# AGU Diversity and Inclusion Strategic Plan



Adopted December 2018



### **EXECUTIVE SUMMARY**

The AGU Diversity and Inclusion (D&I) Task Force, convened in October 2017, proposes adoption of a new AGU Diversity and Inclusion Strategic Plan that has been developed with consideration of all aspects of AGU as an organization that serves a large, global community of Earth and space scientists. The proposed plan works toward the vision that "Diversity and Inclusion are recognized and celebrated as being essential for the success of AGU, its members, and the global Earth and Space Science enterprise." The plan considers D&I topics related to all four of the AGU strategic goals and has incorporated elements of the recommendations related to D&I identified by the concurrent Talent Pool Task Force effort, where relevant. Five priority goals have been identified that broadly address the following aspects of diversity and inclusion: the culture of the Earth and space sciences; the climate of AGU operations for its members; AGU members as agents of change; AGU's leadership role within the larger Earth and space science community; and AGU as a model organization for promoting diversity in science. For each goal, three objectives that relate to resources and/or information, incentives, and accountability have been identified. The proposed plan also identifies some specific strategies or tactics that AGU could implement to achieve the goals and objectives outlined; some have been identified as being of high priority for near-term action.



## A NEW VISION FOR AGU DIVERSITY AND INCLUSION

The previous AGU Diversity Plan, released in 2002 by the AGU Committee on Education and Human Resources, marked a major milestone within the Earth and space science community. For the first time, AGU attempted to elevate concern about the lack of participation by historically underrepresented communities within the geosciences workforce and to codify its priorities regarding how best to address this lack of diversity. Four major goals were outlined in the 2002 plan: (1) Educate and involve the AGU membership in diversity issues; (2) Enhance and foster participation of scientists, Earth and space science educators, and "pre-service scientists" from underrepresented groups in AGU activities; (3) Increase the visibility of the Earth and space sciences and foster awareness of career opportunities in these fields for underrepresented populations; and (4) Promote changes in the academic culture that remove barriers and disincentives for increasing diversity in the student and faculty populations and that reward member-faculty wishing to pursue these goals. Soon after the release of this plan, AGU convened the Joint Society Conference on Increasing Diversity in the Earth and Space Sciences. This meeting, convened in 2003 in collaboration with more than 50 other scientific societies, demonstrated both AGU's willingness to be a leader in the arena of science diversity, equity, and inclusion and the reality that many of the solutions to the problem were bigger than what one organization could tackle.

In the past 15 years, AGU has sought to implement many of the recommendations outlined in the original AGU Diversity Plan. It has expanded its membership, especially internationally; used its meetings to raise awareness among AGU members about important issues related to diversity and inclusion; encouraged participation of more diverse members in AGU leadership<sup>1</sup> activities; and collaborated with other organizations to effect changes in the educational systems that recruit and train future geoscientists. Significant progress in diversity, through both the increased globalization of the geosciences enterprise and the increased participation of

<sup>1.</sup> AGU leadership activities refer to all areas where a selective process has been used to identify participants. These include AGU Board of Directors and Council members, section leadership, committee chairs and committee members, journal editors, journal reviewers, invited presenters, and AGU Fellows and awardees.



women, has been realized in the past 2 decades. But some populations—in particular, historically underrepresented ethnic and cultural minorities in the United States, people from developing countries, and persons with disabilities—continue to be underrepresented within the geosciences community relative to their availability in the talent pool and their participation in other scientific disciplines. All of the barriers to participation identified in 2002 remain relevant today.

Importantly, the entire context that underpins discussions about how to define AGU's priorities related to diversity and inclusion has evolved dramatically in the past 15 years. AGU's membership is now nearly 40% international, demanding that AGU rethink its definition of what constitutes diversity. The field of Earth and space science has become increasingly interdisciplinary, as collaborations between geoscientists and social scientists, health scientists, policy makers, and solution-minded communities seek to apply geoscience knowledge for the benefit of society. Increased participation of women in a commonly field-oriented discipline and the recent more open discussion of the prevalence of this issue have raised a new set of concerns and awareness regarding sexual harassment and its impact across our sciences. Liberalization of attitudes toward gender, gender expression, and sexual identity has opened the door to new conversations regarding diverse audiences who were not even considered back in 2002. Several recent studies by the National Academies of Sciences, Engineering, and Medicine<sup>2</sup> have both highlighted the many ongoing issues that underpin conversations about diversity and inclusion in science and argued for bolder, community-wide action to address what are often systemic barriers to participation.

