

A528. ASA CSSA SSSA Diversity Equity and Inclusion Committee (DEIC) Report 2023

Submitted 12-19-2023

By

Lisa Durso, Chair
Tiffany Carter, Vice Chair
Augustine Obour, Past Chair

The **Diversity Equity and Inclusion Committee (DEIC)** was commissioned in 2021 with the intent that it support and implement the ASA, CSSA, and SSSA DEI Initiatives, guided by the strategic plans. The DEIC currently has 37 members from across all three Societies and a DEI Staff Lead (Susan Chapman). Nine members will rotate off of the DEIC at the end of December 2023.

Breakdown of current committee membership

10 ASA Members at Large

10 CSSA Members at Large

9 SSSA Members at Large

1 Undergraduate Representative

1 Board DEI Representative from each for ASA, CSSA, SSSA

2 ASF Liaisons

1 Women in Science Committee Liaison

Chair, Vice-Chair, and Past-Chair

The primary objectives of the committee are to 1) Implement the goals outlined in the **ASA, CSSA, SSSA Diversity, Equity, and Inclusion Initiative Recommendation Report (Recommendations Report)** 2) enhance the visibility of ongoing DEI efforts within the Tri-Societies by organizing programming for the Annual Meeting.

This report summarizes activities of the DEI Committee in 2023 including highlights at the Annual Meetings, ongoing sub-committee projects, and planning for 2024 activities.

Based on feedback from 2022, full committee meetings were changed from monthly to quarterly, so that more time could be spent in the individual working groups: Professional Conduct and Anti-Harassment Policy Development, Education and Training, and Mentoring. Working Groups met on a schedule decided by individual group leads.

Highlights from 2023:

- Approval of the formation of a **Professional Ethics Committee**, and participation on the ASA, CSSA, SSSA Ethics Committee Development Task Force. Past-chair Augustine Obour led the DEIC participation in this effort for 2023.
- Presentation of **3 DEI-focused Webinars** available to the entire ASA, CSSA, SSSA membership, led by Eugene Law and the Education and Training Working Group. There were **232 attendees** for the original (live) webinars, and the recordings have been made available to the membership.
- Creation of a **report and training matrix** for future DEIC education and training activities.
- Development of a report and criteria for **Tri-Societies mentoring program**, led by Donn Cummings and Elizabeth Gillespie and the mentoring working group. Development of criteria, creation of a Request for Proposals, screening of six applications, and selection of preferred vendor. A request for initial funding was created based on the selected vendor pricing, and the request was **approved by the ASF Boards of Directors at the 2023 Annual Meeting**.
- Addition of **DEI Program Planning Representative**, and expansion of the committee, including new graduate and undergraduate students.
- Providing a **DEI and Safe Space Advocate** program for the annual meeting. The committee wrote a request for proposals, and screened five candidates. Dr. Deanna Kimbrel was chosen to provide service for the 2023 Annual Meeting.
- First annual in-person DEI Committee meeting, open to membership participation, and held at the annual meeting in St. Louis.
- DEIC support for the mentoring and leadership initiatives including the **Bridge Scholars program and SACNAS meeting participation**.
- Facilitated a **pre-meeting Diversity Workshop** with Dr. Deanna Kimbrel for DEIC members, and the ASA, CSSA, and SSSA Leadership to increase awareness of the DEI and Safe Space Advocate program.
- Outreach to annual meeting attendees via the **Society and Diversity Showcase**, held at the annual meeting in the exhibition hall.
- Participation by **103 students, and 133 Judges** in the **Diversity Student Poster Contest**, a 29% and 122% increase over 2022, respectively. Virtual judging was performed prior the meeting, and 15 finalists presented their poster in person. The "Diversity Poster Competition Checkbox" on the abstract submission site continues to be a success.
- Diversity **Student** Poster Contest Winners were:
 - 1st Place: Huan Hu, China Agricultural University
 - 2nd Place: Marissa Barbosa, Louisiana State University
 - 3rd Place, Dionata Filippi, North Carolina State University

Current Leadership of the ACS528 Diversity Committee is as follows:

- Chair, 2023: Lisa Durso, USDA-ARS
- Vice-Chair, 2023: Tiffany Carter, USDA-NRCS
- Past-Chair, 2023: Augustine Obour, Kansas State University
- Staff Liaison, Susan Chapman

Annual Meeting Program Planning sub-committee

An Annual Meeting Program Planning sub-committee was formed in January to identify activities for the 2023 St. Louis meeting. The long-term goal is to have a similar framework for programming each year, to maximize impact and allow for more efficient planning and transfer of committee knowledge. For 2023, the committee kept the same programming format as 2022 with the provision of ombuds services (now named DEI and Safe Space Advocate), and Diversity Summit as the focus. The Summit incorporated the following elements 1) A Diversity **Student** Poster Contest, led by Christine Sprunger; 2) An **invited speaker** – Dr. Marsha McGriff from the University of Florida, organized by Stella Salvo; 3) An **Interactive Roundtable** Session organized by Tiffany Carter; and 4) An ACS Diversity **networking social** organized by Susan Chapman. Additionally, a separate Diversity **Research and Showcase** Poster session was organized by Susan Chapman.

WG 2: Training and Education Working Group 2023 Progress Report

The working group (WG) has been tasked with addressing these top three highest priority areas for education and training:

- developing inclusive workplace practices (with many components),
- understanding power dynamics, and
- facilitating conversations.

