

DIVERSITY SURVEY 2019

The goals of the ASIH diversity surveys are to better understand the composition of the Society's membership, identify how ASIH can best support the needs of our members, and how we can improve efforts to recruit and sustain a more diverse membership in our discipline. Below are the results of the 2019 survey with recommendations from the Diversity and Inclusion Committee on how society leadership can address challenges and opportunities presented by these results. We had 453 survey participants, which represents 30.5% response rate based on 1484 current ASIH members.

OVERALL RECOMMENDATIONS

The survey results indicate that **increasing transparency around DEI initiatives and improving cultural competency of ASIH membership and JMIH attendees** should be a major goal for ASIH. Improving cultural competency includes increasing awareness and understanding of DEI initiatives including actions aimed at increasing inclusion and representation of underrepresented/minoritized groups within Ichthyology and Herpetology, and improving accessibility for JMIH. This would benefit "majoritarian" (e.g., older, white, men) members of ASIH who have felt attacked by statements and initiatives surrounding DEI that were not communicated fully or effectively in the past, as well as communicate to members of underrepresented and minoritized groups that they are welcome in ASIH and at JMIH.

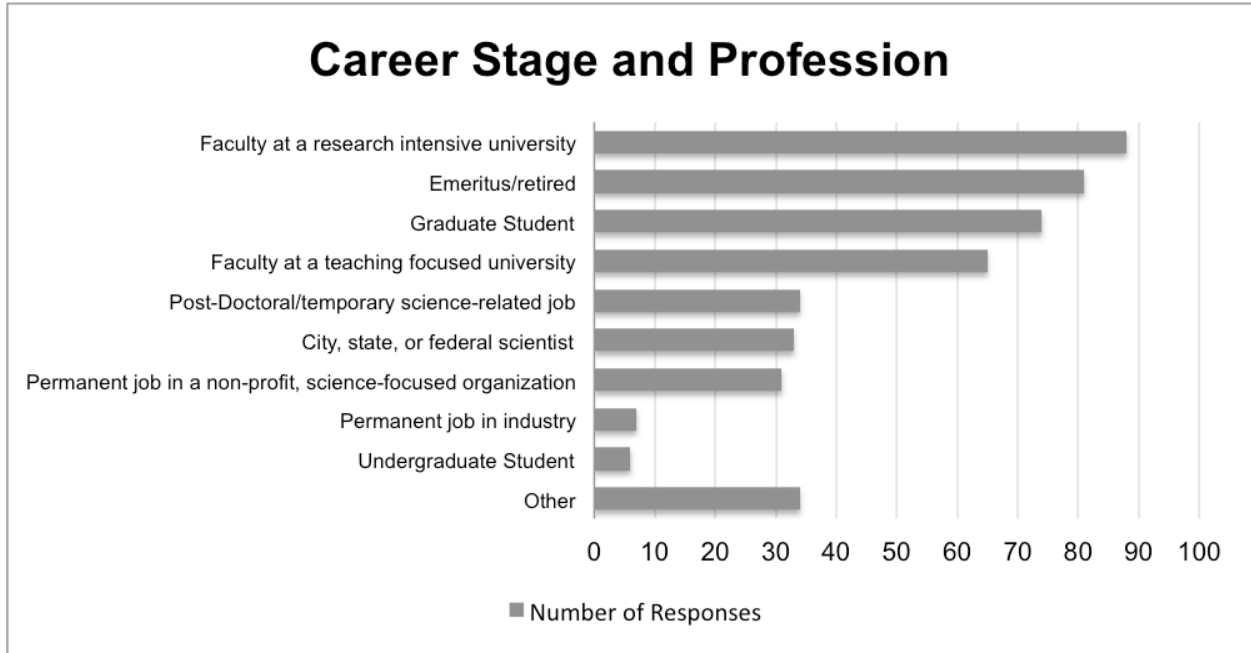
Some ways to achieve these goals include:

- A. **Providing ASIH/JMIH leadership with training to establish a strong base of knowledge and understanding around DEI.** Many members turn to ASIH leaders (president, secretary) when they want to report or address issues. ASIH leaders also have guaranteed platforms (they give introductory remarks at meetings, present awards, etc), so it is very important that they are culturally competent and informed. The Diversity and Inclusion Committee could put together a training presentation for new cohorts of ASIH leadership to be presented annually at the executive meetings. A more professional approach would be to hire an external consultant, for example from the Raben Group (<https://rabengroup.com>).
- B. **Affirmation and education around ASIH/JMIH DEI initiatives.** ASIH has an opportunity to affirm our values with regard to DEI and help educate membership simultaneously by presenting Diversity Survey results, a statement of ASIH's DEI values, and DEI resources for membership. These could be included on the ASIH and JMIH websites so that they are accessible to all members and attendees. We recommend that DEI values and information also be presented in opening remarks at JMIH, and at the ASIH Business Meeting. This would set the tone for an inclusive conference and also increase transparency.