Within this overall context, the AGU D&I Task Force proposes the following new definitions for the terms "diversity" and "inclusion":

<sup>2.</sup> Fostering Integrity in Research (April 2017); Graduate STEM Education for the 21st Century (May 2018); Sexual Harassment of Women: Climate, Culture, and Consequences in Academic Sciences, Engin eering, and Medicine (June 2018).



### DIVERSITY

AGU defines "diversity" as the full spectrum of personal attributes, cultural affiliations, and professional or socioeconomic statuses that characterize individuals within society. Collectively, these identities inform and shape one's scientific ways of thinking. AGU values diversity because it catalyzes productivity in the Earth and space science enterprise, fosters the professional success of AGU's members, increases the vitality of the AGU organization, and enhances the societal relevance and impact of AGU science.

### **INCLUSION**

AGU defines "inclusion" as valuing the contributions of diversity to the Earth and space sciences and respecting the individual identities of participants engaged in executing AGU's vision, mission, and strategic priorities. Inclusion encompasses proactive efforts to provide equitable access to AGU membership and to all AGU programs, resources, honors, and leadership positions, regardless of personal identity and background, and to ensure that AGU is a safe, welcoming, and supportive environment for all Earth and space scientists. AGU strives to cultivate a culture of respect and be a model organization—and scientific community—for inclusive practices. We strive for this objective of inclusivity because it augments the quality and impact of the Earth and space science enterprise and its workforce; it directly supports the personal fulfillment, career success, and impact of AGU members by facilitation of their contributions; and it is the morally and ethically right thing to do.



The AGU Centennial celebration in 2019 offers an important opportunity to reimagine AGU's approach to diversity and inclusion and develop a bold new vision for its efforts going forward. A key consideration in developing the proposed D&I plan is the recognition, based on a growing body of social science and education research, that diversity makes fundamentally important contributions to scientific and organizational excellence. Engagement of diverse perspectives invigorates problem-solving, balances biases, and facilitates specialization. This reality, that diversity and inclusion are good for the geoscience enterprise, is well reflected in the newly modified AGU Ethics Policy, which identifies harassment as an act of scientific misconduct. Further, numerous investments made over the past 20 years have identified effective strategies for reducing barriers to participation among specific populations, engaging more diverse communities in the sciences, and retaining them so they can pursue successful scientific careers. AGU has an important opportunity to mobilize its membership and capitalize on its role as a scientific community leader to disseminate those insights and greatly amplify their impacts. The following proposed AGU Diversity and Inclusion Strategic Plan has been developed with this vision in mind:

### **VISION STATEMENT**

Diversity and inclusion are recognized and celebrated as being essential for the success of AGU, its members, and the global Earth and space science enterprise.



7

Goal 1: Diversity and inclusion are widely recognized within the AGU community as essential features of excellence in the Earth and space sciences.

Goal 5: AGU operates as a model organization for advancing diversity and inclusion in science.

### Vision

Diversity and inclusion are recognized and celebrated as being essential for the success of AGU, its members, and the global Earth and space science enterprise.

### Goal 2:

AGU provides a safe, welcoming environment and cultivates an inclusive culture that supports the success of every individual AGU member and their science.

### Goal 4: Lembraces

fulfills its role as a leader and advocate for promoting diversity and inclusion in the Earth and space sciences worldwide.

### Goal 3:

AGU members are empowered to be effective and impactful change agents for diversity and inclusion within the Earth and space science community.

Five proposed goals for the revised AGU Diversity and Inclusion Strategic Plan.



# AGU DIVERSITY AND INCLUSION STRATEGIC PLAN: GOALS AND OBJECTIVES

<u>Goal 1</u>: Diversity and inclusion are widely recognized within the AGU community as essential features of excellence in the Earth and space sciences.

<u>Objective 1</u>: Increase awareness within the scientific community of the benefits of diversity for the Earth and space science enterprise and workforce, and the evidence for them.

