MEMBERSHIP SURVEY 2020

The goals of the ASIH membership surveys are to better understand the composition of the Society's membership, identify how ASIH can best support the needs of our members, and determine how we can improve efforts to recruit and sustain a more diverse membership in our discipline. Below are the results of the 2020 survey with recommendations from the Committee for Diversity, Equity, Inclusion and Belonging (DEIB) on how society leadership can address challenges and opportunities presented by these results. The survey was sent by Allen Press to current members and to those who have recently let their memberships lapse. We had 642 survey participants, which represents a 28.1% response rate based on 2284 members and recently lapsed members.

OVERALL RECOMMENDATIONS

As in the previous year, survey results indicate that **increasing transparency around DEI initiatives** and improving cultural competency of ASIH membership and JMIH attendees is 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 minoritized (sometimes referred to as "underrepresented") 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 minoritized groups that they are welcome in ASIH and at JMIH. The free responses to survey questions indicate some improvement in this area over the last year, but we still have work to do!

Some ways to achieve these goals include:

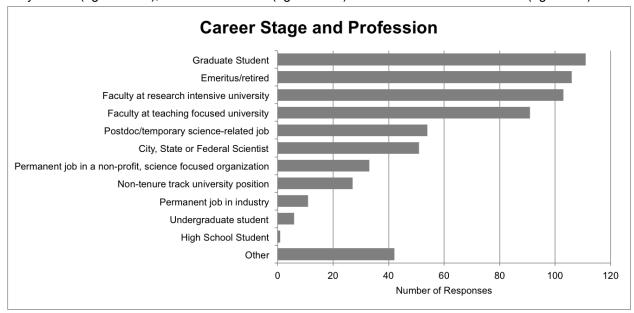
- A. Providing ASIH/JMIH leadership with training to establish a strong base of knowledge and understanding around DEI. Many members turn to ASIH leaders (president, secretary) when they want to report or address issues, as well as to set the cultural and professional tone of Society activities. ASIH leaders have guaranteed platforms (they give introductory remarks at meetings, present awards, etc), so it is very important that they are culturally competent and informed. DEIB strongly recommends the Society hire a professional external consultant to provide this training for leadership, for example 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 Membership Survey results, a statement of ASIH's DEI values, and DEI resources for membership. The Society has made important steps in this work over the last year. 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 would also increase transparency.

SUMMARY OF SURVEY RESULTS

ASIH members represent a range of careers and career stages

Society membership represents diverse careers and career stages, with Faculty at research intensive universities (16.2%), Emeritus/Retired Faculty (16.7%), Graduate Students (17.5%), Faculty at teaching focused universities (14.3%), and Postdoctoral Researchers (8.5%) representing a combined 73.1% of membership. However, many of our members are state or federal scientists (8.0%) or hold permanent positions in non-profit organizations (5.2%). 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 38.8% early-career (ages 20-39), 26.2% mid-career (ages 40-59) and 35.0% late-career/retired (ages 60+).

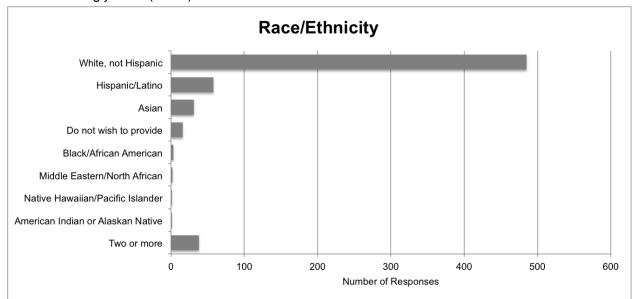


This diversity of occupations and career stages in our membership is challenging with respect to providing benefits of society membership that satisfy many different needs. However, it also provides opportunities for members to build professional networks that extend beyond a single career track and serves as an important nexus to exchange information about research, education, and conservation of the organisms for which we advocate and cherish. The DEIB 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 DEIB recommends:

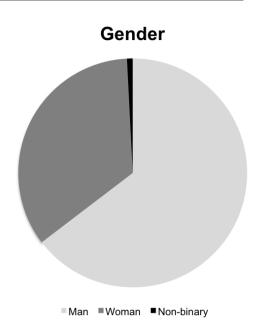
- 1. **ASIH leadership should form a Membership Committee** that conducts the annual membership survey with input from DEIB.
- 2. The Membership Committee should lead further discussion with each of the main career groups and stages within our membership to solicit feedback on the perceived benefits 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. DEIB can provide the Membership Committee with the raw survey data and free responses from 2019 and 2020 so they can begin their work immediately.
- 3. More explicit and variable opportunities should be provided for networking within and between career paths, especially for early-career professionals (undergraduate/graduate students and postdoctoral researchers) and faculty at primarily undergraduate institutions. This could include mixers/speed-networking/panels at JMIH and virtual networking events for those unable to attend JMIH.
- 4. Symposium and keynote speakers should reflect the diversity of careers within our membership.
- 5. Voluntary recording of oral presentations at JMIH made available on YouTube should be an option so that members unable to attend JMIH are able to participate remotely.

Very low representation of minoritized ("traditionally underrepresented") groups in STEM

ASIH 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 and Hispanic/Latino membership (see DEIB reports from previous years). In the present survey, 0.5% of respondents (three individuals) identified as Black or African American, and 9.1% as Hispanic/Latino, indicating no significant change in the proportion of members belonging to these groups since the first DEIB administered survey in 2015. Society membership also lags behind national averages for STEM graduates with respect to the proportion of Asian members (4.9% of ASIH membership in 2020 versus 9.5% of STEM graduates). American Indian or Alaskan Native, Native Hawaiian/Pacific Islander, and Middle Eastern/North African are also underrepresented in ASIH with one, one, and two respondents selecting these identities, respectively. Several members indicated they belong to two or more ethnic/racial groups (6% of members); however, even accounting for this additional diversity in membership composition, the Society is overwhelmingly white (>75%).



