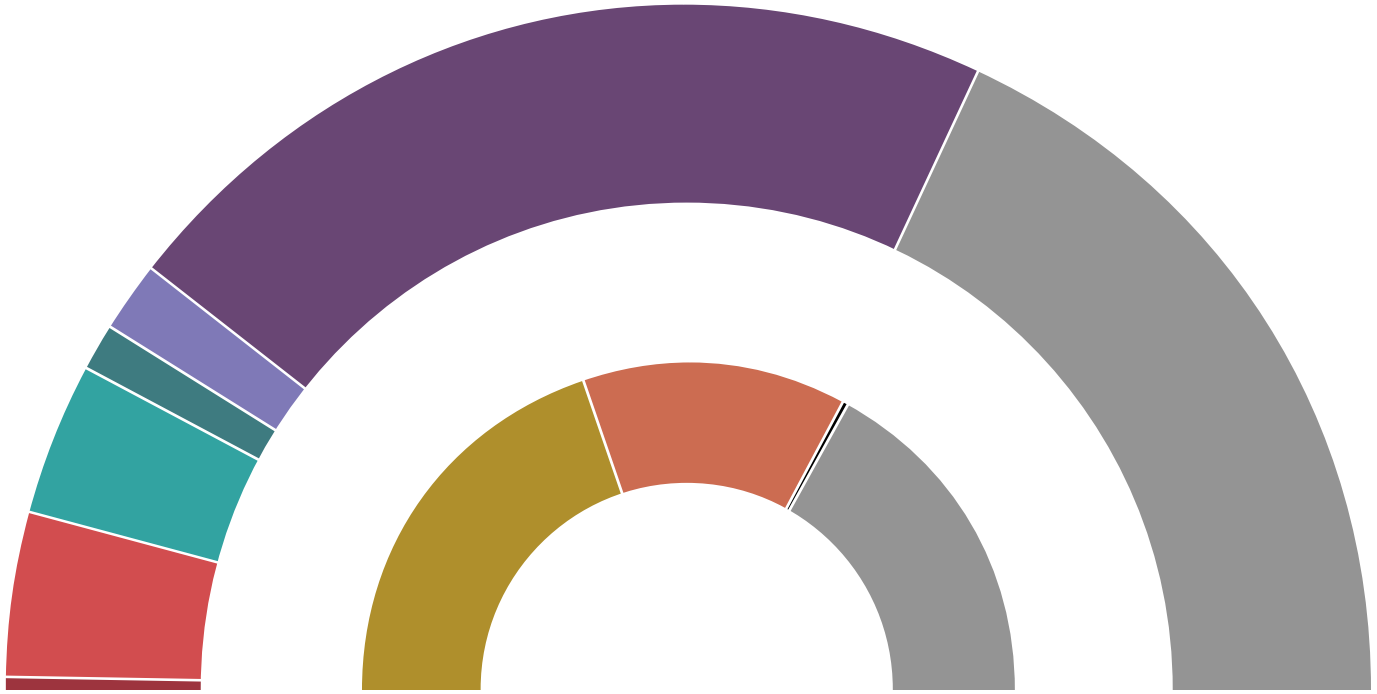
- Women (W)
- Men (M)
- Nonbinary/Self-identify (N/S)
- Missing (Mis)
- American Indian or Alaska Native (AI/AN)
- Asian or Pacific Islander (A/PI)
- Black or African American (B/AA)
- Hispanic or Latinx (H/L)
- Multiracial or other (M/O)
- White (non-Hispanic) (W/NH)

Note: Due to rounding, percentages may not sum to 100.

2021 Speakers and Presenters at Major AAAS Events (N=877)

RACIAL / ETHNIC IDENTITY

- **<1.0%** American Indian or Alaska Native
- **7.6%** Asian or Pacific Islander
- **6.8%** Black or African American
- **2.6%** Hispanic or Latinx
- **3.3%** Multiracial or other
- **42.8%** White (non-Hispanic)
- **36.5%** Missing



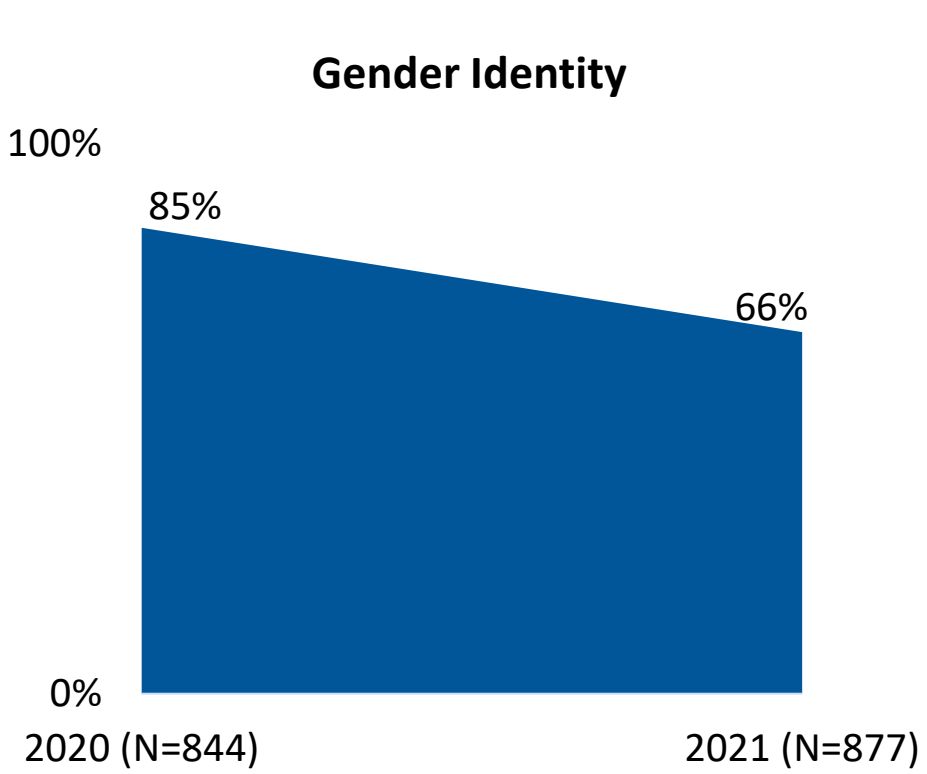
GENDER IDENTITY

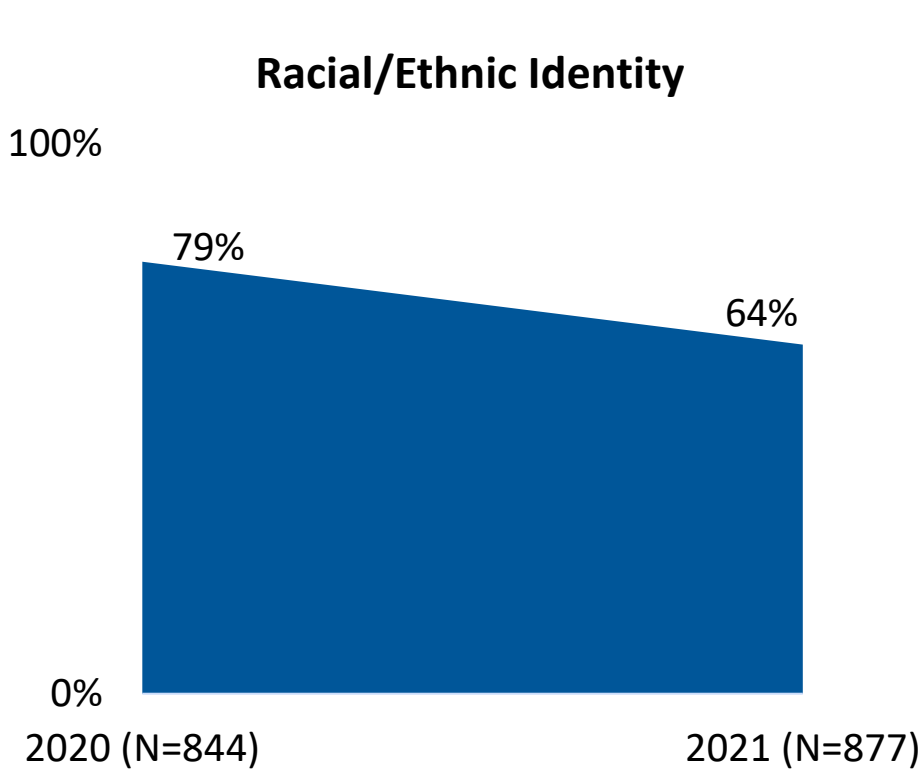
- **39.3%** Women
- **26.2%** Men
- **<1.0%** Nonbinary/ Self-identify
- **34.2%** Missing

Speakers and Presenters at Major AAAS Events

Trends in Data Coverage

Decreased data coverage for AAAS Speakers and Presenters at Major AAAS Events may be due to the inclusion of new subgroups in this function that have not yet started collecting demographic data. It may also be due to increased emphasis on using only self-reported data this year.

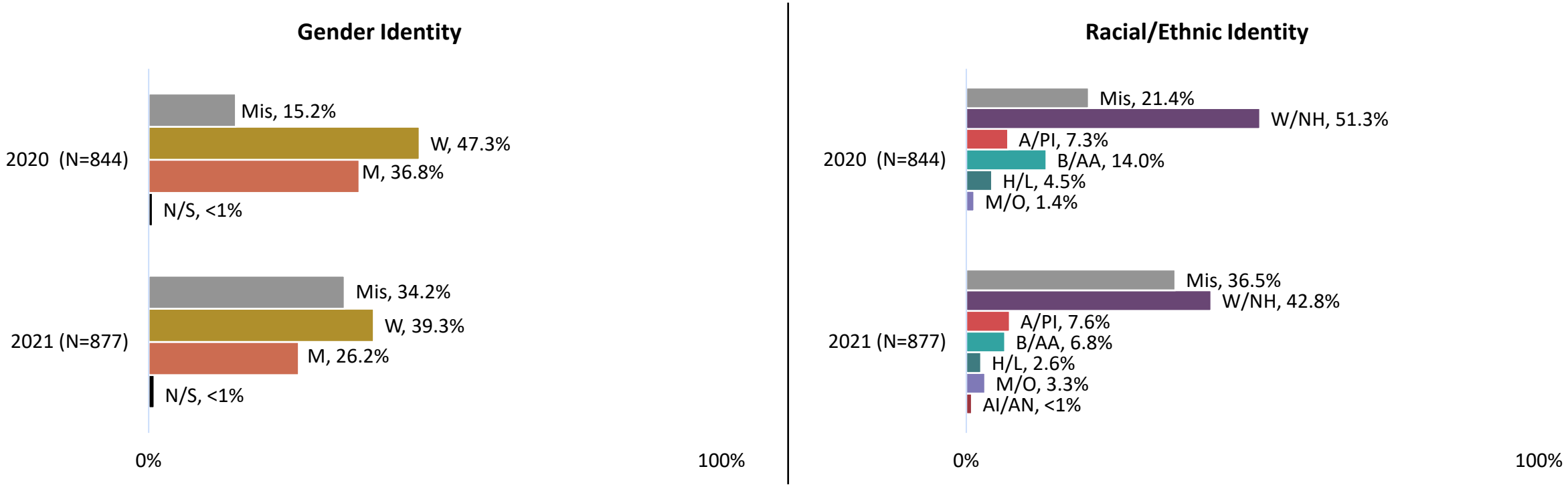




Speakers and Presenters at Major AAAS Events

Trends in Representation

It's difficult to determine whether the decreased representation of women and people with typically underrepresented racial/ethnic identities, and the change of the 2nd most prominent racial/ethnic identity from Black or African American to Asian or Pacific Islander among AAAS Speakers and Presenters at Major AAAS Events are due to decreased data coverage, the inclusion of additional subgroups, or an actual change in demographic representation.