<u>Objective 2</u>: Promote and expand collaborative activities that engage Earth and space scientists in local community–relevant scientific endeavors, particularly in support of underserved and disadvantaged communities.

<u>Objective 3</u>: Enforce standards of scientific integrity and behavior identified in the AGU Ethics Policy when members of the scientific community engage in discrimination or harassment.

<u>Goal 2</u>: AGU provides a safe, welcoming environment and cultivates an inclusive culture that supports the success of every individual AGU member and their science.

<u>Objective 1</u>: Expand the offering of respectful, tailored programs that address the professional development needs of all individuals within the AGU scientific community, regardless of their career stage or affiliations.

<u>Objective 2</u>: Provide an organizational environment in which everyone is actively engaged, empowered, and informed regarding diversity and inclusion issues.



<u>Objective 3</u>: Assess the climate of AGU operations on a regular basis over time.

# <u>Goal 3</u>: AGU members are empowered to be effective and impactful change agents for diversity and inclusion within the Earth and space science community.

<u>Objective 1</u>: Strengthen and expand the ability of the Earth and space science community to implement programs and activities in support of increasing diversity, both individually and collectively.

<u>Objective 2</u>: Encourage more members of the Earth and space science community to advance AGU's diversity and inclusion goals by expanding the number and types of incentives that reward such activities.

<u>Objective 3</u>: Consider and reward an individual's diversity and inclusion efforts and impacts when evaluating candidates for AGU honors and leadership positions.

<u>Goal 4</u>: AGU embraces and fulfills its role as a leader and advocate for promoting diversity and inclusion in the Earth and space sciences worldwide.

<u>Objective 1</u>: Increase the visibility of education and career paths in the Earth and space sciences among diverse audiences and encourage participation in the geosciences.

<u>Objective 2</u>: Encourage systemic improvements in the policies and practices of Earth and space science educational programs, to create a more inclusive environment.

<u>Objective 3</u>: Establish community-wide standards and expectations regarding diversity and inclusion best practices for Earth and space science education programs and scientific research.

<u>Goal 5</u>: AGU operates as a model organization for advancing diversity and inclusion in science.



<u>Objective 1</u>: Increase the use of demographic measures and data to inform decisionmaking about AGU diversity programs and to regularly monitor progress in achieving results.

<u>Objective 2</u>: Increase representation of historically underrepresented groups in all aspects of AGU operations (e.g., publications, meetings, leadership, honors, AGU headquarters staff).

<u>Objective 3</u>: Establish concrete diversity and inclusion policies for all AGU programs and operations and implement accountability mechanisms.

# AGU DIVERSITY AND INCLUSION STRATEGIC PLAN: STRATEGIES AND TACTICS

The AGU D&I Task Force has identified the following strategies and tactics as mechanisms that could be used to implement the proposed plan and achieve the desired goals and objectives. It is expected that a standing AGU Diversity and Inclusion Committee (see Goal 5, Objective 3, below) would establish more concrete suggestions, identify specific metrics and benchmarks for documenting progress toward achieving goals, review and update objectives as needed, and oversee synthesis and reporting of data related to D&I activities. The chair of this committee would report to the AGU Council and the Board of Directors.

GOAL	OBJECTIVE	SUGGESTED STRATEGIES/TACTICS
1	1	<ul> <li>Provide at least one Union-wide session at future AGU meetings that features diversity-related themes and issues, starting with Fall Meeting 2019 (Centennial year)</li> <li>Disseminate research on diversity in science through leadership meetings convened by AGU (e.g., Heads and Chairs)</li> <li>Increase the visibility of the contributions of diverse members of the scientific community (e.g., through special monographs highlighting their careers or work); for example, encourage the AGU Centennial project to extract and publish profiles of "100 AGU Scientists" with predominantly female or minority representation, perhaps with a foreword by the AGU president</li> <li>Deploy diversity and inclusion "ambassadors" as resource agents during AGU Fall Meetings</li> <li>Create and disseminate vignettes on why D&amp;I matters</li> <li>Explicitly include diversity and inclusion in the definition of scientific integrity for the Earth and space science community (i.e., promote the AGU Ethics Policy adopted in 2017)</li> </ul>
		<ul> <li>Publicize the results of community-based geoscience research via mainstream media outlets</li> </ul>