In addition to these areas, it will be important to address other vital areas of interest to our members, including recruiting diverse candidates, implicit bias, and understanding other perspectives. Education and training efforts must realize that there is overlap with concepts and find ways to address that.

Responsibilities of the WG include:

- Critical review the DEI Survey conducted by the Societies,
- Conduct a review of literature on DEI topics
- Conduct a qualitative review of existing training materials
- Develop a training matrix for Society members based on intended learning outcomes
- Assess options for resources, online, on demand, and in-person education and training

WG2: Progress During 2022-2023

Critical Review of 2021 DEI Survey Data

As a start to the work of the group, a thorough review of the 2021 DEI Survey was completed with a focus on the questions around the understanding of DEI concepts. The survey asked:

How comfortable are you in your understanding of the following Diversity, Equity, and Inclusion related concepts? Overall, the concepts with the highest level of understanding are Harassment (82%), Inclusive Workplace Practices (70%), and Systemic Racism (67%). The lowest comfort level of understanding (and perhaps

comfort-level with understanding when and what actions to take) are Bystander Intervention (51%), Allyship (57%), and Microaggressions (60%).

Further, participants describe Implicit Bias as the most prevalent issue (51%) they face along with recruiting diverse candidates (46%), understanding other perspectives (45%), and creating inclusive workplaces (44%).

When asked, What does success look like for you upon completion of any specific DEI education and training? participants reported leaving with actionable goals, a better understanding of DEI topics, and a better understanding of others as major factors that would increase their confidence in having conversations and addressing DEI issues in the workplace.

Explicitly, the survey asked about specific topics the Societies should focus on developing as education and training activities. The priority areas are:

- Developing inclusive workplace practices (with a host of topics falling in this category)
- Understanding power dynamics (very high among students/early career, under-represented groups)
- Facilitating conversations

These separate questions and responses were used as a starting point in the development of the training matrix and webinars.

WG2: Review of Literature

The group also initiated a review of peer-reviewed literature on diversity, equity, inclusion and justice education, and how systemic and individual bias impacts the experiences of members of marginalized populations in agricultural and soil sciences. This effort is ongoing; a public Zotero library of the collected literature can be accessed at https://www.zotero.org/groups/4831491/tri-societiesdeic_diversityeducation.

WG2: Explore Developed Materials

The group did a review of organizations/materials that are available/they are familiar with. There are extensive resources - from every organization, consulting companies, institutions - with some free (content) and others with a fee (speakers on specific topics). In addition, the Professional Conduct working group has gathered some potential topics and speakers from their RFP for the 2023 DEI and Safe Space program.

Responsible Conduct of Research Training (RCR) - contains DEI training components related to research in an academic setting.

WG2: Develop a Training Matrix

After reviewing survey responses, peer-reviewed literature, and training programs and materials developed by other organizations or service providers, a matrix was created to map specific training topics to broad themes for DEI education (Table 1). The goal of

this exercise was to create a tool to inform the selection of future training topics and ensure that programming is relevant and responsive to priorities identified by members as well as the overall DEI goals of the Societies. This approach also accounts for the inherent overlap between themes and concepts that will be present for any given training topic, while also ensuring that all educational themes are included in programming on a regular basis. As the DEI Education and Training program continues to be developed and the Societies make progress towards DEI goals, the Training Matrix should be updated periodically to reflect new and changing priorities for member education.

WG2: Assess Training and Education Options

As part of the plan to review options, the working group developed a series of three webinars for 2023 to showcase the work of the group and provide visibility to the membership. The webinars were:

- 1. Understanding Diversity & Allyship in our Science Societies**, June - 78 attendees, 95% interest rating (via go-to-webinar), 80% value rating (post webinar survey)
- 2. The Transformative Power of Difficult Conversations**, August - 81 attendees, 95% interest rating (via go-to-webinar), 66% value rating (post webinar survey)
- 3. Responding as a Bystander to Harassment, Discrimination, and Bias**, October - 73 attendees, 96% interest rating (via go-to-webinar), 81% value rating (post webinar survey)

Feedback from attendees providing additional topic considerations including:

- Responding to the challenges of DEI in most US institutions and how to prepare ourselves to face them,
- Inclusive mentoring/mentoring diverse students
- Gender/sexuality topics – support and stand in solidarity with our rainbow friends. We have Pride Month ... how can we stick up for them all the time ("stick up" = defend against bias, misogyny, etc.)
- Best practices for confronting bias in an interview process. I often find myself uncomfortable with what a committee member has said/asked and am uncomfortable confronting them during the interview, on behalf of the candidate. Suggestions or modeling (mock interview scenario?) would be really useful. Ditto for grant panel review discussions, or even a thesis defense presentation.
- Updates on best practices and approaches to attracting, hiring, & partnering with diverse individuals in order to further advance diversity in our work spaces.
- Microaggressions at work - recognizing them, what to do/how to address.
- It is important to invite members to share their personal stories on marginalization. Solutions should target the micro level beginning with engaging members on the essence of DEI that can easily be revealed through member's stories. This will make proposed strategies more authentic and relevant to the membership.

WG2: Table 1. "Training Matrix" mapping specific training topics to broader educational themes prioritized by member surveys.

Table 1. "Training Matrix" mapping specific training topics to broader educational themes prioritized by member surveys.