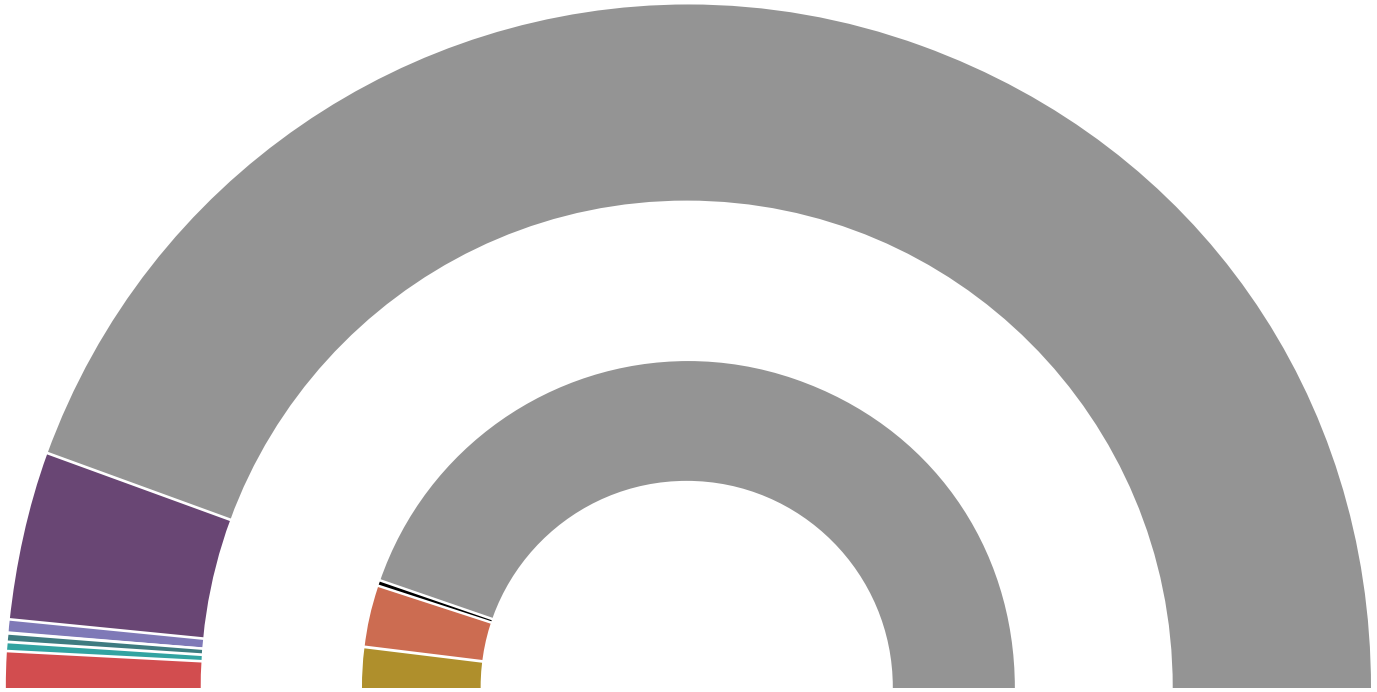


Notes: Missing data includes both people who declined to respond and people from whom data was not collected. Due to rounding, percentages may not sum to 100.

2021 AAAS Program Volunteers (N=2,615)

RACIAL / ETHNIC IDENTITY

- **0.0%** American Indian or Alaska Native
- **1.5%** Asian or Pacific Islander
- **<1.0%** Black or African American
- **<1.0%** Hispanic or Latinx
- **0.5%** Multiracial or other
- **7.6%** White (non-Hispanic)
- **89.9%** Missing



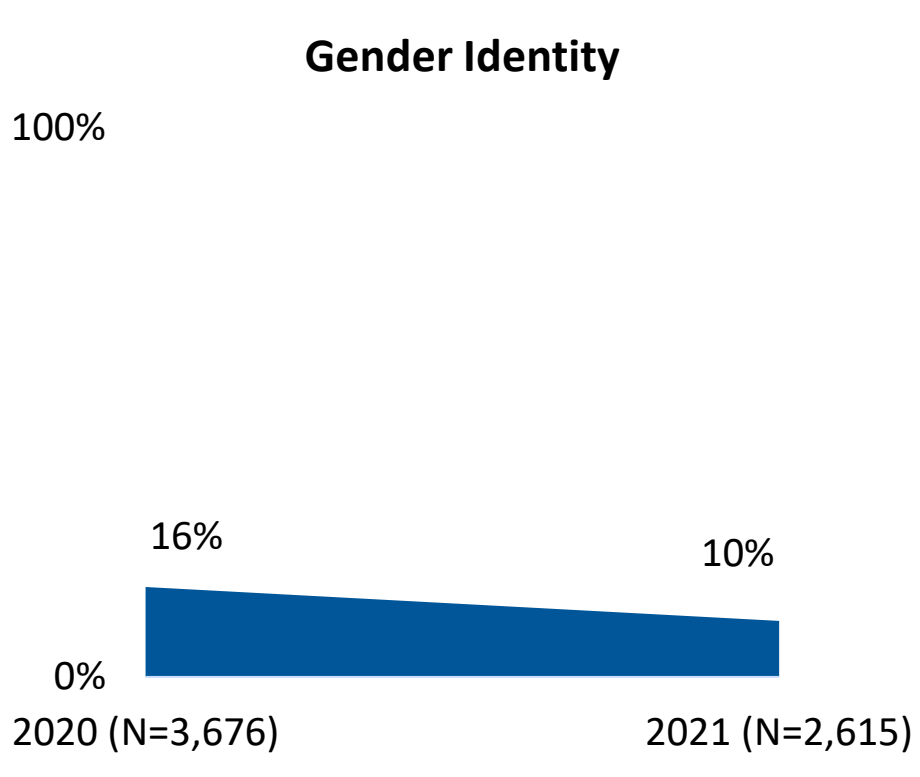
GENDER IDENTITY

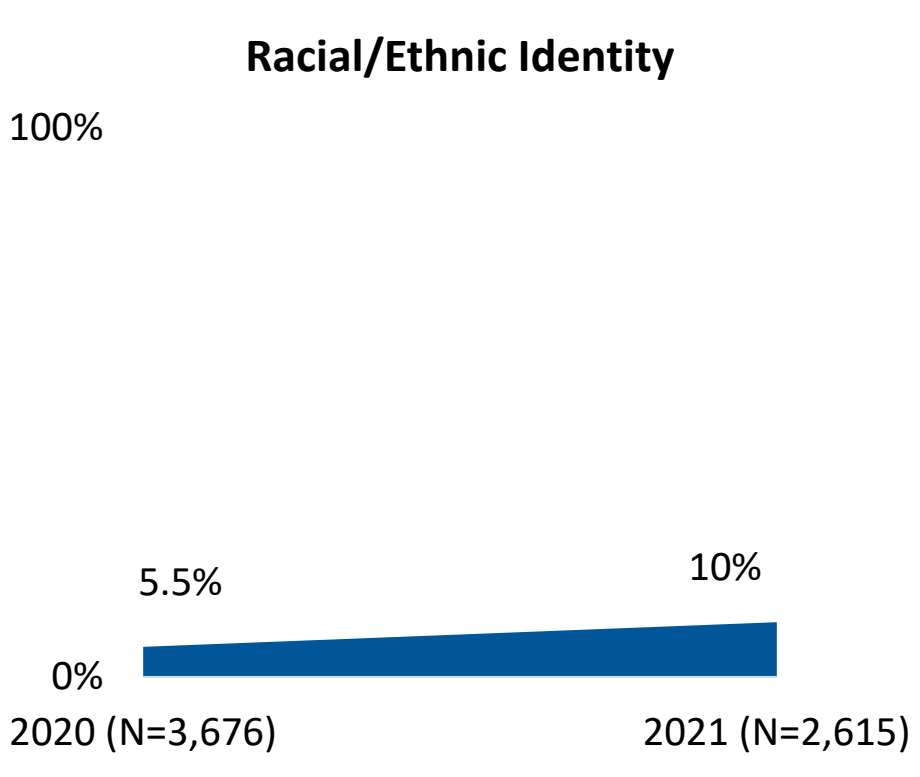
- **3.7%** Women
- **6.4%** Men
- **<1.0%** Nonbinary/ Self-identify
- **89.8%** Missing

AAAS Program Volunteers

Trends in Data Coverage

Data from 2020 includes participants from years prior to and including 2020, so year-over-year comparisons cannot be made. Decreased data coverage for gender identity is due to a decreased response due to the pandemic.

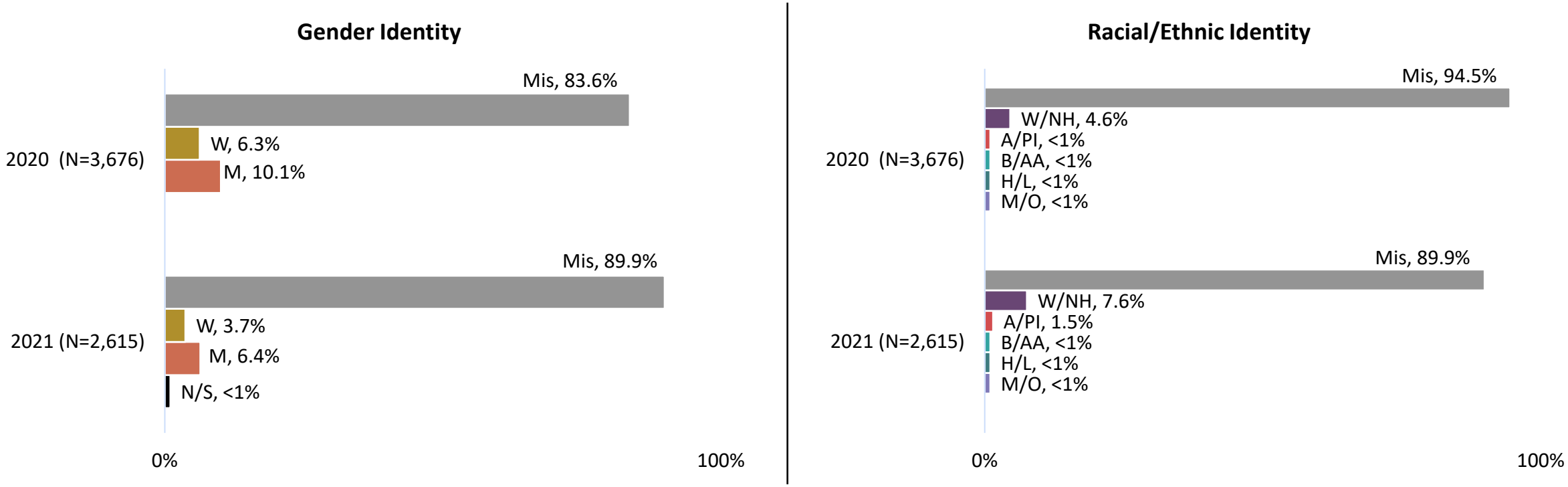




AAAS Program Volunteers

Trends in Representation

Data from 2020 includes participants from years prior to and including 2020, so year-over-year comparisons cannot be made.