2	<ul> <li>Develop additional funding sources (e.g., through local community-based foundations) to support expansion of the Thriving Earth Exchange</li> <li>Incentivize scientific collaborations in underserved or disadvantaged communities through grant programs</li> <li>Make "Science and Society" a major theme of the AGU Centennial</li> <li>Convene AGU meetings in demographically underrepresented regions within and outside the United States</li> <li>Engage local community-based organizations (e.g., nonprofits, foundations) as convening partners for AGU meetings</li> </ul>
3	<ul> <li>Create an Ethics Resource Center to provide guidance on best practices for promoting and ensuring ethical behavior within the geosciences, with specific information related to diversity and inclusion issues</li> <li>Establish mechanisms for reporting alleged violations of ethical behavior and assessing their validity</li> <li>Develop policies and procedures for imposing accountability when ethics violations related to diversity and inclusion occur</li> </ul>

GOAL	OBJECTIVE	SUGGESTED STRATEGIES/TACTICS
	1	<ul> <li>Expand mentoring programs offered during large AGU meetings</li> <li>Continue to provide relevant career services programs for all career stages</li> <li>Create special meeting badges that can be used voluntarily to indicate personal identities (e.g., LGBTQ)</li> <li>Convene daily networking events for affinity groups during major meetings</li> <li>Develop and implement policies regarding accessibility for conferences and meetings based on known best practices (e.g., offer Braille signage and transports for persons needing assistance)</li> </ul>



2	2	<ul> <li>Provide editorial support for non-English speakers submitting manuscripts to AGU publications</li> <li>Offer reduced fees for scientists from developing countries or socioeconomically depressed regions</li> <li>Increase the visibility, number, and diversity of scientific role models engaged in AGU leadership roles</li> <li>Allocate slots on all AGU committees for early-career scientists</li> <li>Provide training and resources that support effective mentoring</li> <li>Include diversity and inclusion as core competencies for all AGU staff members who interact with the membership</li> <li>Provide annual webinars on how to make AGU oral presentations more useful for nonnative-English-speaking audiences</li> <li>Ensure access to AGU resources for scientists with limited Internet access</li> <li>Establish mechanisms for subpopulations within the AGU membership to voluntarily affiliate with external organizations that provide support for a larger community of scientists with similar identities</li> <li>Establish and enforce a code of conduct and an antiharassment policy for AGU meetings</li> <li>Expand "Safe AGU" support available during meetings</li> </ul>
	3	<ul> <li>Collaborate with social scientists to conduct periodic studies that gauge the D&amp;I attitudes of AGU members</li> <li>Conduct surveys immediately after the Fall Meeting to assess the diversity and inclusion climate of the meeting</li> <li>Convene listening sessions during AGU meetings to get stakeholder input</li> <li>Devote time during at least one AGU Council or Board meeting each year to focus on diversity and inclusion outcomes</li> <li>Consider diversity and inclusion contributions during annual performance reviews of AGU staff members</li> </ul>

GOAL	OBJECTIVE	SUGGESTED STRATEGIES/TACTICS
	1	<ul> <li>Create a central resource center that provides AGU members (and the larger Earth and space science community) with best practices for D&amp;I</li> <li>Offer webinars and training that can increase AGU member engagement and efficacy in D&amp;I efforts</li> <li>Create diversity-focused forums that promote collaboration and collective impact</li> </ul>
3	2	<ul> <li>Create new awards and honors that explicitly celebrate achievements in diversity and inclusion (tiered by career stage)</li> <li>Support communities of practice within the membership focused on diversity initiatives</li> <li>Feature successful D&amp;I programs regularly in <i>Eos</i></li> </ul>
	3	<ul> <li>Develop policies regarding D&amp;I qualifications for candidates seeking AGU leadership positions</li> <li>Use diverse selection committees to evaluate candidates</li> </ul>
4	1	<ul> <li>Establish new collaborations with relevant organizations and implement joint programs to market Earth and space science education and career pathways</li> <li>Explore alliances or special invited co-meeting interactions with relevant minority-serving or international scientific organizations; consider a special invitation to their membership for participation at AGU Fall Meeting 2019, possibly with reduced registration rates; consider a colocated meeting for future AGU meetings</li> <li>Create promotional resources that are tailored for diverse audiences about the relevance of, and opportunities within, the Earth and space sciences</li> <li>Establish intentional collaborations with minority-serving institutions, academic institutions, and scientific organizations to improve recruitment and retention of minorities in the Earth and space sciences</li> </ul>