SUMMARY OF SURVEY RESULTS

ASIH members represent a range of careers and career stages

Society membership is complex, with Faculty at research intensive universities (19.4%), Emeritus/Retired Faculty (17.9%), Graduate Students (16.3%), Faculty at teaching focused universities (14.3%), and Postdoctoral Researchers (7.5%) representing a combined 75.4% of membership. However, many of our members are state or federal scientists (7.3%) or hold permanent positions in non-profit organizations (6.8%). In addition, several members hold permanent positions in industry and other permanent, non-faculty positions at universities including staff scientists, collections managers, and administrators. ASIH membership is fairly balanced across age groups, with 33.6% early-career (ages 20-39), 30.8% mid-career (ages 40-59) and 35.6% late-career/retired (ages 60 and older).

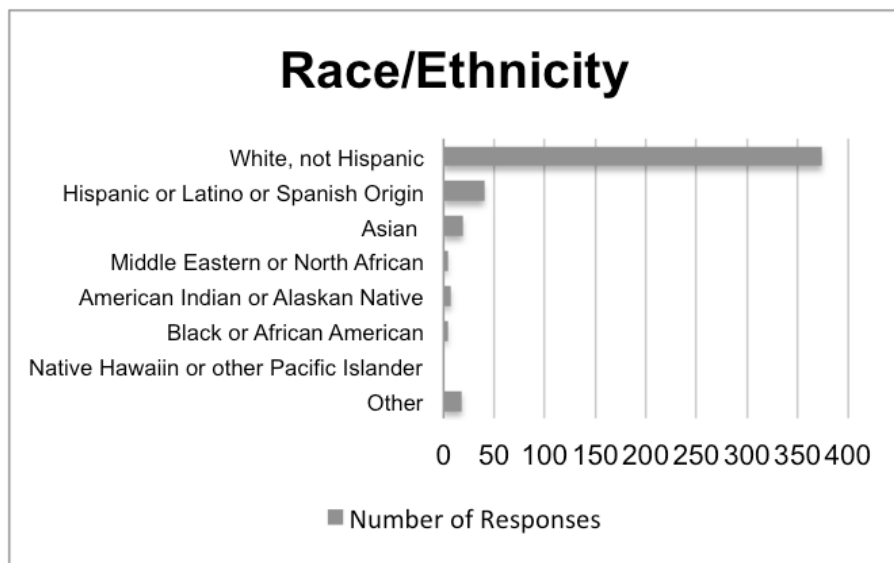


This diversity of occupations and career stages in our membership is challenging with respect to providing benefits of society membership that satisfy many different needs. However, it also provides opportunities for members to build professional networks that extend beyond a single career track and serves as an important nexus to exchange information about research, education, and conservation of the organisms for which we advocate and cherish. The Diversity and Inclusion Committee (DIC) feels strongly that maintaining meaningful connections with fellow professionals in ichthyology and herpetology across these different career paths is essential to the long-term viability of the Society and provides important networking opportunities for all members, especially for early-career professionals. We want all people in the Society to feel that membership is a worthwhile investment and that they belong in ASIH and at JMIH. Thus, the DIC recommends:

1. *Further discussion with each of the main career groups and stages within our membership to solicit feedback on the perceived benefits of membership and what types of society activities would be most relevant to them. In particular, discussion with members that are faculty at undergraduate-focused institutions, in non-profit and/or wildlife management-focused careers, and international members who have never attended meetings would provide important input as to how ASIH membership and JMIH could be more relevant to these groups.*
2. *More explicit and variable opportunities for networking within and between career paths, especially for early-career professionals (undergraduate/graduate students and postdoctoral researchers). This could include mixers/speed-networking/panels at JMIH and virtual networking events for those unable to attend JMIH.*
3. *Symposium and keynote speakers that reflect the diversity of careers within our membership.*
4. *Voluntary recording of oral presentations at JMIH made available on YouTube so that members unable to attend JMIH are able to participate remotely.*