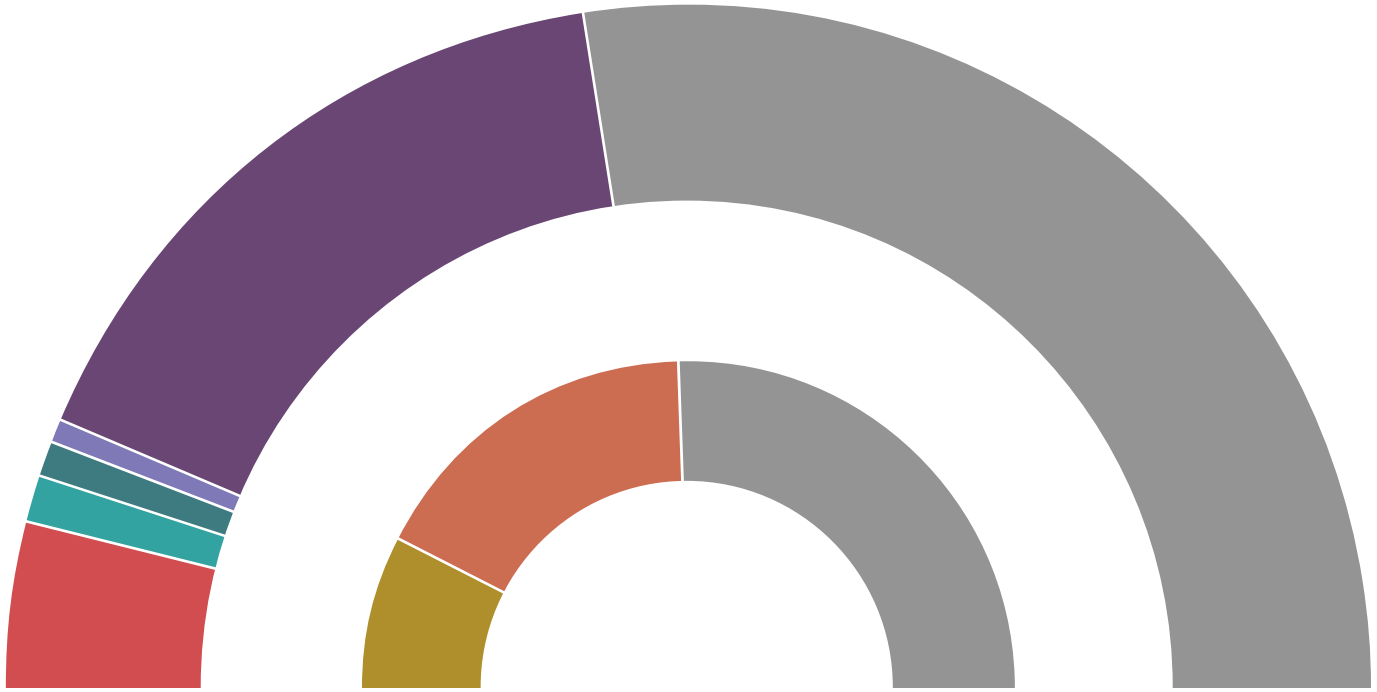
- Women (W)
- Men (M)
- Nonbinary/Self-identify (N/S)
- Missing (Mis)
- American Indian or Alaska Native (AI/AN)
- Asian or Pacific Islander (A/PI)
- Black or African American (B/AA)
- Hispanic or Latinx (H/L)
- Multiracial or other (M/O)
- White (non-Hispanic) (W/NH)

Notes: Missing data includes both people who declined to respond and people from whom data was not collected. Due to rounding, percentages may not sum to 100.

2021 *Science* Family Editors and Advisors (N=782)

RACIAL / ETHNIC IDENTITY

- **0.0%** American Indian or Alaska Native
- **8.1%** Asian or Pacific Islander
- **1.9%** Black or African American
- **1.7%** Hispanic or Latinx
- **1.0%** Multiracial or other
- **32.7%** White (non-Hispanic)
- **54.6%** Missing

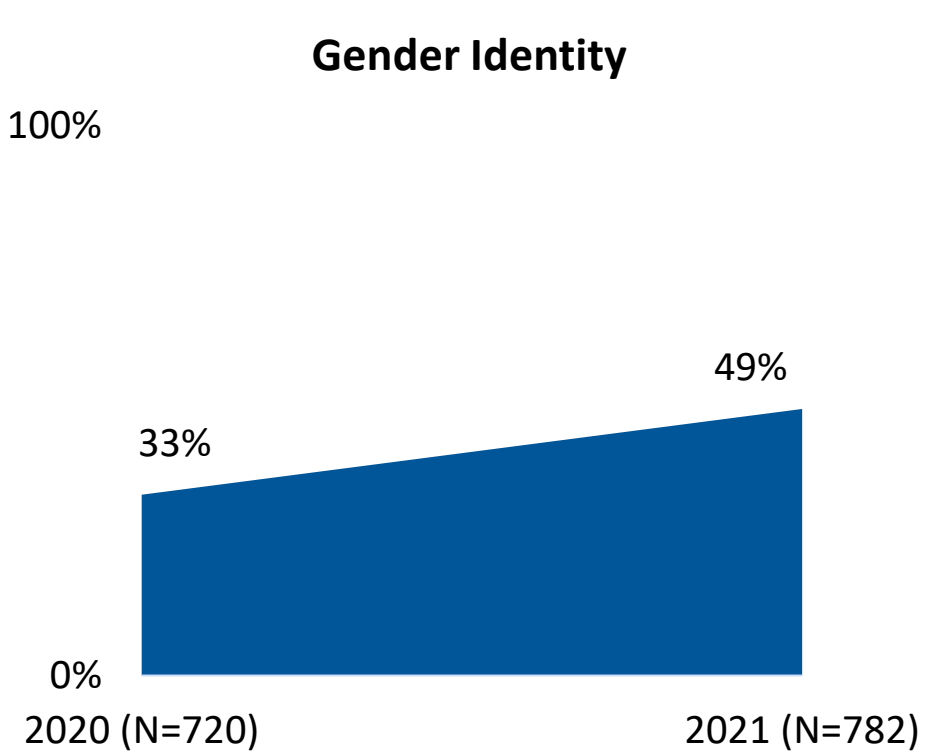


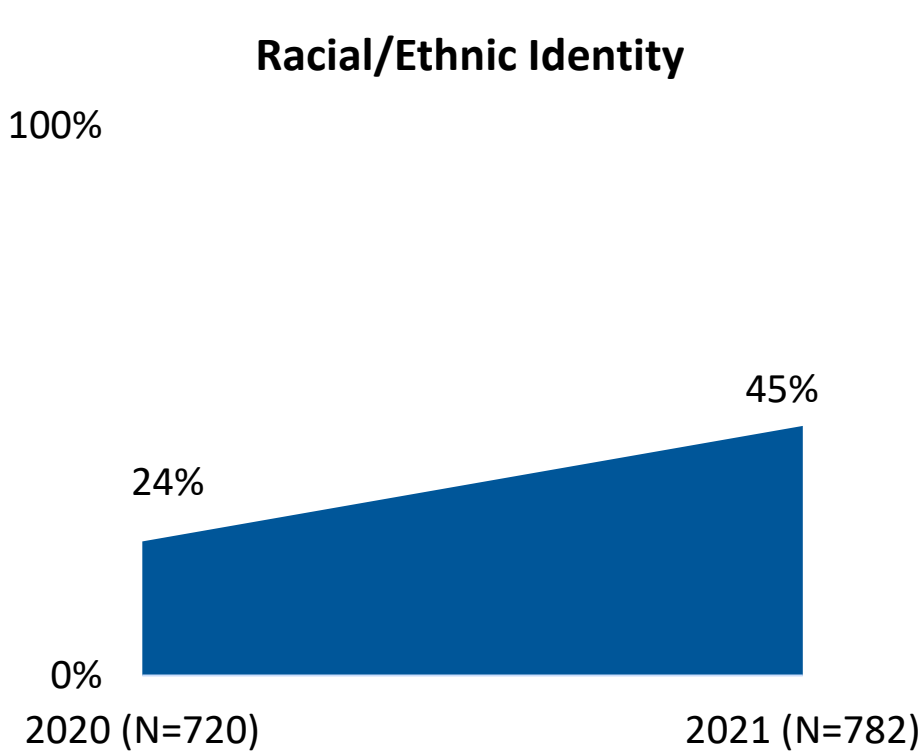
GENDER IDENTITY

- **14.7%** Women
- **33.8%** Men
- **0.0%** Nonbinary/ Self-identify
- **51.5%** Missing

Science Family Editors and Advisors

Trends in Data Coverage

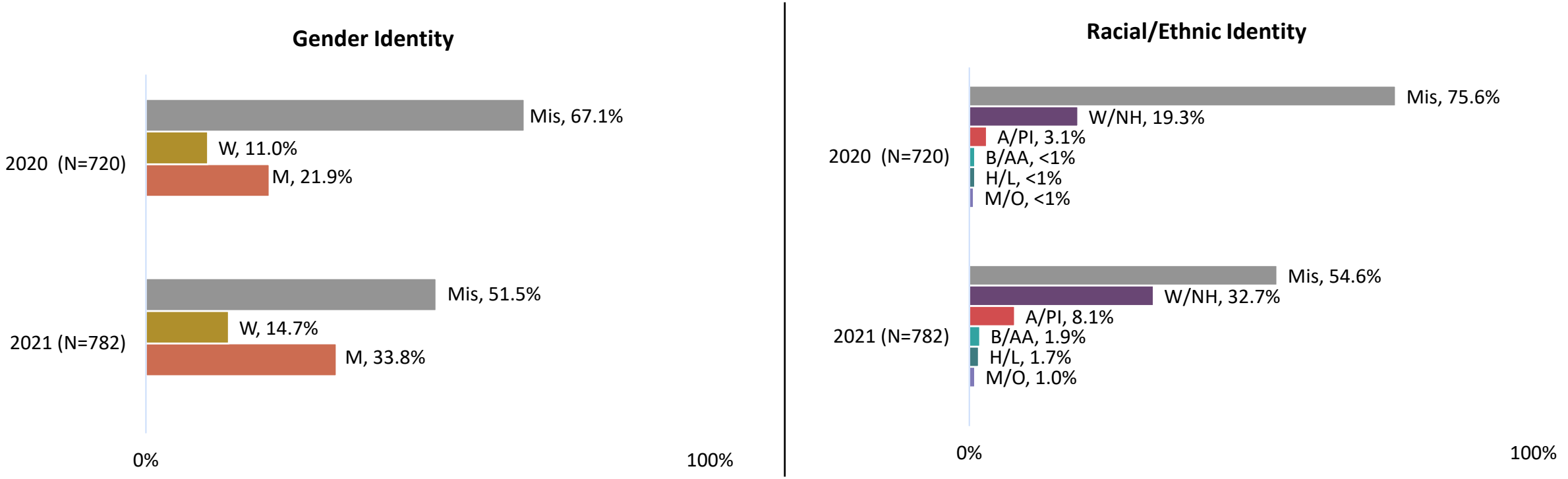




Science Family Editors and Advisors

Trends in Representation

It is difficult to determine whether the slight decrease in representation for women among *Science* Family Editors and Advisors is due to improved data coverage or an actual shift in demographic representation.