2	<ul> <li>Collaborate with international scientific organizations to encourage exchanges</li> <li>Create, and promote the use of, a standardized survey for assessing departmental culture and climate</li> <li>Use leadership forums (e.g., Heads and Chairs) to engage academic departments, national laboratories, and field stations in discussions about diversity best practices</li> <li>Convene workshops and trainings during AGU meetings focused on academic department and student research practices related to diversity and inclusion</li> </ul>
3	<ul> <li>Articulate Earth and space science community expectations for D&amp;I best practices in academic institutions</li> <li>Support the establishment and implementation of a pilot program to develop STEM Equity Achievement (SEA); change departmental equity achievement awards in the Earth and space sciences</li> </ul>

GOAL	OBJECTIVE	SUGGESTED STRATEGIES/TACTICS
	1	<ul> <li>Collect and report ongoing demographic information regarding key parameters related to membership, governance, meetings, publications, and honors<sup>3</sup></li> <li>Survey the D&amp;I attitudes and needs of the AGU membership worldwide, using appropriate evaluation expertise</li> </ul>

3. The Task Force recommends providing an annual snapshot/dashboard with the demographic information (gender, country of origin, ethnicity, career stage) for these roles: membership, Board of Directors, Council, committees, awards committees, awardees, reviewers, authors, invited lecturers, session conveners, session chairs, authors, first-author abstracts (for meetings and publications), oral session presenters (meetings), and AGU staffleadership.



		Proactively encourage members to update their AGU profiles with
		relevant diversity indicator information
		Monitor and report annually to the AGU Council and the Board on the
		state of diversity in AGU operations
5	2	<ul> <li>Encourage diversity in how sessions are organized at AGU meetings, including session conveners, session chairs, first-author abstracts, and oral session presenters</li> <li>Provide all AGU leadership team members, committee chairs, journal editors, and senior AGU staff with biannual ethics, implicit bias, and related D&amp;I training, as a condition of service, and make this training available online</li> <li>Recruit diverse membership on selection committees and meeting sessions</li> <li>Evaluate current mechanisms for selecting honors and explore new approaches that will minimize bias</li> <li>Set benchmarks for participation of early-career scientists in committees and sessions in meetings</li> </ul>
		Create new incentives to encourage participation in AGU operations
	3	<ul> <li>Establish a standing AGU Diversity and Inclusion Advisory Committee by 1 April 2019, with a charter and membership selected to also allow advice or collaboration on talent pool-related topics as a closely coordinated parallel or subgroup effort; it is anticipated that this committee will help to prepare the annual AGU diversity report and recommend changes to D&amp;I programs and policies as needed</li> <li>Review the current status of diversity within all AGU programs</li> <li>Develop metrics and evaluation measures to assess program effectiveness</li> </ul>





# **Implementation: High-Priority Actions**

The following action items are recommended by the AGU D&I Task Force as being of highest priority for immediate implementation:

- Institute/require biannual ethics/D&I-related training for all Council and Board members.
- Establish a standing AGU Diversity and Inclusion Advisory Committee by 1 April 2019, with a charter and membership selected to also allow advice or collaboration on talent pool-related topics as a closely coordinated parallel or subgroup effort. This committee would help to identify the useful demographic data and D&I program measures that should be collected on a regular basis and reported to the AGU membership, Council, and Board.
- Establish a new AGU award that explicitly honors individual or group leadership in promoting or advancing diversity and inclusion in the geosciences.
- Provide three to five questions that gauge attitudes regarding D&I on each of the annual member surveys and track results over time.<sup>4</sup>
- Explore alliances or special invited co-meeting interactions with relevant minority-serving
  or international scientific organizations, and consider a special invitation to their
  membership for participation at AGU Fall Meeting 2019, possibly with reduced
  registration rates. Explore the potential for colocated meetings of those organizations in
  conjunction with future AGU meetings.
- Establish a formally recognized AGU community that holds affiliation with the National Organization of Gay and Lesbian Scientists and Technical Professionals (NOGLSTP) and explore additional opportunities with other external scientific organizations that offer similar support for specific identity groups within the AGU membership.