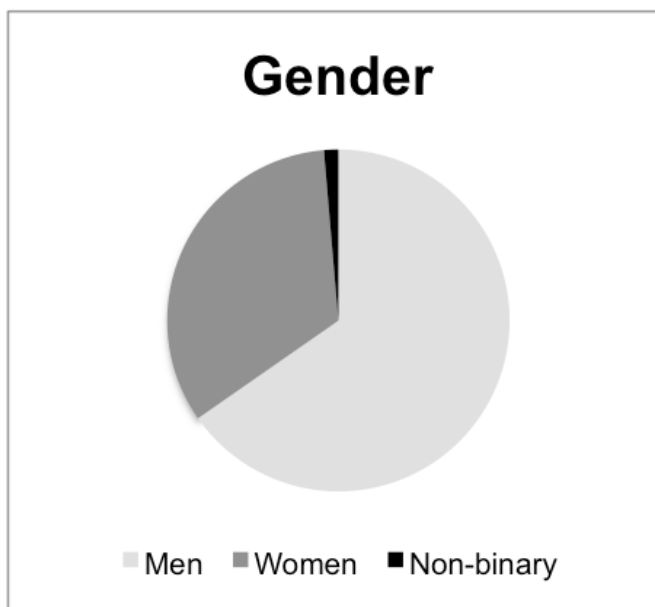
Very low representation of traditionally underrepresented groups in STEM among ASIH membership

ASIH membership surveys in 2015 and 2016 [reported](#) that society membership is not reflective of the ethnic/racial composition of graduating STEM majors in the United States, in particular with respect to Black/African American (0.8% ASIH members in 2016 versus 8.7% STEM graduates in 2014) and Hispanic/Latino (8.4% ASIH members in 2016



versus 12.1% STEM graduates in 2014) membership. In the present survey, 0.9% of respondents identified as Black or African American, and 8.9% as Hispanic or Latino or Spanish origin, indicating no significant change in the proportion of members belonging to these groups. Society membership also lags behind national averages for STEM graduates with respect to the proportion of Asian members (4.2% of ASIH membership in 2019 versus 9.5% of STEM graduates). In addition, some individuals were counted more than once because they identify as belonging to more than one of the underrepresented groups.

Likewise, the 2015 and 2016 surveys reported that society membership is not reflective of national trends for women graduating in STEM majors in the United States (31.9% ASIH members in 2016 versus 50% STEM graduates in 2014). In the present survey, 33% percent of respondents identified as women, indicating effectively no change in the gender composition of the society. Given that only 13.3% of ASIH members are 20-29, it is not surprising that the ethnic/racial and gender composition of society membership continues to lag behind national averages for STEM undergraduates. For instance gender is more balanced within the membership cohorts aged 20-29 (57% women, 5% non-binary) and 30-39 (50% women, 1% non-binary). However, a



balanced gender ratio at earlier career stages does not necessarily indicate that women are being retained in our field. In addition, the ethnic/racial composition of the ages 20-29 and 30-39 cohorts still deviates from national averages of STEM graduates with a combined 10.5% of respondents identifying as Hispanic or Latino or Spanish origin, 4.6% identifying as Asian, 2.6% as American Indian or Alaskan Native, and only one person (<1%) identifying as Black/African American.

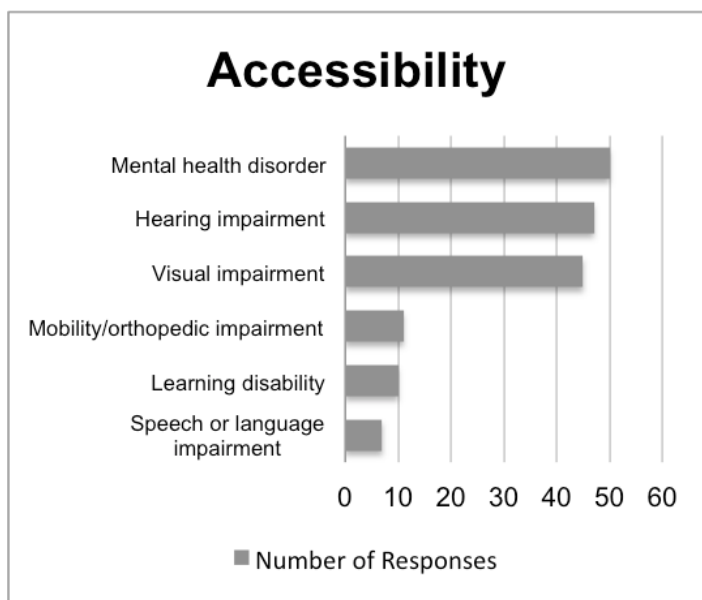
The 2019 survey also provided additional categories and free-response options for many questions such that we now have estimates of ASIH membership that identify as Middle Eastern/North African (0.9%), as non-binary/genderqueer (1.3%), as part of the LGBTQ+ community (10.5+%), as well as members for whom English is a second language (14.5%) and that are first generation college graduates (32.1%). Through the free-response options we also received feedback that religious sensitivity is an area in which ASIH and sister societies could improve.