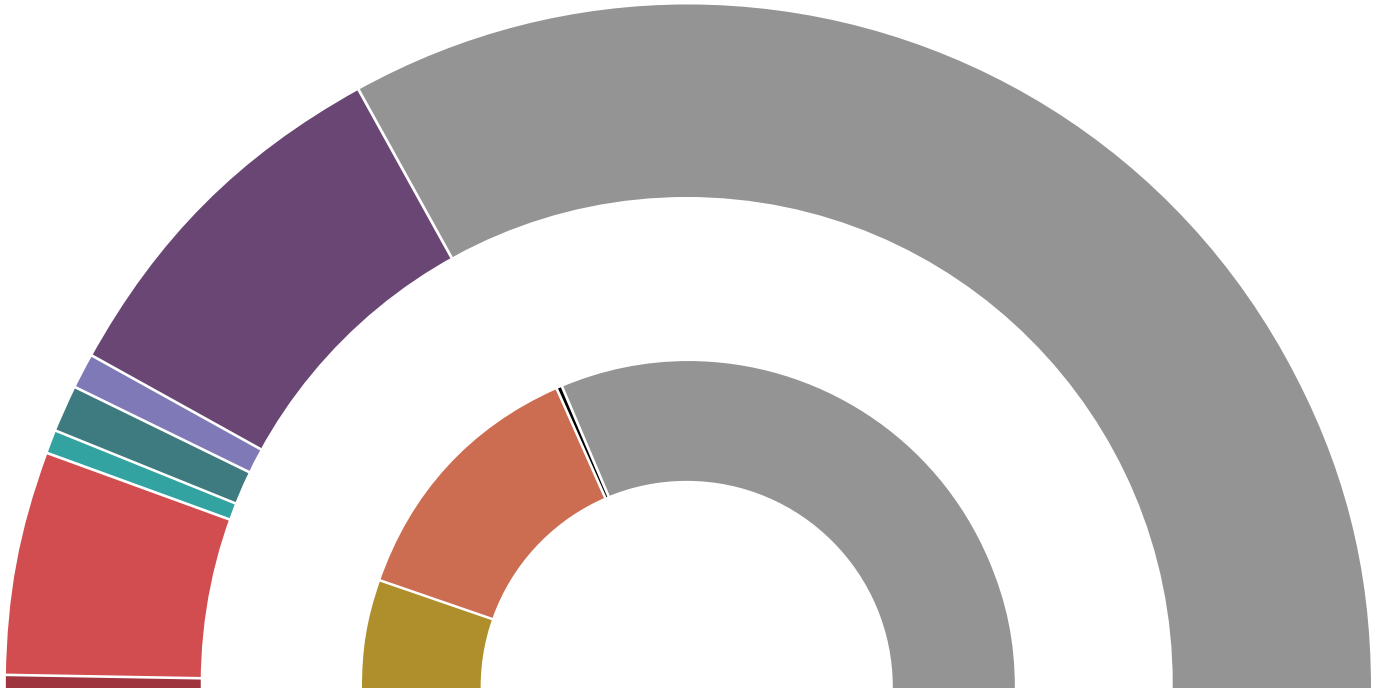


Note: Due to rounding, percentages may not sum to 100.

2021 *Science* Family Authors and Reviewers (N=56,946)

RACIAL / ETHNIC IDENTITY

- **<1.0%** American Indian or Alaska Native
- **11.2%** Asian or Pacific Islander
- **<1.0%** Black or African American
- **1.4%** Hispanic or Latinx
- **1.1%** Multiracial or other
- **18.7%** White (non-Hispanic)
- **67.1%** Missing

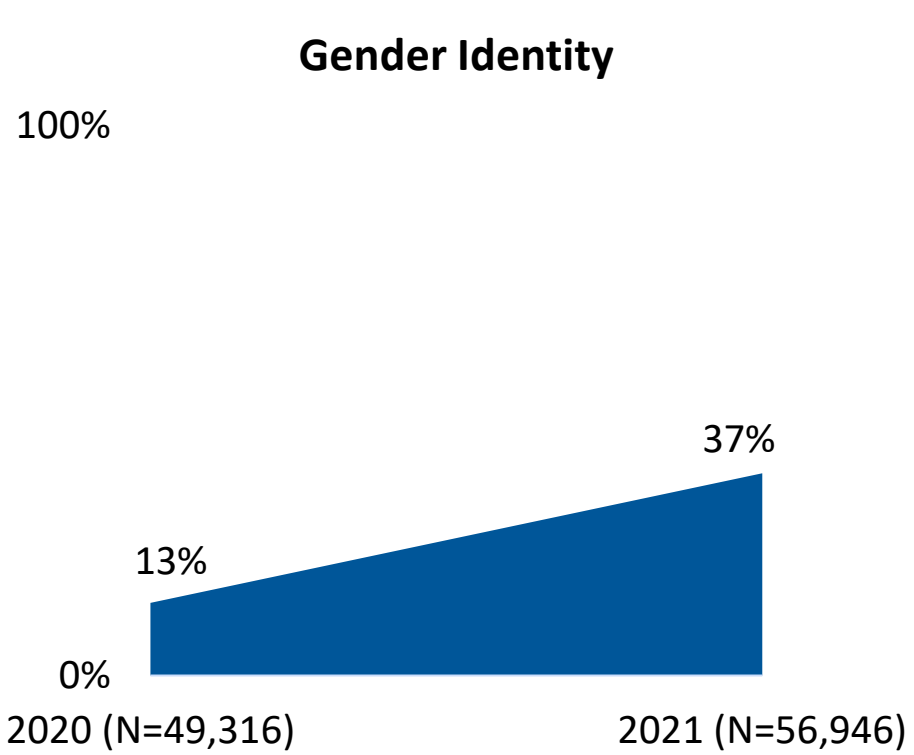


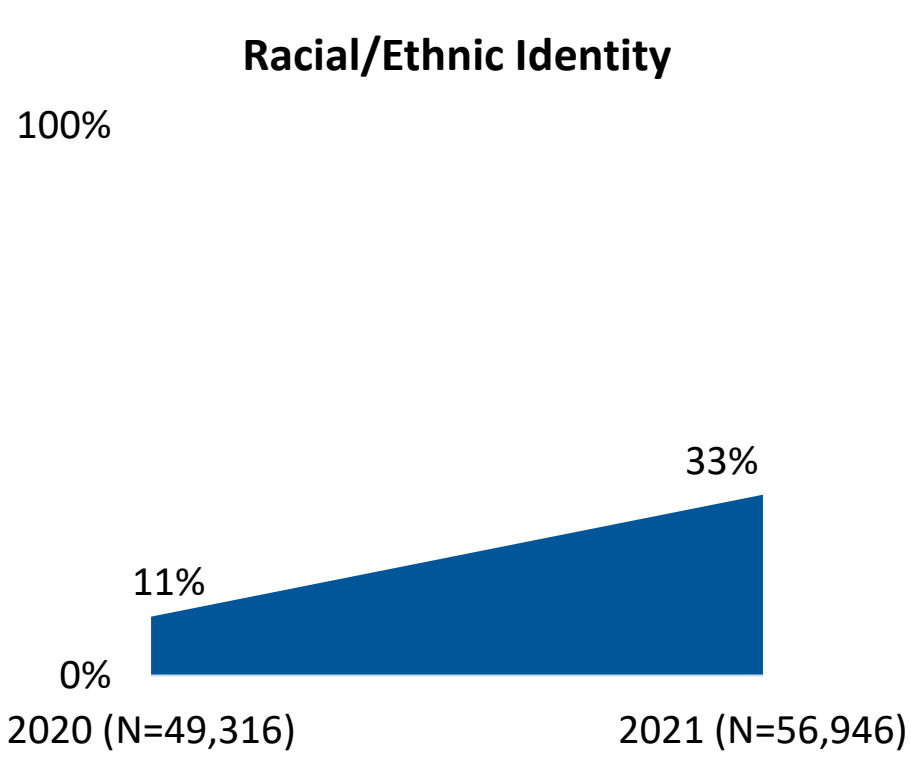
GENDER IDENTITY

- **10.9%** Women
- **25.7%** Men
- **<1.0%** Nonbinary/ Self-identify
- **63.2%** Missing

Science Family Authors and Reviewers

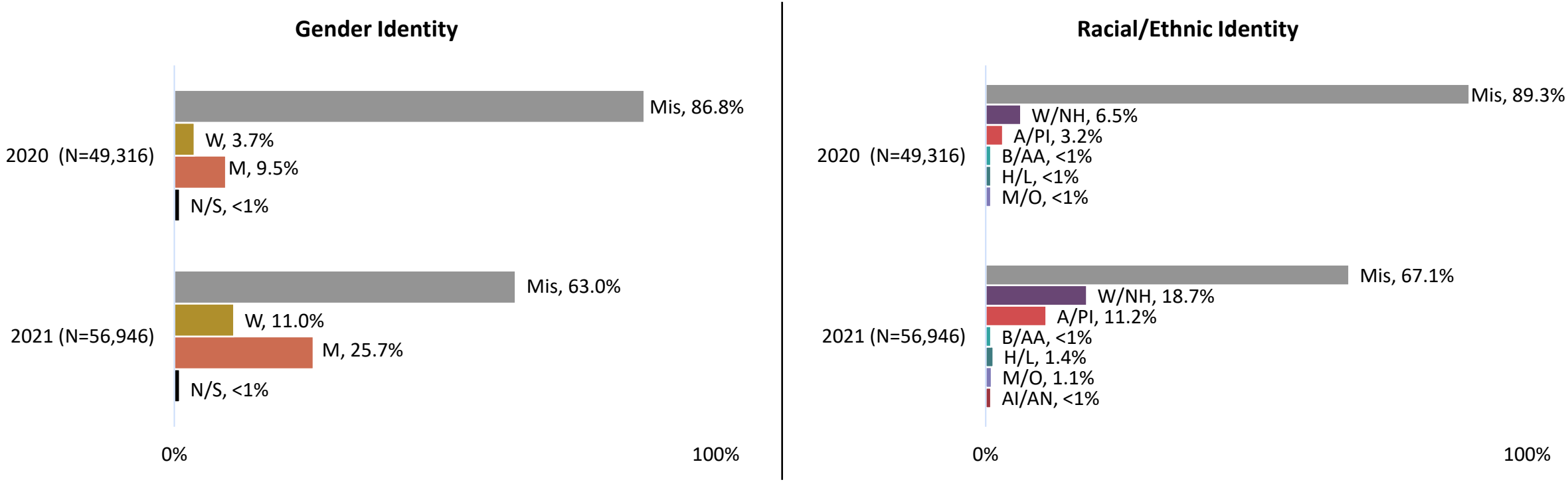
Trends in Data Coverage





Science Family Authors and Reviewers

Trends in Representation



- Women (W)
- Men (M)
- Nonbinary/Self-identify (N/S)
- Missing (Mis)
- American Indian or Alaska Native (AI/AN)
- Asian or Pacific Islander (A/PI)
- Black or African American (B/AA)
- Hispanic or Latinx (H/L)
- Multiracial or other (M/O)
- White (non-Hispanic) (W/NH)