<sup>4.</sup> Suggested topics to query regarding level of agreement include the following: "AGU encourages open, honest, and respectful conversations in pursuit of its goals." "Differences in styles and individual backgrounds are valued by AGU." "Differences in styles and individual backgrounds are valued by those with whom I work." "AGU provides sufficient resources to help address D&I-related issues and opportunities."

# APPENDIX: SUMMARY OF DIVERSITY AND INCLUSION TASK FORCE ACTIVITIES

The AGU Diversity and Inclusion (D&I) Task Force began work in October 2017 and was charged with the following:

- Reviewing the current state of AGU D&I policies and practices, within the context of the needs of AGU's membership, known best practices for D&I, and activities at relevant scientific organizations.
- Recommending updates to the 2002 AGU Diversity Plan that reflect current needs and provide definitions for the terms "diversity" and "inclusion" that are relevant for AGU.
- Reviewing available D&I-relevant metadata regarding AGU's programs (across the entire organization) and recommending areas where additional study may be needed.
- Identifying areas where additional research and/or support may be needed.
- Recommending whether a longer-term D&I oversight committee is needed and, if so, its responsibilities.
- Recommending additional activities needed to further engage the AGU membership in meaningful D&I efforts.

The <u>D&I Task Force</u> sought to fulfill this charge in the following manner:

- The Task Force includes 17 members, with all but three of them being AGU members and five of the 17 being current or former AGU Council members. They are supported by three AGU staff partners.
- Between November 2017 and August 2018, the group convened four meetings of the Task Force (three virtual; one face-to-face). The group carefully considered input from the Earth and space science community provided through
  - A town hall on diversity and inclusion held during the 2017 AGU Fall Meeting.
  - Presentations on diversity and inclusion efforts under way at relevant scientific organizations, given by representatives of the European Research Council (ERC), European Geosciences Union (EGU), American Association for the Advancement of Science (AAAS), National Science Foundation (NSF), American Geosciences Institute (AGI), National Oceanic and Atmospheric Administration (NOAA), NASA, and American Meteorological Society (AMS).



- Updates by AGU staff on diversity and inclusion activities under way in relevant AGU programs, including the Talent Pool Task Force, meetings, publications, honors and awards, governance, Thriving Earth Exchange, affiliation and engagement, membership, and ethics.
- As a result of this process, the D&I Task Force has
  - Developed new definitions for "diversity" and "inclusion" that are relevant for an international organization like AGU.
  - Developed a new AGU Diversity and Inclusion Strategic Plan that lays out an ambitious vision for D&I at AGU and that updates and expands the goals of the original 2002 AGU Diversity Plan.
  - Identified five new D&I strategic goals that are well aligned with the four AGU strategic goals, consistent with the recommendations made by the AGU Talent Pool Task Force, and encompassing of all aspects of AGU operations.
  - Identified three priority objectives under each of the five strategic goals, each supported by a series of proposed strategies and/or tactics.
  - Identified a list of recommended high-priority activities that should be undertaken soon, for consideration by the AGU Council and the Board.
- Preliminary recommendations were submitted for review to the AGU Council on 6 September 2018 and to the AGU Board of Directors on 26 September 2018.
- The D&I Task Force solicited broader community input through a public comment period in October–November 2018 and presentations at the 2018 Geological Society of America Annual Meeting (4–7 November) and AGU Fall Meeting 2018 (10–14 December).
- After incorporating revisions received by the Board, the Council, and AGU membership, the final draft plan was submitted for approval by the AGU Board in December 2018. If adopted, the D&I Task Force expects to develop a draft charge and list of responsibilities for the proposed new AGU Diversity and Inclusion Committee, which would be a longerterm entity that provides oversight during implementation of the new AGU Diversity and Inclusion Strategic Plan. One important task for this committee will be to better define the metrics for success under each goal and objective of the proposed AGU Diversity and Inclusion Plan.



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