		Educational Themes								
Year	Training Topic	Developing Inclusive Workplace Practices	Understanding Power Dynamics	Facilitating Conversations	Transforming Implicit Bias	Understanding Systemic Racism	Responding to Microaggressions	Managing and Combating Harassment	Fostering Allyship	Implementing Bystander Intervention
Completed Trainings										
2023	Understanding Diversity & Allyship in the Societies									
2023	The Transformative Power of Difficult Conversations									
2023	Empowering Bystanders: Combating Harassment, Discrimination, and Bias									
Priorities for Future Trainings										
2024	The History of Racism in Agriculture									
2024	Fieldwork Safety for Minorities in Agriculture									
2024	Understanding the Diversity of Gender Identity and Sexuality									
2024	Workshop on Inclusive Hiring Practices (at Annual Meeting)									

WG 3: Mentoring Working Group 2023 Progress Report

WG3: Overview

“Mentorship is a professional, working alliance in which individuals work together over time to support the personal and professional growth, development, and success of the relational partners through the provision of career and psychosocial support.” - National Academy of Sciences, Engineering, and Medicine

The Mentoring Working Group of the ASA, CSSA, SSSA Diversity, Equity, and Inclusion Committee (DEIC) was formed as an outcome of the 2022 DEI Recommendations Report. The working group spearheaded the project that overlooked the development and review of a potential mentoring program for members and authored this report.

WG3: Introduction

Mentoring has continuously been of significant importance to our members; however, the mentoring programs offered throughout the Societies are disconnected, member-driven with little resources, and do not have the capacity to educate and train members on the subject. In 2021, the Societies released the results of a Diversity, Equity, and Inclusion (DEI) membership survey in which mentorship was one of the highest ranked potential programs to enhance DEI within the Societies. Furthermore, the Societies commissioned a “Future of Membership” survey to members, former members, and prospective members. Across these member groups, an average of 85% of participants somewhat or strongly support the development of a Societies mentoring program. **Therefore, based on membership feedback, our overall goal for this project is**

to develop a comprehensive, online, user-friendly mentoring program that connects members across all three Societies.

About Mentoring

Mentoring in STEM (Science, Technology, Engineering, and Mathematics) is a crucial tool that helps individuals set and achieve their professional goals, while developing the necessary technical, practical, and soft skills to succeed in their field. Effective mentoring can have a profound impact on an individual's growth and development, providing them with the guidance and support needed to thrive in their chosen career.

Developing a well-designed and managed mentoring program will provide the following:

- **Connects** those who want to develop mentoring relationships with those who are interested in mentoring,
- **Establishes** deeper connections and relationship-building between members (in similar fields of study and across cohorts),
- **Enhances** engagement which positively impacts member retention - particularly in our student and early career categories,
- **Builds** mentor and mentee skill sets for their mentoring and professional endeavors throughout their careers, and
- **Educates** members on best practices for mentoring and how to foster an effective mentoring relationship.

Best practices for mentoring call for the following:

- Establish clear goals and expectations
- Provide mentor and mentee training
- Match mentors and mentees carefully
- Encourage open communication
- Establish a meeting schedule and stick to it
- Provide ongoing support to mentors and mentees

Mentoring can take place in formal or informal settings and can involve many types of mentoring. Mentoring Types include:

- Traditional one-to-one (long term relationship with an experienced mentor),
- Peer-to-Peer,
- On-Demand (one-time, as needed mentoring)
- Reverse (mentee becomes the mentor),
- Group (conversations with multiple mentors/mentees on a topic), and
- Peer Group Learning Circles (conversations on specific topics).

Mentoring: The Societies' Path Forward

The DEI Recommendations Report calls for “the assessment, funding, and development of a robust mentoring program that connects members with mentors - regardless of career stage - within and across-Societies. This involves:

- Understanding the components of an effective mentoring program
- Assessing options for a comprehensive mentoring system (software)
- Developing a program timeline
- Establishing Evaluation/Metrics
- Creating a Sustainability Plan

According to the ASA, CSSA, and SSSA 2021 DEI Survey, one of the top priority development areas is to build a mentoring program. When asked to select their top focus areas for the Societies DEI efforts, Mentoring was rated in the top three, along with Programmatic/Scholarship Support and Education/Training. The Societies were not viewed as providing programs and resources to foster the success of under-represented groups in our membership and sciences particularly with students and early career members and there is still a stated need to build on the programs and services for under-represented groups in our sciences and Societies.

Further, the 2022 member, former member, and prospective member surveys confirm the prioritization of mentoring program development. When asked what the level of support was across all members - 85% somewhat or strongly support a mentoring program.

As part of the working group's assessment of a mentoring program, additional research was conducted through a focused survey on mentoring in the spring of 2023. Highlights include:

- 91% of undergrads, 93% of graduate students, 97% of Early Career, and 78% (averaged) of mid/late/retired members are interested in being a mentee, mentor, or both.
- Over 65% are interested in both traditional 1:1 and peer-to-peer mentoring and approximately 40% are interested in group-based, learning circles, and event-based mentoring.
- While over 50% believe that it is important to make mentoring connections with those in their scientific field, 18-20% also agree that it depends on the topic.
- Over 60% would participate if mentor/mentee training was a prerequisite.
- 38% of participants would be willing to support the program with a small optional contribution.
- Participants noted, based on past experiences, that clear expectations, defined schedule, appropriate mentor/mentees skills, and communications were key to positive experiences.

Goals and criteria were identified for the project of developing a strong mentoring program and identifying a software program to complement our needs based on this research.