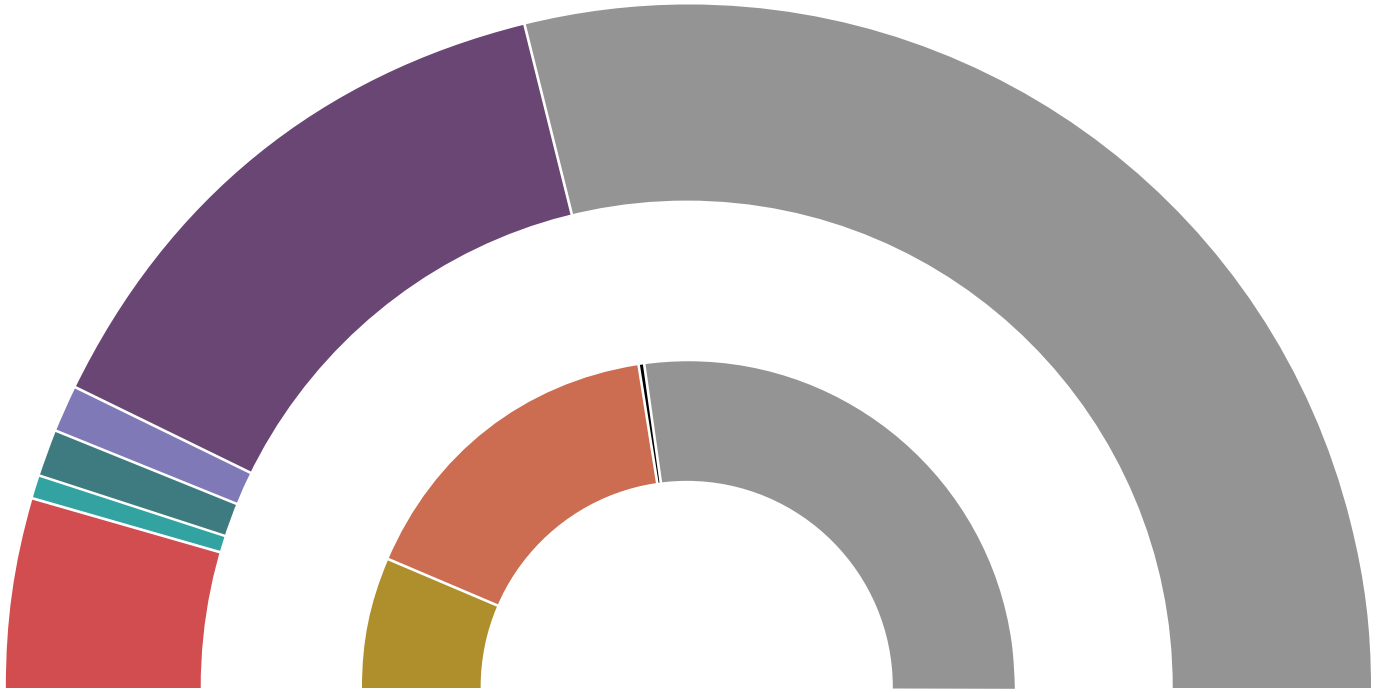
Notes: Missing data includes both people who declined to respond and people from whom data was not collected. Due to rounding, percentages may not sum to 100.

Science Family Authors and Reviewers

Reviewers (N=16,771)

RACIAL / ETHNIC IDENTITY

- **0.0%** American Indian or Alaska Native
- **9.0%** Asian or Pacific Islander
- **0.6%** Black or African American
- **1.8%** Hispanic or Latinx
- **1.9%** Multiracial or other
- **28.3%** White (non-Hispanic)
- **58.4%** Missing

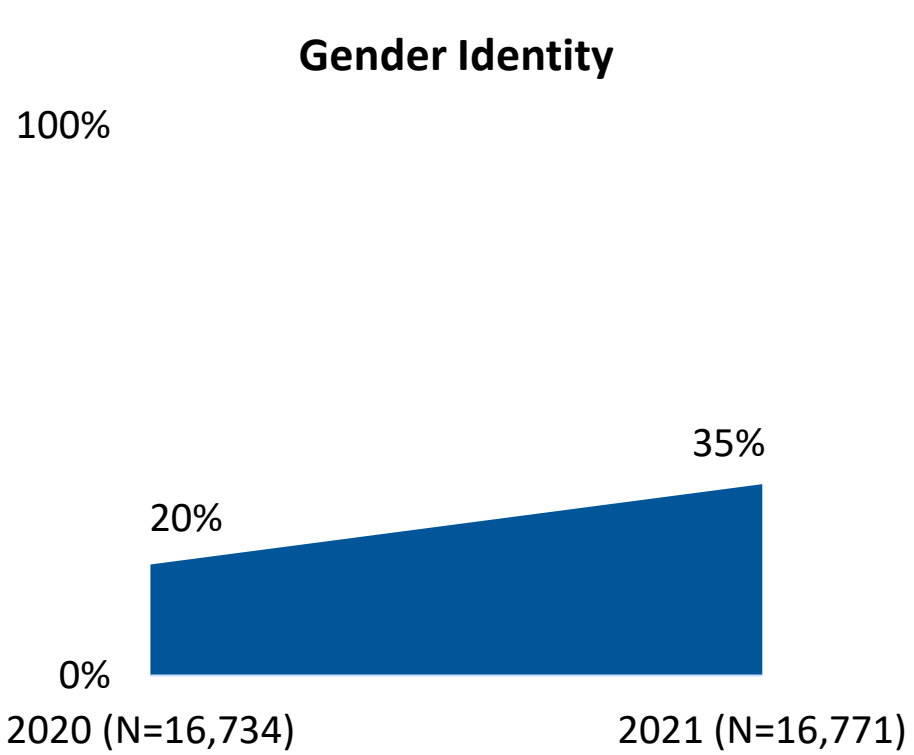


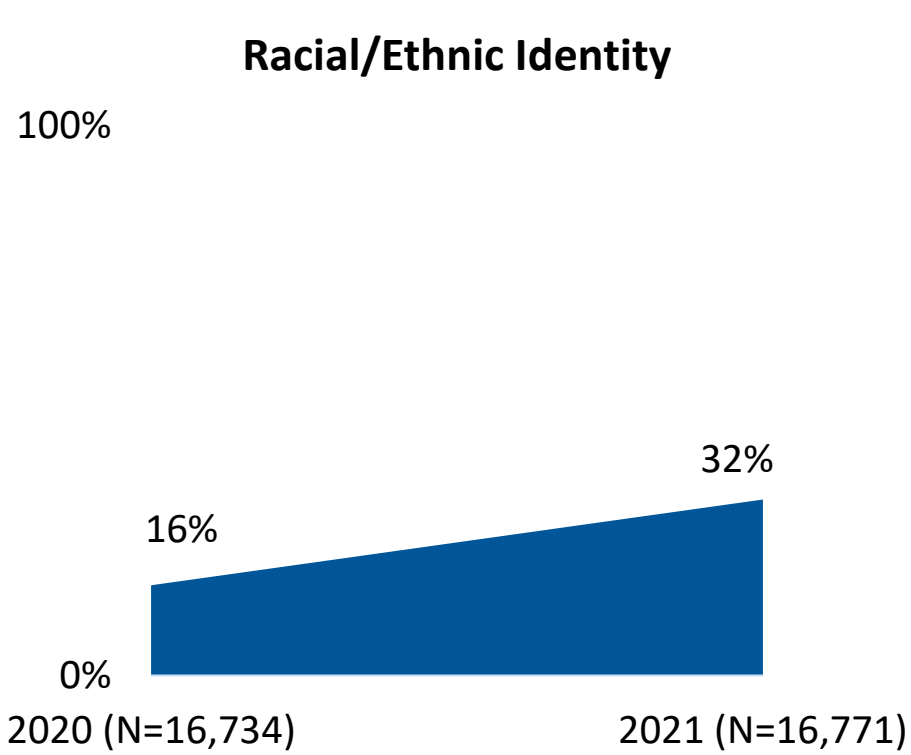
GENDER IDENTITY

- **13.6%** Women
- **32.5%** Men
- **<1.0%** Nonbinary/ Self-identify
- **53.8%** Missing

Science Family Authors and Reviewers

Reviewers: Trends in Data Coverage

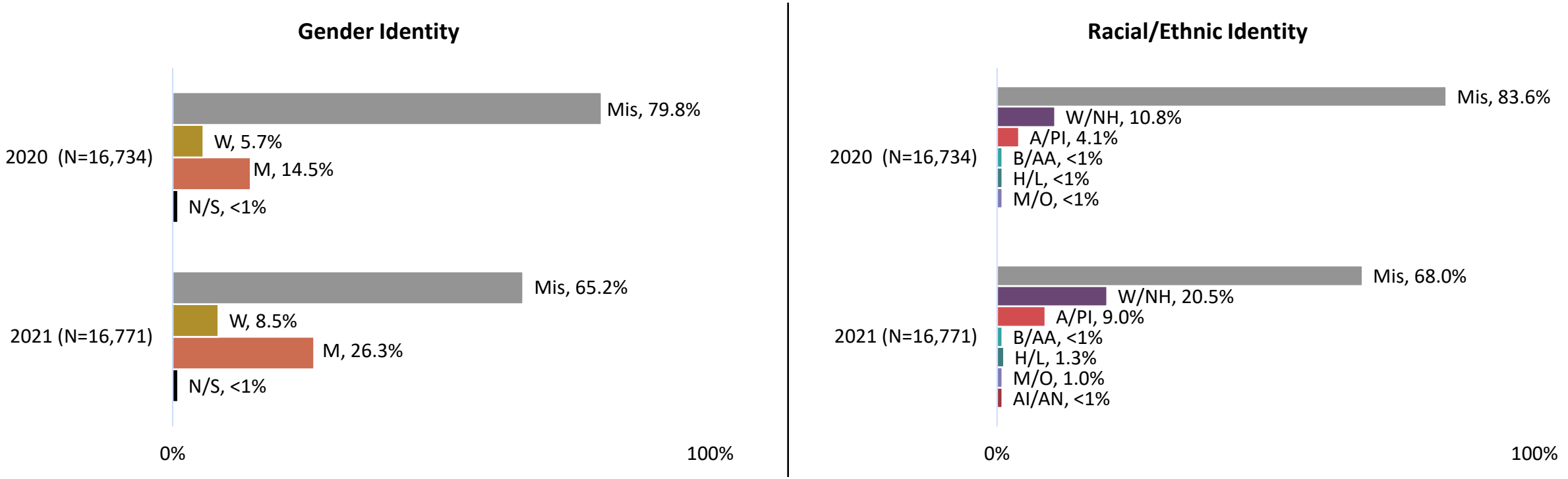




Science Family Authors and Reviewers

Trends in Representation

It is difficult to determine whether the decrease in proportion of women relative to men among *Science* Family Reviewers is due to improved data coverage (i.e., improved accuracy) or an actual shift in demographic representation.