The DIC remains deeply concerned that ASIH membership is not representative of the demography of the United States, let alone, the demography of STEM undergraduates in the United States. Clearly, major efforts are needed to recruit and retain a more diverse community in our discipline and the DIC recommends the following:

1. *An assessment of the diversity composition of ASIH leadership, Board of Governors, and committees.*
2. *Maintain the Cashner Student Awards at the current funding level of 10 awards per year (5 fishes, 5 herps). Solicit a mentor from the general ASIH membership for each student recipient based on their career goals and/or research interests. Establish quarterly virtual meetings for current and past recipients to enable peer-to-peer mentorship.*
3. *Financial support for ASIH representation at national conferences that promote diversity in STEM (e.g., the Society for Advancement of Chicanos/Hispanics and Native Americans in Science).*
4. *Professional development workshops at JMIH with a focus on mentoring and leadership skills for early-career faculty at research and undergraduate-focused institutions. Some respondents indicated a lack of funds to attend JMIH (particularly members that are not based at research universities); therefore, travel awards for early-career faculty at undergraduate-only institutions to defer the cost of attending the workshop and JMIH may help increase diversity of participants.*
5. *Social gatherings for members of underrepresented groups and allies at JMIH.*
6. *Religious holidays should be taken into consideration by the Meeting Management and Planning Committee when scheduling conferences and other events.*

Accessibility needs of ASIH members at JMIH

ASIH membership surveys in 2015 and 2016 [reported](#) on mobility, hearing and visual impairments among the membership, which accounted for a combined 13.1% of respondents. The 2019 survey included additional options for reporting impairments with 11.8% of respondents reporting a mental health disorder, 11.1% reporting a hearing impairment, 10.6% reporting a visual impairment, 2.6% reporting a mobility/orthopedic impairment, 2.4% reporting a learning disability, and 1.6% reporting a speech or language impairment. The DIC feels strongly that ASIH, and in particular activities related to JMIH, should take into account the accessibility needs of our membership and recommend the following:



1. *Improved accessibility at JMIH for members with hearing impairments:*
 - a. *Online registration should include a list of measures being implemented to improve accessibility for members with hearing impairments and include the option for registrants to list accommodation requests.*
 - b. *A protocol should be implemented for the local conference planning committee that year to audit technology offerings of the conference venues, preferably during the bidding process. For example, the venue should offer ADA standard accommodations, such as a compatible microphone or assistive listening system where speech can be transmitted directly to some hearing aids and cochlear implants.*
 - c. *JMIH should provide instructions for session chairs and those preparing oral presentations specifying that >10% of membership is hearing impaired and that use of microphones is **not** optional. Headset or lapel microphones should be supplied when possible (especially for longer presentations) because these tend to provide uninterrupted amplification, even when the speaker moves around. If only fixed or handheld microphones are available, session chairs should remind presenters to speak directly into the microphone. Finally, roving microphones should be made available at events where questions or comments from the audience are solicited. In the situation that a question is asked unamplified, speakers should repeat the question into the microphone before providing an answer.*
 - d. *Promote assistive listening technology among participants (e.g., remote microphones, speech-to-text apps).*
 - e. *Poster sessions are especially challenging for members with hearing impairments. The conference planning committee should account for the acoustics and layout of exhibition spaces when considering suitable venues for JMIH to ensure poster sessions are productive and enjoyable for all members to attend. One solution might be arranging poster sessions into multiple, smaller spaces rather than one large auditorium/exhibition hall.*
2. *Improved accessibility at JMIH for members with visual impairments:*
 - a. *Online registration should include a list of measures being implemented to improve accessibility for members with visual impairments and include the option for registrants to list accommodation requests.*
 - b. *The local conference planning committee should audit projection offerings of the conference venue to ensure that screen size is scaled appropriately to the size and configuration of the presentation room.*
 - c. *JMIH should provide instructions for those preparing oral and poster presentations specifying that >10% of our membership is visually impaired and provide guidance on minimum font sizes and color combinations for effective communication (e.g., <https://www.ascb.org/science-news/how-to-make-scientific-figures-accessible-to-readers-with-color-blindness/>).*
3. *Improved visibility and support at JMIH for members with mental health disorders and learning disabilities:*
 - a. *JMIH should provide instructions for those preparing oral and poster presentations with guidance on formats that are accessible for those with dyslexia and other learning disabilities (e.g., <https://www.brightcarbon.com/blog/powerpoint-presentations-and-dyslexia/>).*
 - b. *Acknowledgement of mental health disorders and neurodiversity represented in both ASIH and US society at-large, potentially during conference introduction. This could also*