WG3: Mentoring Program Selection Process

Project Scope (Program development)

To establish a successful mentoring program across the Societies, project goals and criteria were defined that were used to evaluate mentoring programs provided in the Request for Proposals (RFPs). Specific project goals include:

- Implementing an online system that can be used within the mentoring program to maximize efficiency (i.e. software, mobile device, etc.)
- Conduct a soft launch to ensure systems are operating smoothly and efficiently.
- Utilize select vendor capabilities and knowledge to develop a robust program with high participant satisfaction.

The Societies provide a unique opportunity for members to connect on several platforms, such as within specific programs (GO and Bridge Scholars), divisions, and groups (specialty groups, graduate student committees, etc.). Therefore, it is crucial that an online system as part of a mentoring program will adapt to our Societies' specific needs. Specific criteria that must be met include:

- System support for a variety of mentoring types
 - Traditional 1:1
 - On-Demand
 - Career
 - Peer
 - Topical
 - Group/Circle
 - Flash (one-time)
- Education and training courses
- Time-bound mentoring relationships
- Customizable application and matching process
- Strong data/metric analyses
- Administrative assistance/system support
- Compatibility with Microsoft Dynamics CRM system

Mentoring: Request for Proposals Process

Information gained through research was used to develop a request for proposal to mentoring system vendors. Outreach was done to assess what other STEM organizations may be using for mentoring programs. An RFP was developed that provided background of the societies and rationale for establishing a mentoring program at this time. Components of the RFP included:

- System Capabilities
- Education/Training Options
- Technology Capabilities/Data Privacy
- Project Success Strategies
- Data Collection/Metrics
- Budget/Pricing

- Company Resources
- References
- Potential Launch Timelines
- Marketing Support

The RFP process was vetted through the DEIC's mentoring working group and conducted over the summer of 2023. An assessment rubric was developed based on project goals and criteria then an initial review of proposals by working group members was conducted. This brought forward the top three prospective companies. Individual demos were given to the working group members by each of the prospective companies and recorded. A final assessment and review process was conducted and the following section presents our recommendation.

Mentoring Program Evaluation and Final Recommendation

The RFP produced mentoring program proposals from six different companies. After evaluation of the proposals by the working group, the top three prospective companies were: Art of Mentoring, Chronus, and MentorCity. Demos were provided by the three companies and further evaluated, resulting in Art of Mentoring and Chronus as the top two candidates for our Society-wide mentoring program platform. A more detailed rubric was developed and used to compare the two companies for a final recommendation, as well as several follow-up discussions with each vendor.

Based on final evaluations, the DEI Committee has selected Chronus as the mentoring platform of choice for the Societies.

DEIC Planning for 2024 and Beyond

- Continuation of the annual meeting programming format, with provision of Safe Space Advocate services and DEI Summit.
 - For 2022 and 2023 the format has been in person for the full length of the meeting. We expect to receive a final report from Dr. Kimbrel in late December 2023/early January 2024, and will use that information to evaluate the efficacy of the full-time in-person format.
- Appointment of a DEI Committee member representative to the Professional Ethics Committee.
- Continuing Professional Development, Mentoring and Training efforts
- Bring the Leadership, Governance, and Policy Review Working Group online to develop path and timeline for policy reviews.
- Bring the **Data & Analytics** Working Group online, to develop **Metrics for Measurement** – in conjunction with ACSESS staff and existing SSSA efforts.
- Bring the **Organizational Communications** Working Group online and begin outreach and communication efforts, to sections, divisions and communities; committees; editorial, boards, and certification boards

Recommendations For Future DEI Education and Training Programs

Continue Process of Defining Diversity, Equity, and Inclusion Goals and Indicators of Progress for the Societies

One major challenge faced by the Working Group was a lack of specific, measurable goals for the Societies' overarching DEI initiatives. This in turn made it difficult to determine the scope and direction of a DEI education and training program. **We recommend that the DEIC prioritize the “Measuring Success” objective of the 2022 DEI Recommendations report:**

- Provide opportunities for Society Members to give feedback on DEI initiatives
- Town hall series
- Periodic surveys
- Conduct a goal-setting process to align DEI priorities of Society leadership, DEIC members, and the membership at large
- Define metrics that will be used as indicators of progress towards a more diverse, equitable, and inclusive organization
- Utilize overarching DEI goals to define goals and indicators of progress for the education and training program

Continue to Develop a Series of DEI Trainings that is Responsive to Needs Identified by the Membership

The DEI Webinar Series that began in 2023 is a starting point for providing the Societies' membership with opportunities to learn about DEI issues and develop skills that will allow them to play an active role in making the Societies an inclusive organization. In order to reach a larger segment of the membership and to provide more in-depth training experiences that allow participants to practice skills and build relationships, **we recommend that educational programming be expanded beyond webinars, and specifically that programs allow for dialogue and interaction between experts and participants whenever possible.**

- Explore opportunities to expand the DEI education and training program through offerings such as:
- Signature DEI workshops during Annual Meetings, including collaborative efforts with Specialty Groups
- Asynchronous training materials hosted on the Societies' web platforms
- Explore technology that encourages interactive webinars/educational sessions, as appropriate, to facilitate more rich dialogue and peer-learning
- More speaker/attendee interactions (virtual face-to-face)

Create a “DEI Leadership in Agricultural and Soil Science” Certificate Program for the Societies' Membership

Based on the efforts of the Working Group and feedback from other members of the DEIC and Societies at large, **we highly recommend the development of a certificate program that will serve as both an incentive and documentation of members' participation in DEI professional development activities.**

- Continue providing regular opportunities for members to deepen their understanding of DEI issues and develop skills for addressing these issues in their personal and professional lives.
- Define criteria for earning a DEI certificate, including consideration of:
 - Number of required training sessions .
 - Participation in trainings on specific themes/topics.
 - E.g., Bystander Intervention and Communication Across Differences might be required to earn a certificate as they are broadly applicable to the goals of the DEI Education and Training Program.
- If a Safe Space Ambassador program (being explored by the Professional Conduct and Anti-Harassment working group) is developed, all volunteer ambassadors should be required to obtain this certificate.