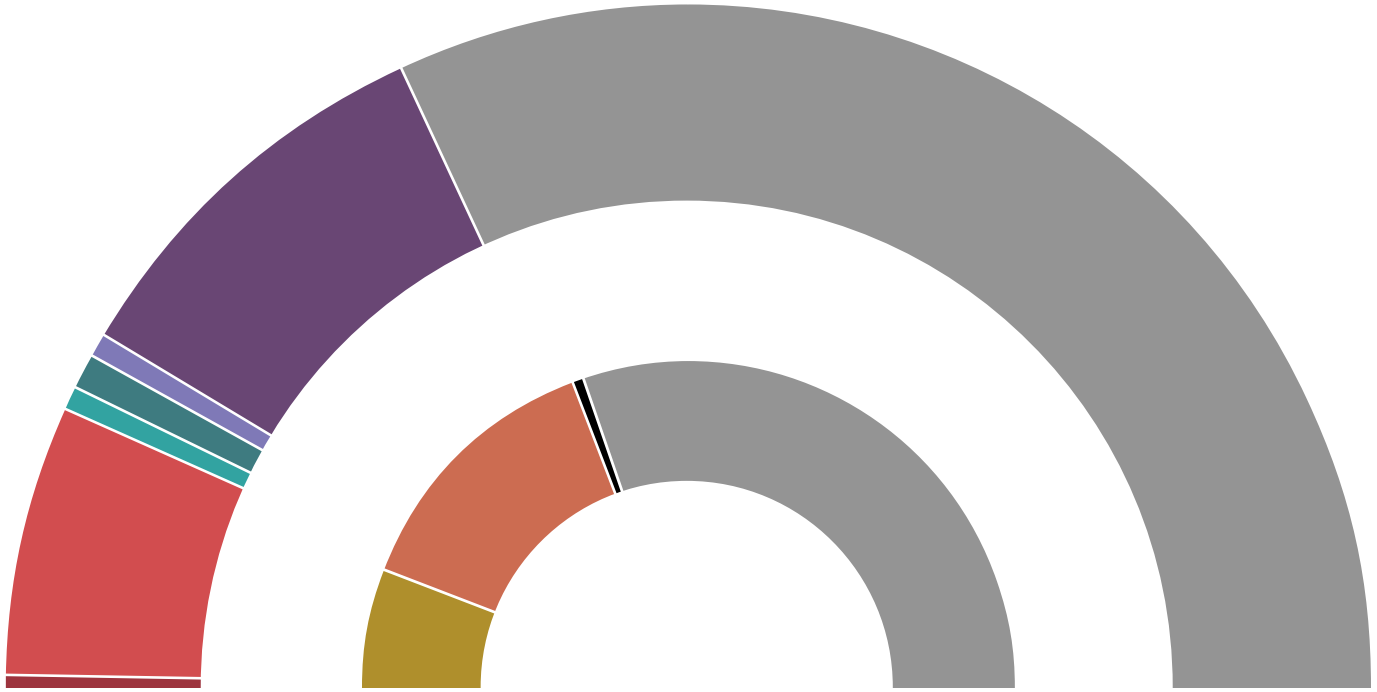
Note: Due to rounding, percentages may not sum to 100.

Science Family of Journals

Research Paper Authors (N=39,883)

RACIAL / ETHNIC IDENTITY

- **<1.0%** American Indian or Alaska Native
- **12.7%** Asian or Pacific Islander
- **<1.0%** Black or African American
- **1.4%** Hispanic or Latinx
- **1.1%** Multiracial or other
- **18.7%** White (non-Hispanic)
- **65.6%** Missing

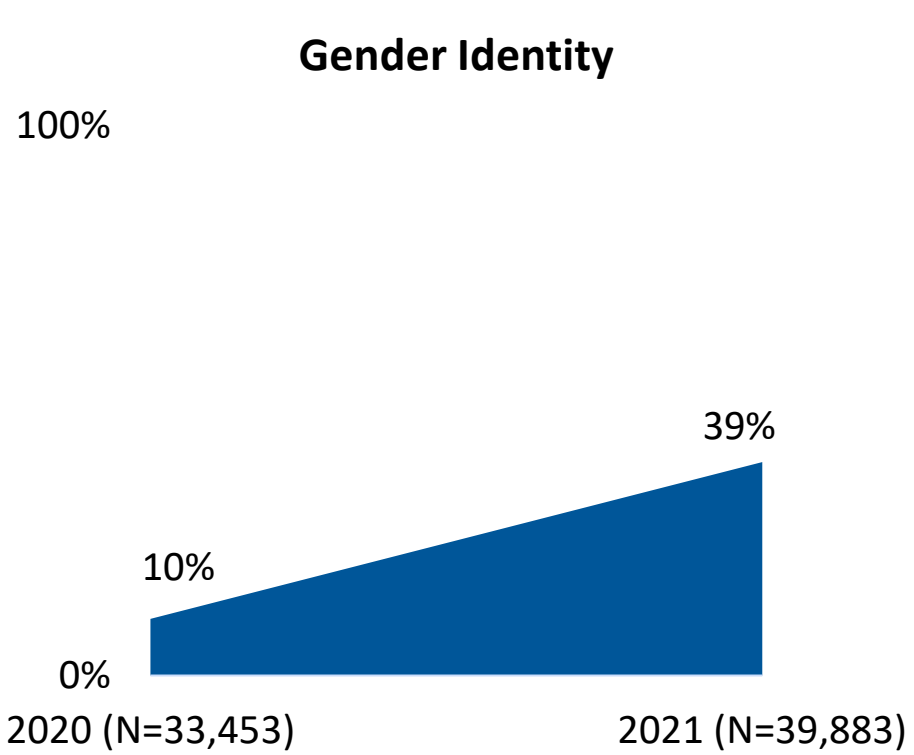


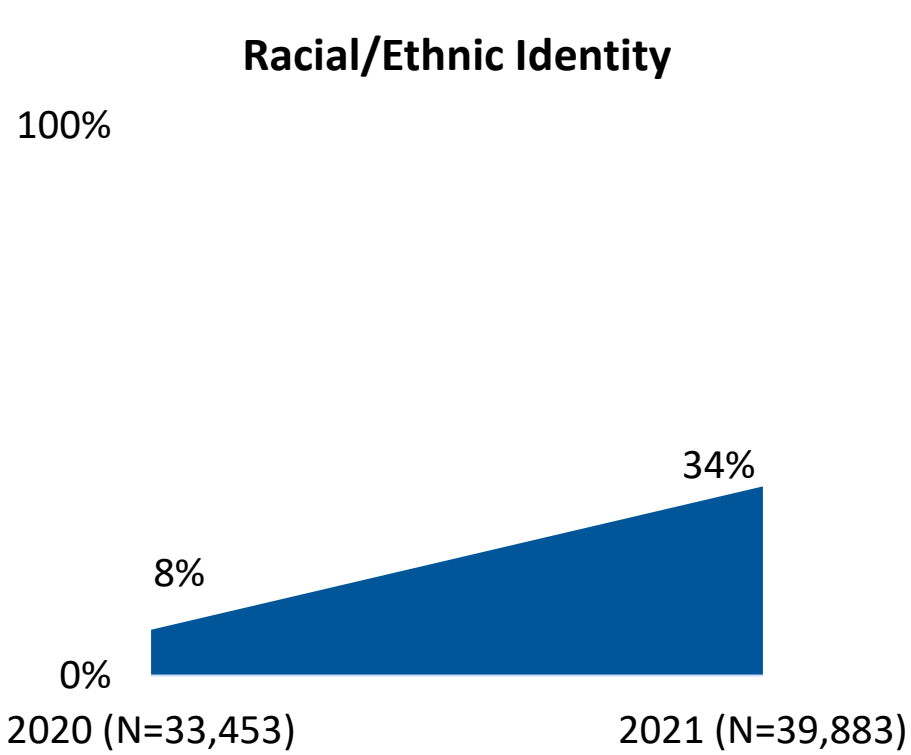
GENDER IDENTITY

- **11.8%** Women
- **26.9%** Men
- **<1.0%** Nonbinary/ Self-identify
- **61.2%** Missing

Science Family of Journals: Research Paper Authors

Trends in Data Coverage

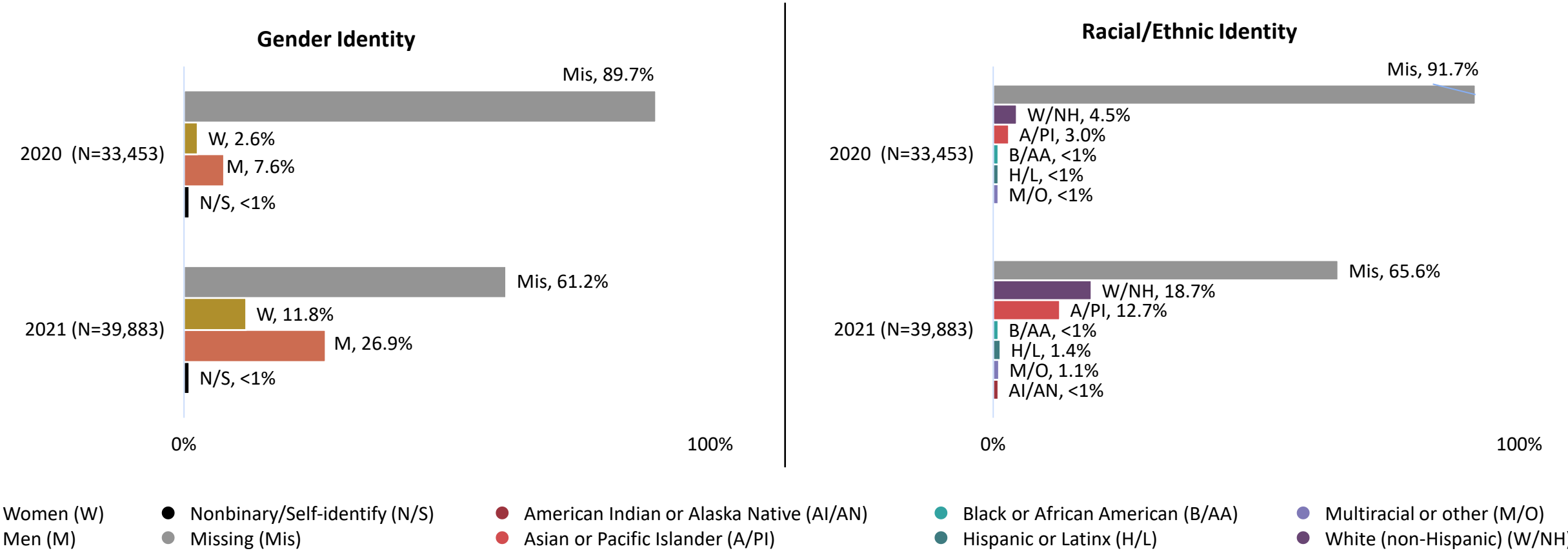




Science Family of Journals: Research Paper Authors

Trends in Representation

It is difficult to determine whether the decrease in proportion of women relative to men among *Science* Family of Journals: Research Paper Authors is due to improved data coverage (i.e., improved accuracy) or actual shifts in demographic representation.