serve to increase awareness and cultural competency of ASIH membership/JMIH attendees.

4. *Improved accessibility at JMIH for members with mobility/orthopedic impairments:*
 - a. *The local host committee, prior to accepting bids, should take into account the layout of meeting spaces such that attendees with mobility/orthopedic impairments are given sufficient time to move between talks when there are concurrent sessions. For instance, moving between sessions was challenging at the JMIH in Snowbird for members of all abilities, but especially challenging for those with mobility/orthopedic impairments.*
5. *Social gatherings for members of these groups and allies at JMIH with opportunities to provide feedback to JMIH on the effectiveness of accessibility initiatives.*

Creating a more inclusive atmosphere at JMIH

A significant portion (12%) of survey respondents indicated that they do not feel they belong to the ASIH community for many different reasons, but a few common themes include feeling that ASIH is an “old white boys club”, that the society and JMIH are geared towards members in academic positions, and general disillusionment due to inappropriate conduct at previous Joint Meetings. In addition, several respondents indicated they would like greater transparency with respect to ASIH activities and decisions - these responses came both from members of underrepresented/minoritized groups, and from “majoritarian” groups (specifically older white men). When it comes to divisive issues (and unfortunately, DEI initiatives are currently seen as divisive), it is not an effective strategy to simply present facts in the hopes that dissenters will change their minds. If we want to change the minds of ASIH members who do not support/understand DEI initiatives, we need to help them understand why DEI initiatives are important and beneficial for everyone. As stated above, we want all of our members to feel that membership is a worthwhile investment and that they belong in ASIH and at JMIH, thus the DIC recommends:

1. *More networking opportunities at JMIH, especially for early-career researchers, new members, and members attending their first JMIH (or first JMIH in many years).*
2. *Provide additional networking opportunities with small group and one-on-one formats (e.g., the popular speed-networking event for students could offer a mentor-student matching session that runs simultaneously where small groups meet with one or two professionals)*
3. *Increased communication to ASIH membership about how and why the society does things (at the EXEC level and committee level, including diversity-related initiatives).*
 - a. *An option here could be to include affirmation and explanation of DEI initiatives during the JMIH opening remarks. This could both affirm that underrepresented/minoritized groups are valued and welcome at JMIH, and that e.g. old white men are in fact **not** being negatively targeted through the implementation of these programs. Increased diversity, equity, and inclusion makes **all** of us better scientists, and at the same time makes our science better.*
 - b. *Additional resources:*
 - i. <https://www.scientificamerican.com/article/how-diversity-makes-us-smarter/>
 - ii. <https://heleo.com/facts-dont-change-peoples-minds-heres/16242/>
 - iii. <https://www.psychologytoday.com/us/blog/thoughts-thinking/201804/how-change-people-s-minds>
 - iv. <https://hbr.org/2019/10/how-to-show-white-men-that-diversity-and-inclusion-efforts-need-them>
4. *Greater engagement with society members to solicit feedback on society activities and areas for improvement.*
5. *Revise the 2019 Diversity Survey questions in response to feedback submitted through the free response sections of the survey to improve the survey before it is implemented in 2020.*

The 2019 ASIH Diversity Survey, summary, and recommendations were prepared by the ASIH Diversity and Inclusion Committee: Rayna Bell (co-chair), Mariangeles Hernandez (co-chair), Anat Belasen, Adania Flemming, Kimberly Foster, Michael Franklin, Chris Martinez, M. Rockwell Parker, Adela Roa-Verón, Beck Wehrle, Molly Womack