Develop or Provide Educational Programming Targeted at Increasing Opportunities for Underrepresented Minorities in Agricultural and Soil Sciences

The 2021 DEI Survey clearly indicates that there is a need to address the lack of demographic diversity in our scientific fields by improving the pipeline for talented individuals to pursue careers in agricultural and soil sciences. In service to this objective, the Working Group has identified that there is a need to balance educational opportunities that address broad topics/skills for creating inclusive environments (i.e., not specific to, but applicable to improving conditions for individuals from various social identity groups) with opportunities to learn about and address the issues facing people within specific groups. For example, understanding microaggressions is a broad topic that provides an opportunity to learn skills that can be applied to many situations affecting many different groups of people. As a contrast to such a broadly applicative topic, accurately teaching the distinction between and nuances of gender and sex in biology classrooms is largely relevant to creating an inclusive environment for gender identity, specifically. We recommend the following as a starting point for developing programming that will serve this objective:

- Provide training on Inclusive Mentoring in support of the Society-sponsored mentoring programs.
- Partner with HBCU/1890/Hispanic-Serving Organizations to provide students with information on career opportunities in agronomy, crop, soil, and environmental sciences.
- Further develop relationships with MANRRS, SACNAS, and other professional organizations to provide visibility of our Societies and sciences.
- Develop programming relevant to specific audiences within the societies as needed, ideally through partnerships with members of those groups that identify the need and how to best address it.

Mentoring Program Three-Year Sustainability Plan

Based on the research conducted, including an understanding of mentoring, feedback from members, and prospective program selection process, programmatic goals have been established. Note that these are tentative based on the approval process and funding approvals.

Year 1 - 2024

- Develop a Mentoring Committee across the three Societies
- Contract with mentoring system provider
- Complete discovery and development phases with provider
- Define usage goals/metrics/assessment process
- Develop sustainable marketing plan, including launch
- Launch initial pilot program to membership by Q3
- Pilot group system for Golden Opportunity/Greenfield Scholars, Bridge Scholars
- Assess options for external funders
- Year-end success report to funders, members

Year 2 - 2025

- Launch Mentoring Oversight Committee
- First year assessment review
- Build pilot programs for internal groups/events (annual meeting events with divisions, communities, specialty groups)
- Quarterly assessments/data analysis
- Seek external funding
- Year end success report to funders, members

Year 3 - 2026

- Year two assessment review
- Assess year two internal pilot programs for updates/additional programs
- Quarterly assessments/data analysis
- Year end success report to funders, members

Metrics

Ensuring that the data analytics and measurement capacities provide us with the information to assess and improve the program, a base list of metrics were developed and vetted with the potential vendors. These base metrics include:

- Number of mentees, across cohorts/for different cohorts
- Number of mentors, across cohorts
- Number of matches
- Based on tracking, number of trainings mentors/mentees participate in
- Satisfaction with experience (on a scale)
- Repeat mentors

Success Strategies

- Quality over quantity
- Attention to detail - mentoring program participant engagement, communications, assessment
- Dedicated staff or outsourced program manager

Funding

- Sustained funding request from the Agronomic Science Foundation for 5 years to ensure ongoing support. ASA, CSSA, SSSA matching support will come from matching funding and staff time for the project or outsourced program manager.
- Explore the options for outside funding including industry, government as part of a program to develop career resources to keep students in STEM, attract students to our sciences.

Marketing

Based on cohort groups and scope of the program over the first three years, the marketing plan will be built.

Items Requiring Board Attention

Attachments

Full WG Reports (Training and Education, Mentoring)

DEIC Education & Training Report 2023

Executive Summary

In 2020 the American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America (hereafter “the Societies”) began a focused effort to develop policies and programs in support of diversity, equity, and inclusion (“DEI”) within the Societies and the broader scientific communities of agronomy, crop, soil, and environmental sciences. An extensive survey was conducted in 2021 to assess members’ experiences of DEI during Societies activities and to obtain their feedback on how to improve DEI-focused programs sponsored by the Societies.

Providing DEI Education and Training opportunities that are specific to the unique needs of academics and professionals in agricultural, crop, soil, and environmental sciences was selected as a top priority for the Societies’ DEI Initiative by 47% of survey respondents.