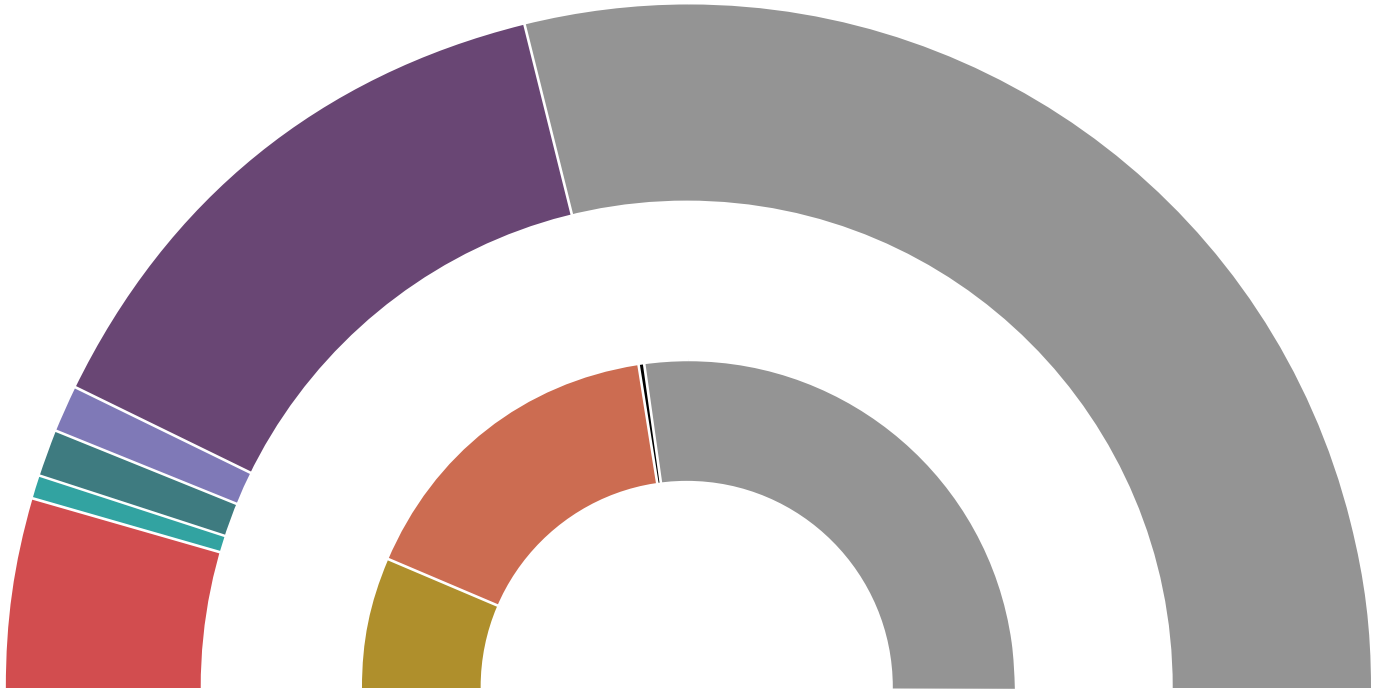
Notes: Missing data includes both people who declined to respond and people from whom data was not collected. Due to rounding, percentages may not sum to 100.

Science Family of Journals

Review Authors (N=721)

RACIAL / ETHNIC IDENTITY

- **0.0%** American Indian or Alaska Native
- **9.0%** Asian or Pacific Islander
- **0.6%** Black or African American
- **1.8%** Hispanic or Latinx
- **1.9%** Multiracial or other
- **28.3%** White (non-Hispanic)
- **58.4%** Missing

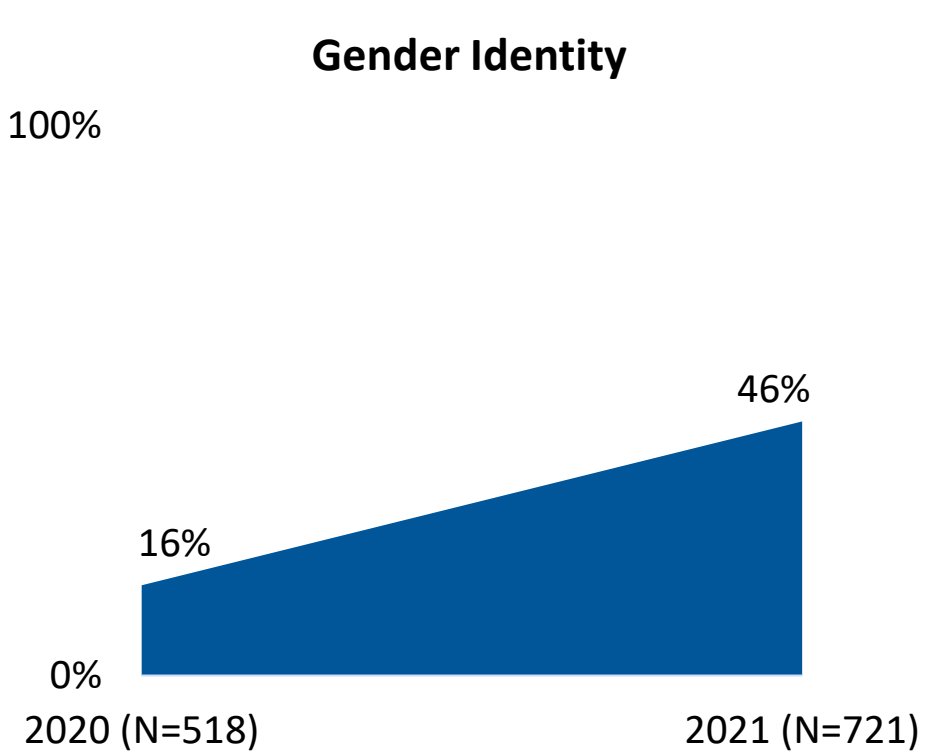


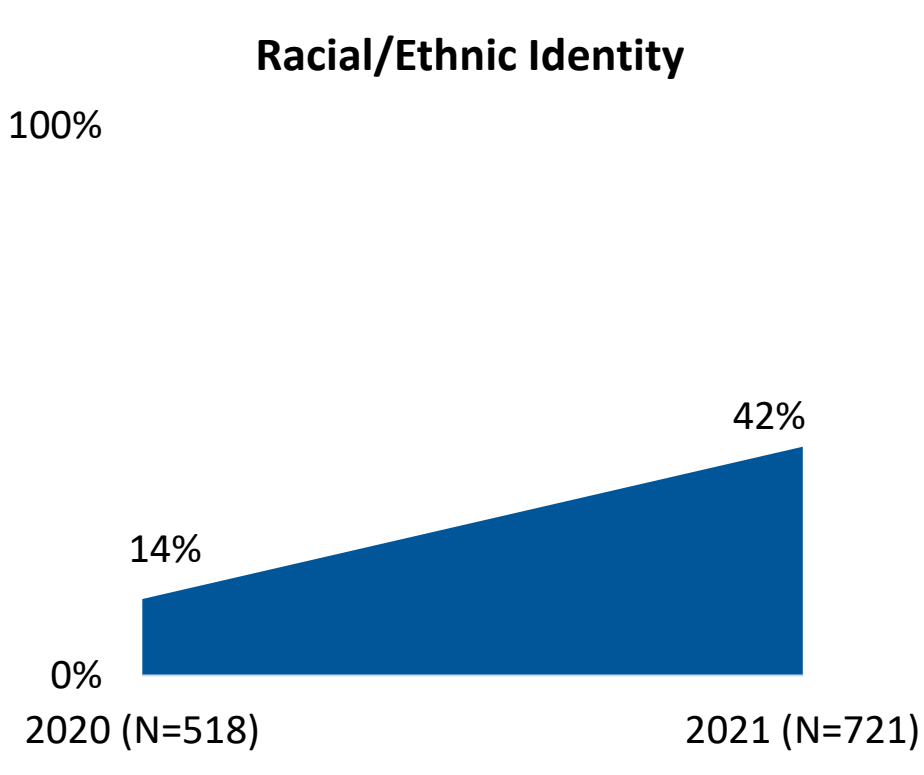
GENDER IDENTITY

- **13.6%** Women
- **32.5%** Men
- **<1.0%** Nonbinary/ Self-identify
- **53.8%** Missing

Science Family of Journals

Review Authors: Trends in Data Coverage

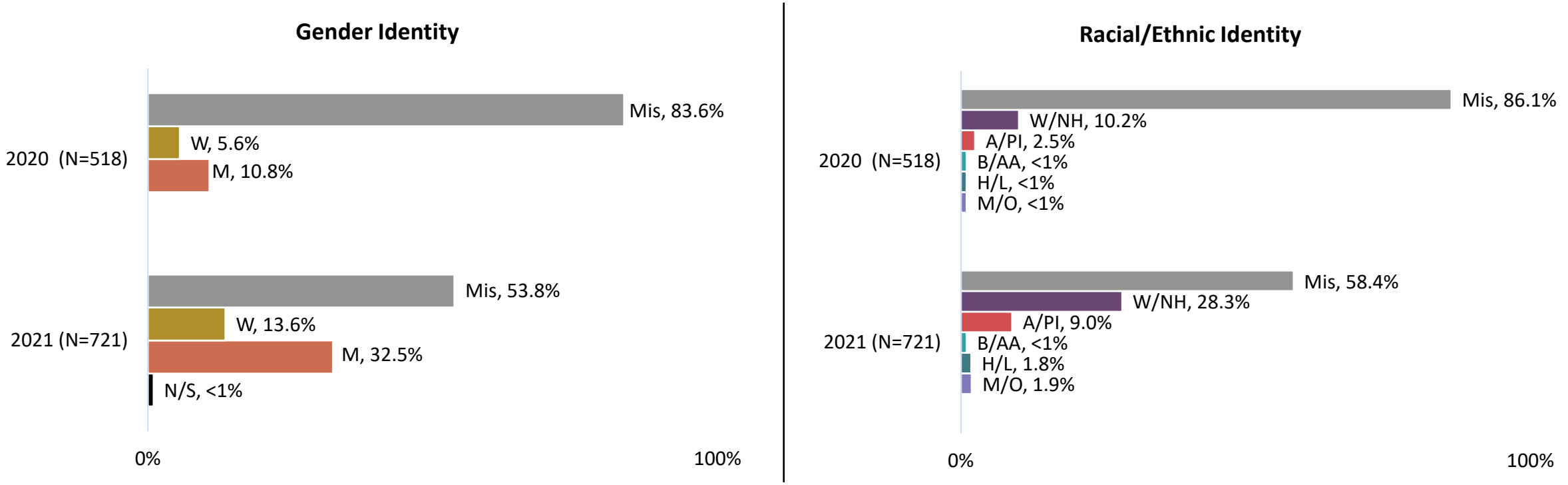




Science Family of Journals

Review Authors: Trends in Representation

It is difficult to determine whether the decrease in proportion of women relative to men among *Science* Family of Journals: Review Authors is due to improved data coverage (i.e., improved accuracy) or actual shifts in demographic representation.