Disparity in membership representation also occurs along the axis of gender. Previous membership surveys reported that society membership is not reflective of national trends for women graduating in STEM majors in the United States (note there are not national statistics for non-binary/gender non-conforming STEM majors). In the present survey, 34.6% percent of respondents identified as women, indicating effectively no change in the gender composition of the society since the first DEIB administered survey in 2015. Given that only 12.9% 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 (58.7% women, 2.5% non-binary) and 30-39 (47.8% women, 1.2% non-binary). However, a balanced gender ratio at earlier career stages does not necessarily indicate that gender minorities (women and non-binary people) are being retained in our field.



The 2019 and 2020 surveys included additional questions that provide a more comprehensive view of the identities of ASIH membership. For instance, 10.8% of members identify as part of the LGBTQ+ community, English is a second language for 17.3% of members, 32.1% are first generation college graduates, 87% reside in North America (predominantly in the United States), and 11.4% of members belong to a religious group. Through the free-response options in the survey, we received feedback that religious sensitivity is an area in which ASIH and sister societies need to improve. Alongside these calls for improved religious sensitivity, some responses to the survey question were offensive and dismissive with comments such as "Ehhh, this is a scientific society. We don't need to pander. Religion isn't really diversity of thought, and let's be real here, it's bullshit.", "Religion or accommodations for religion or religious behavior or practice should not be allowed in a scientific organization.", and "Religious beliefs are antithetical to science and should not be catered to." Addressing religious sensitivity is important to creating a more welcoming environment in ASIH, and is directly related to our goals to increase diversity within the membership given the intersection between religion and ethnicities that are minoritized and/or marginalized in the Society. For instance, as a group African Americans are significantly more religious than many other ethnic groups in the US (Pew 2009).

The DEIB 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, large-scale and intentional efforts are needed to recruit and retain a more diverse community in our discipline. The DEIB recommends the following:

- 1. An assessment of the composition of identities held by ASIH leadership, Board of Governors, and committees.
- 2. Release a transparent statement to ASIH membership that includes the DEI values of ASIH leadership, the current identity composition of ASIH leadership and membership, the relevant work being done and planned, an invitation for feedback from membership, and a commitment to continuing to evolve toward a welcoming, equitable, and inclusive Society.
- 3. 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 (these activities are now ongoing).
- Provide 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).
- 5. Hold 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.
- 6. Hold social gatherings for members of underrepresented groups and allies at JMIH.
- 7. Take religious holidays into consideration when the Meeting Management and Planning Committee (MMPC) schedules conferences and other events.

Accessibility needs of ASIH members at JMIH

As in previous surveys, we included several questions to address accessibility needs of members. In 2020, 10.0% of respondents reported a mental health disorder, 9.0% a hearing impairment, 5.2% a visual impairment, 1.7% a mobility/orthopedic impairment, 1.6% a learning disability, and 0.5% a speech or language impairment. The DEIB feels strongly that ASIH, and in particular activities related to JMIH,

should take into account the accessibility needs of our membership and recommend the MMPC and local hosts address 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 each 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 be made accessible to those with visual impairments and 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 choice guidance for effective communication (e.g., https://www.ascb.org/science-news/how-to-make-scientific-figures-accessible-to-readers-with-color-blindness/).
 - d. Official ASIH social media accounts should produce content that is compatible with screen readers (e.g., capitalization in hashtags so screen readers can translate them)
- 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 should be represented in both ASIH and US society at-large, potentially during conference introduction. This would improve feelings of belonging for these members, as well as serve to increase awareness and cultural competency of all 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 (19.8%) 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 "cliquey", that the society and JMIH are geared towards members in academic positions, and general disillusionment due to inappropriate conduct at previous Joint Meetings. This number is slightly higher than survey respondents in 2019. The 2020 survey results may more accurately represent general sentiments among ichthyologists and herpetologists who have had varied experiences in the Society, as it was also sent to individuals who have not renewed their membership. In addition, several respondents indicated they would like greater transparency with respect to ASIH leadership's activities and decisions. 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 DEIB recommends:

- 1. The new ASIH Membership Committee should address recruitment and retention of members. This work should be conducted in partnership with DEIB but is core to the long-term viability of ASIH and extends beyond the mandate of DEIB.
- 2. There should be more networking opportunities at JMIH, especially for early-career researchers, new members, and members attending their first JMIH (or first JMIH in many years).
 - Additional networking opportunities should include 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 with ASIH membership about how and why the Society engages in activities and makes decisions (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. More importantly, welcoming all individuals to be part of the Society is consistent with basic justice and human rights.
 - 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-effort s-need-them
- v. https://hbr.org/2019/11/why-so-many-organizations-stay-white
- vi. https://nmaahc.si.edu/sites/default/files/downloads/resources/racialhealinghandb https://nmaahc.si.edu/sites/default/files/downloads/resources/racialhealinghandb <a href="https://ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ookspaces.ook
- 4. Solicit and foster greater engagement with Society members to provide feedback on society activities and areas for improvement.
- 5. Revise the 2020 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 2021.

The 2020 ASIH Diversity Survey, summary, and recommendations were prepared by the ASIH Committee for Diversity, Equity, Inclusion and Belonging: Rayna Bell (co-chair), Mariangeles Hernandez (co-chair), Anat Belasen, Cori Black, Adania Flemming, Michael Franklin, Chris Martinez, M. Rockwell Parker, Adela Roa-Varón, Beck Wehrle, Molly Womack