Between January 2022 and October 2023 a DEI Education and Training Working Group has been conducting research on options for education and training programming that are responsive to priorities identified by Society members and are targeted at advancing the overarching DEI goals of the Societies. In addition, the Working Group initiated efforts to provide DEI programming in 2023 with the creation of a quarterly DEI Webinar Series. This report provides an overview of the Working Group’s activities and four major recommendations on how to continue making progress on this important priority:

1. Continue the Process of Defining Diversity, Equity, and Inclusion Goals and Indicators of Progress for the Societies
2. Continue to Develop a Series of DEI Training Programs that is Responsive to Needs Identified by the Membership
3. Create a “DEI Leadership in Agricultural and Soil Science” Certificate Program for ACS Membership
4. Develop or Provide Educational Programming Targeted at Increasing Opportunities for Underrepresented Minorities in Agricultural and Soil Sciences

Working Group Charge as outlined in ASA, CSSA, SSSA DEI Initiative Recommendations Report

The Education and Training Program Development Working Group was charged with developing a foundational plan that will provide education and training opportunities to increase DEI competency among members by providing training tools to assist them in addressing DEI issues within and outside of their organizations. This foundational plan, when implemented, will create opportunities for increased understanding, engagement, and inclusion, thereby positively impacting membership recruitment and retention.

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- facilitating conversations.

In addition to these areas, it will be important to address other vital areas of interest to our members, including recruiting diverse candidates, implicit bias, and understanding other perspectives. Education and training efforts must realize that there is overlap with concepts and find ways to address that.

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Progress of Working Group During 2022-2023

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The group also initiated a review of peer-reviewed literature on diversity, equity, inclusion and justice education, and how systemic and individual bias impacts the experiences of members of marginalized populations in agricultural and soil sciences. This effort is ongoing; a public Zotero library of the collected literature can be accessed at https://www.zotero.org/groups/4831491/tri-societiesdeic_diversityeducation.

Explore Developed Materials

The group did a review of organizations/materials that are available/they are familiar with. There are extensive resources - from every organization, consulting companies, institutions - with some free (content) and others with a fee (speakers on specific topics). In addition, the Professional Conduct working group has gathered some potential topics and speakers from their RFP for the 2023 DEI and Safe Space program.

Responsible Conduct of Research Training (RCR) - contains DEI training components related to research in an academic setting

Develop a Training Matrix

After reviewing survey responses, peer-reviewed literature, and training programs and materials developed by other organizations or service providers, a matrix was created to map specific training topics to broad themes for DEI education (Table 1). The goal of this exercise was to create a tool to inform the selection of future training topics and ensure that programming is relevant and responsive to priorities identified by members as well as the overall DEI goals of the Societies. This approach also accounts for the inherent overlap between themes and concepts that will be present for any given training topic, while also ensuring that all educational themes are included in programming on a regular basis. As the DEI Education and Training program continues to be developed and the Societies make progress towards DEI goals, the Training Matrix should be updated periodically to reflect new and changing priorities for member education.

Assess Options

As part of the plan to review options, the working group developed a series of three webinars for 2023 to showcase the work of the group and provide visibility to the membership. The webinars were:

- Understanding Diversity & Allyship in our Science Societies, June - 78 attendees, 95% interest rating (via go-to-webinar), 80% value rating (post webinar survey)
- The Transformative Power of Difficult Conversations, August - 81 attendees, 95% interest rating (via go-to-webinar), 66% value rating (post webinar survey)
- Responding as a Bystander to Harassment, Discrimination, and Bias, October - 73 attendees, 96% interest rating (via go-to-webinar), 81% value rating (post webinar survey)

Feedback from attendees providing additional topic considerations including:

- Responding to the challenges of DEI in most US institutions and how to prepare ourselves to face them,
- Inclusive mentoring/mentoring diverse students
- Gender/sexuality topics – support and stand in solidarity with our rainbow friends. We have Pride Month ... how can we stick up for them all the time ("stick up" = defend against bias, misogyny, etc.)
- Best practices for confronting bias in an interview process. I often find myself uncomfortable with what a committee member has said/asked and am uncomfortable confronting them during the interview, on behalf of the candidate. Suggestions or modeling (mock interview scenario?) would be really useful. Ditto for grant panel review discussions, or even a thesis defense presentation.
- Updates on best practices and approaches to attracting, hiring, & partnering with diverse individuals in order to further advance diversity in our work spaces.
- Microaggressions at work - recognizing them, what to do/how to address.
- It is important to invite members to share their personal stories on marginalization. Solutions should target the micro level beginning with engaging members on the essence of DEI that can easily be revealed through member's stories. This will make proposed strategies more authentic and relevant to the membership.

Table 1. "Training Matrix" mapping specific training topics to broader educational themes prioritized by member surveys.

		Educational Themes								
Year	Training Topic	Developing Inclusive Workplace Practices	Understanding Power Dynamics	Facilitating Conversations	Transforming Implicit Bias	Understanding Systemic Racism	Responding to Microaggressions	Managing and Combating Harassment	Fostering Allyship	Implementing Bystander Intervention
Completed Trainings										
2023	Understanding Diversity & Allyship in the Societies									
2023	The Transformative Power of Difficult Conversations									
2023	Empowering Bystanders: Combating Harassment, Discrimination, and Bias									
Priorities for Future Trainings										
2024	The History of Racism in Agriculture									
2024	Fieldwork Safety for Minorities in Agriculture									
2024	Understanding the Diversity of Gender Identity and Sexuality									
2024	Workshop on Inclusive Hiring Practices (at Annual Meeting)									

Effective Communications and Conflict Management - from the RFP proposals for the Ombuds program

Recommendations For Future DEI Education and Training Programs

Continue Process of Defining Diversity, Equity, and Inclusion Goals and Indicators of Progress for the Societies