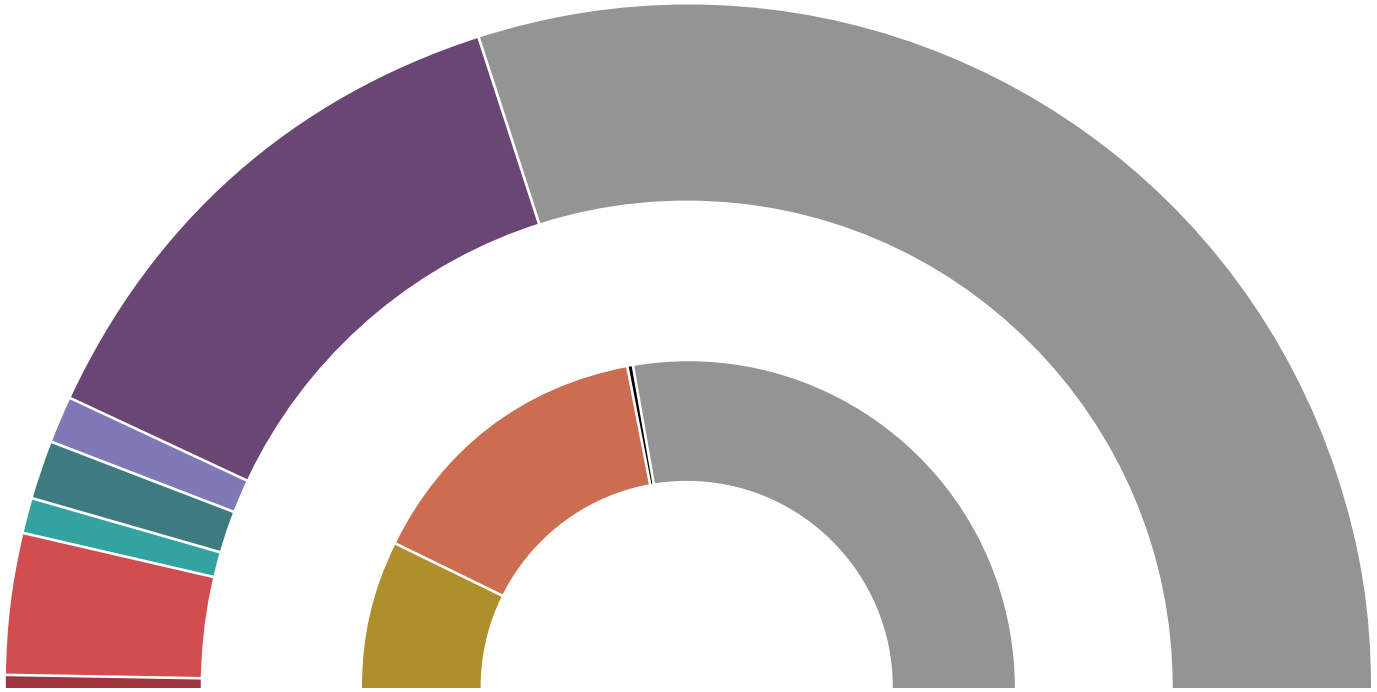
Note: Due to rounding, percentages may not sum to 100.

Science Family of Journals

Commentary Authors (N=2,560)

RACIAL / ETHNIC IDENTITY

- **<1.0%** American Indian or Alaska Native
- **6.6%** Asian or Pacific Islander
- **1.2%** Black or African American
- **2.9%** Hispanic or Latinx
- **1.8%** Multiracial or other
- **27.4%** White (non-Hispanic)
- **60.0%** Missing

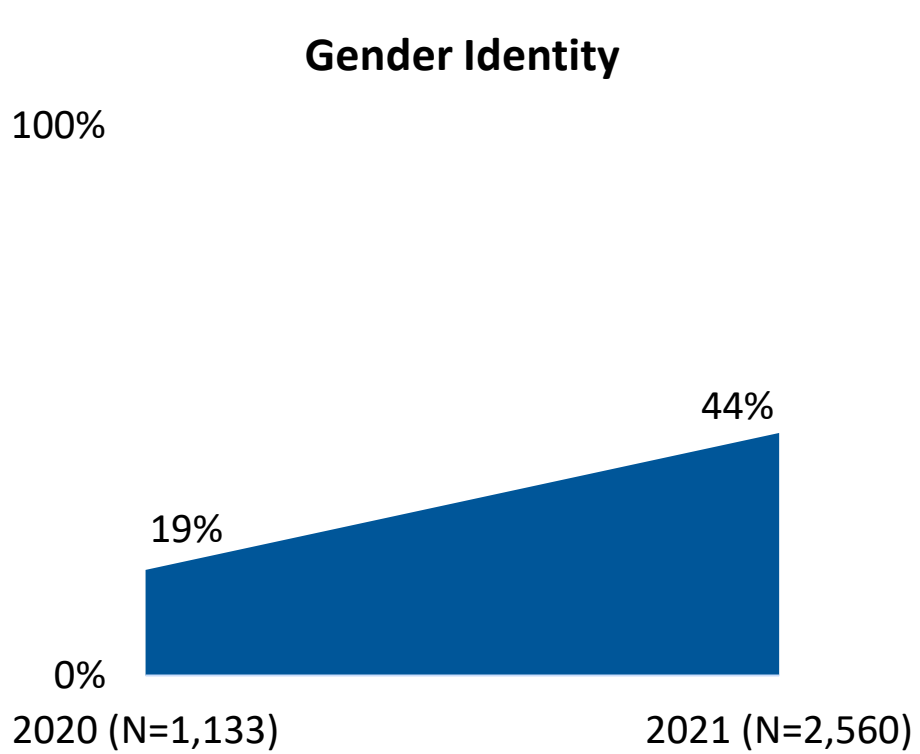


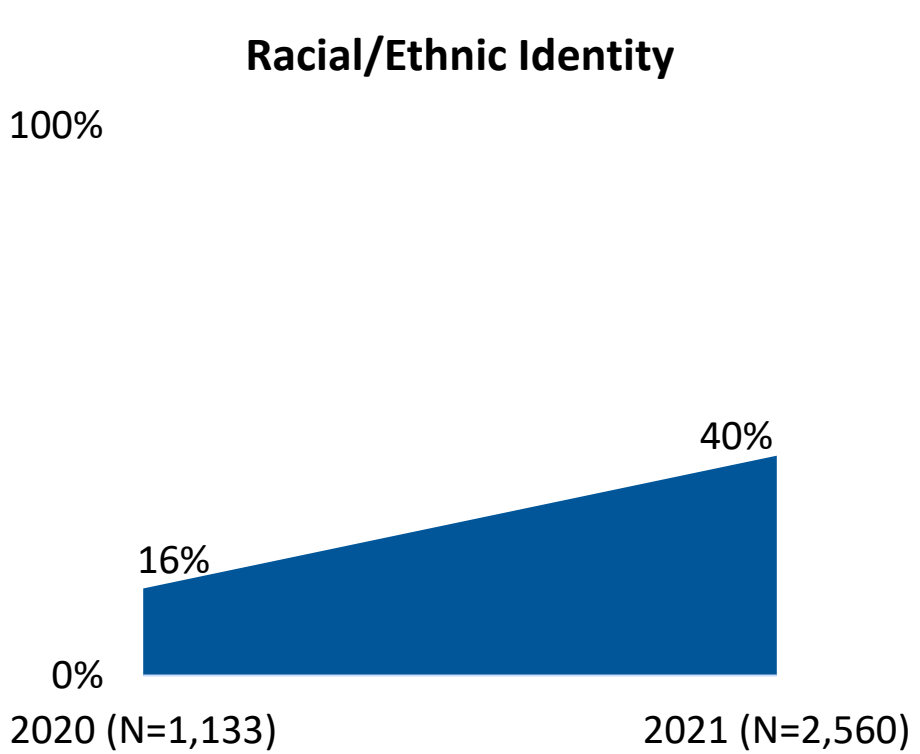
GENDER IDENTITY

- **14.6%** Women
- **29.5%** Men
- **<1.0%** Nonbinary/ Self-identify
- **55.9%** Missing

Science Family of Journals

Commentary Authors: Trends in Data Coverage

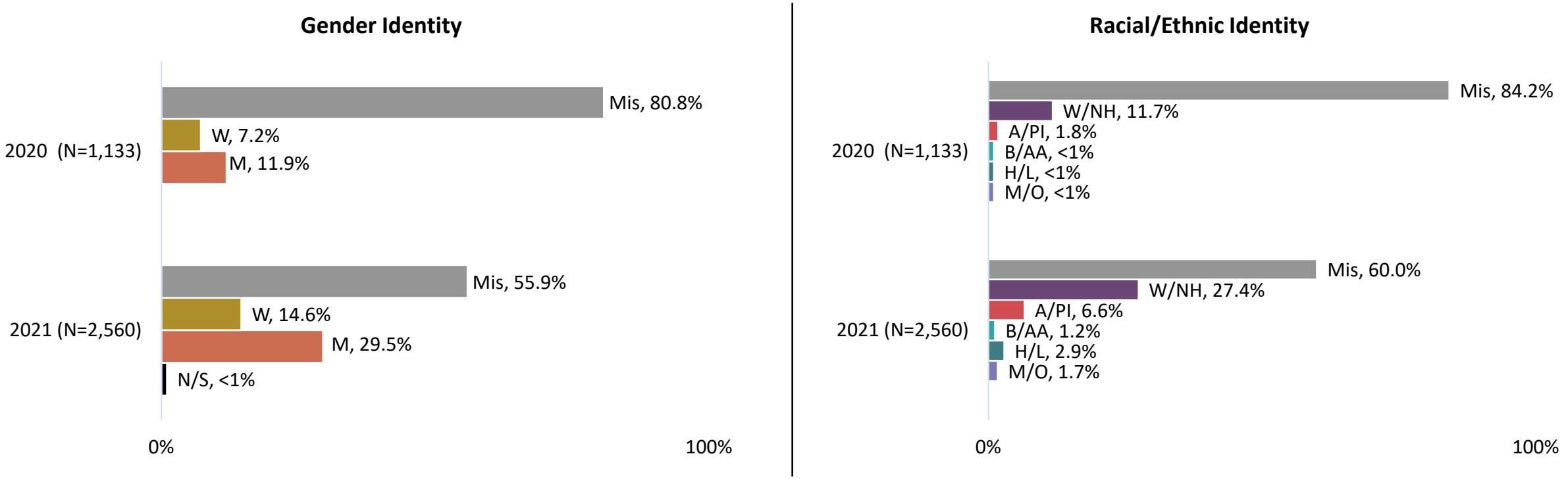




Science Family of Journals: Commentary Authors

Trends in Representation

It is difficult to determine whether the decrease in proportion of women relative to men among *Science* Family of Journals: Commentary Authors is due to improved data coverage (i.e., improved accuracy) or actual shifts in demographic representation.



Notes: Missing data includes both people who declined to respond and people from whom data was not collected. Due to rounding, percentages may not sum to 100.