One major challenge faced by the Working Group was a lack of specific, measurable goals for the Societies' overarching DEI initiatives. This in turn made it difficult to determine the scope and direction of a DEI education and training program. We recommend that the DEIC prioritize the "Measuring Success" objective of the 2022 DEI Recommendations report:

- Provide opportunities for Society Members to give feedback on DEI initiatives
 - Town hall series
 - Periodic surveys
- Conduct a goal-setting process to align DEI priorities of Society leadership, DEIC members, and the membership at large
- Define metrics that will be used as indicators of progress towards a more diverse, equitable, and inclusive organization
- Utilize overarching DEI goals to define goals and indicators of progress for the education and training program

Continue to Develop a Series of DEI Trainings that is Responsive to Needs Identified by the Membership

The DEI Webinar Series that began in 2023 is a starting point for providing the Societies' membership with opportunities to learn about DEI issues and develop skills that will allow them to play an active role in making the Societies an inclusive organization. In order to reach a larger segment of the membership and to provide more in-depth training experiences that allow participants to practice skills and build relationships, we recommend that educational programming be expanded beyond webinars, and specifically that programs allow for dialogue and interaction between experts and participants whenever possible.

- Explore opportunities to expand the DEI education and training program through offerings such as:
 - Signature DEI workshops during Annual Meetings, including collaborative efforts with Specialty Groups
 - Asynchronous training materials hosted on the Societies' web platforms
- Explore technology that encourages interactive webinars/educational sessions, as appropriate, to facilitate more rich dialogue and peer-learning
 - More speaker/attendee interactions (virtual face-to-face)

Create a "DEI Leadership in Agricultural and Soil Science" Certificate Program for the Societies' Membership

Based on the efforts of the Working Group and feedback from other members of the DEIC and Societies at large, we highly recommend the development of a certificate program that will serve as both an incentive and documentation of members' participation in DEI professional development activities.

- Continue providing regular opportunities for members to deepen their understanding of DEI issues and develop skills for addressing these issues in their personal and professional lives.
- Define criteria for earning a DEI certificate, including consideration of:
 - Number of required training sessions
 - Participation in trainings on specific themes/topics
 - E.g., Bystander Intervention and Communication Across Differences might be required to earn a certificate as they are broadly applicable to the goals of the DEI Education and Training Program
- If a Safe Space Ambassador program (being explored by the Professional Conduct and Anti-Harassment working group) is developed, all volunteer ambassadors should be required to obtain this certificate

Develop or Provide Educational Programming Targeted at Increasing Opportunities for Underrepresented Minorities in Agricultural and Soil Sciences

The 2021 DEI Survey clearly indicates that there is a need to address the lack of demographic diversity in our scientific fields by improving the pipeline for talented individuals to pursue careers in agricultural and soil sciences. In service to this objective, the Working Group has identified that there is a need to balance educational opportunities that address broad topics/skills for creating inclusive environments (i.e., not specific to, but applicable to improving conditions for individuals from various social identity groups) with opportunities to learn about and address the issues facing people within specific groups. For example, understanding microaggressions is a broad topic that provides an opportunity to learn skills that can be applied to many situations affecting many different groups of people. As a contrast to such a broadly applicative topic, accurately teaching the distinction between and nuances of gender and sex in biology classrooms is largely relevant to creating an inclusive environment for gender identity, specifically. We recommend the following as a starting point for developing programming that will serve this objective:

- Provide training on Inclusive Mentoring in support of the Society-sponsored mentoring programs
- Partner with HBCU/1890/Hispanic-Serving Organizations to provide students with information on career opportunities in agronomy, crop, soil, and environmental sciences
- Further develop relationships with MANRRS, SACNAS, and other professional organizations such as the 1890 Foundation, Native colleges, to provide visibility of our Societies and sciences.
- Develop programming relevant to specific audiences within the societies as needed, ideally through partnerships with members of those groups that identify the need and how to best address it

ASA, CSSA, and SSSA Mentoring Program

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Overview

Mentorship is a professional, working alliance in which individuals work together over time to support the personal and professional growth, development, and success of the relational partners through the provision of career and psychosocial support. - National Academy of Sciences, Engineering, and Medicine¹

The Mentoring Working Group of the ASA, CSSA, SSSA Diversity, Equity, and Inclusion Committee (DEIC) was formed as an outcome of the 2022 DEI Recommendations Report². The working group spearheaded the project that overlooked the development and review of a potential mentoring program for members and authored this report.

Introduction

Mentoring has continuously been of significant importance to our members; however, the mentoring programs offered throughout the Societies are disconnected, member-driven with little resources, and do not have the capacity to educate and train members on the subject. In 2021, the Societies released the results of a Diversity, Equity, and Inclusion (DEI) membership survey³ in which mentorship was one of the highest ranked potential programs to enhance DEI within the Societies. Furthermore, the Societies commissioned a “Future of Membership” survey to members, former members, and prospective members. Across these member groups, an average of 85% of participants somewhat or strongly support the development of a Societies mentoring program. **Therefore, based on membership feedback, our overall goal for this project is to develop a comprehensive, online, user-friendly mentoring program that connects members across all three Societies.**

About Mentoring

Mentoring in STEM (Science, Technology, Engineering, and Mathematics) is a crucial tool that helps individuals set and achieve their professional goals, while developing the necessary technical, practical, and soft skills to succeed in their field. Effective mentoring can have a profound impact on an individual’s growth and development, providing them with the guidance and support needed to thrive in their chosen career.

Developing a well-designed and managed mentoring program will provide the following:

- **Connects** those who want to develop mentoring relationships with those who are interested in mentoring,
- **Establishes** deeper connections and relationship-building between members (in similar fields of study and across cohorts),

¹ National Academies of Sciences, Engineering, and Medicine. (2020). *The science of effective mentorship in STEM*. National Academies Press.

² <https://www.agronomy.org/files/DEI/dei-recommendations-report.pdf>

³ <https://www.agronomy.org/files/DEI/dei-survey-summary-report-06252021.pdf>

- **Enhances** engagement which positively impacts member retention - particularly in our student and early career categories,
- **Builds** mentor and mentee skill sets for their mentoring and professional endeavors throughout their careers, and
- **Educates** members on best practices for mentoring and how to foster an effective mentoring relationship.

Best practices for mentoring call for the following:

- Establish clear goals and expectations
- Provide mentor and mentee training
- Match mentors and mentees carefully
- Encourage open communication
- Establish a schedule and stick to it
- Provide ongoing support to mentors and mentees

Mentoring can take place in formal or informal settings and can involve many types of mentoring. Mentoring Types include:

- Traditional one-to-one (long term relationship with an experienced mentor),
- Peer-to-Peer,
- On-Demand (one-time, as needed mentoring)
- Reverse (mentee becomes the mentor),
- Group (conversations with multiple mentors/mentees on a topic), and
- Peer Group Learning Circles (conversations on specific topics).

The Societies' Path Forward

The DEI Recommendations Report calls for “the assessment, funding, and development of a robust mentoring program that connects members with mentors - regardless of career stage - within and across-Societies. This involves:

- Understanding the components of an effective mentoring program
- Assessing options for a comprehensive mentoring system (software)
- Developing a program timeline
- Establishing Evaluation/Metrics
- Creating a Sustainability Plan

According to the ASA, CSSA, and SSSA 2021 DEI Survey, one of the top priority development areas is to build a mentoring program. When asked to select their top focus areas for the Societies DEI efforts, Mentoring was rated in the top three, along with Programmatic/Scholarship Support and Education/Training. The Societies were not viewed as providing programs and resources to foster the success of under-represented groups in our membership and sciences particularly with students and early career members and there is still

a stated need to build on the programs and services for under-represented groups in our sciences and Societies

Further, the 2022 member, former member, and prospective member surveys confirm the prioritization of mentoring program development. When asked what the level of support was across all members - 85% somewhat or strongly support a mentoring program.

As part of the working group's assessment of a mentoring program, additional research was conducted through a focused survey on mentoring in the spring of 2023. Highlights include:

- 91% of undergrads, 93% of graduate students, 97% of Early Career, and 78% (averaged) of mid/late/retired members are interested in being a mentee, mentor, or both.
- Over 65% are interested in both traditional 1:1 and peer-to-peer mentoring and approximately 40% are interested in group-based, learning circles, and event-based mentoring.
- While over 50% believe that it is important to make mentoring connections with those in their scientific field, 18-20% also agree that it depends on the topic.
- Over 60% would participate if mentor/mentee training was a prerequisite.
- 38% of participants would be willing to support the program with a small optional contribution.
- Participants noted, based on past experiences, that clear expectations, defined schedule, appropriate mentor/mentees skills, and communications were key to positive experiences.

Goals and criteria were identified for the project of developing a strong mentoring program and identifying a software program to complement our needs based on this research.

Mentoring Program Selection Process

Project Scope (Program development)

To establish a successful mentoring program across the Societies, project goals and criteria were defined that were used to evaluate mentoring programs provided in the Request for Proposals (RFPs). Specific project goals include:

- Implementing an online system that can be used within the mentoring program to maximize efficiency (i.e. software, mobile device, etc.)
- Conduct a soft launch to ensure systems are operating smoothly and efficiently
- Utilize select vendor capabilities and knowledge to develop a robust program with high participant satisfaction

The Societies provide a unique opportunity for members to connect on several platforms, such as within specific programs (GO and Bridge Scholars), divisions, and groups (speciality groups, graduate student committees, etc.). Therefore, it is crucial that an online system as part of a mentoring program will adapt to our Societies' specific needs. Specific criteria that must be met include:

- System support for a variety of mentoring types
 - Traditional 1:1
 - On-Demand
 - Career
 - Peer
 - Topical
 - Group/Circle
 - Flash (one-time)
- Education and training courses
- Time-bound mentoring relationships
- Customizable application and matching process
- Strong data/metric analyses
- Administrative assistance/system support
- Compatibility with Microsoft Dynamics CRM system

Request for Proposals Process

Information gained through research was used to develop a request for proposal to mentoring system vendors. Outreach was done to assess what other STEM organizations may be using for mentoring programs. An RFP was developed that provided background of the societies and rationale for establishing a mentoring program at this time. Components of the RFP included:

- System Capabilities
- Education/Training Options
- Technology Capabilities/Data Privacy
- Project Success Strategies
- Data Collection/Metrics
- Budget/Pricing
- Company Resources
- References
- Potential Launch Timelines
- Marketing Support

The RFP process was vetted through the DEIC's mentoring working group and conducted over the summer of 2023. An assessment rubric was developed based on project goals and criteria then an initial review of proposals by working group members was conducted. This brought forward the top three prospective companies. Individual demos were given to the working group members by each of the prospective companies and recorded. A final assessment and review process was conducted and the following section presents our recommendation.

Mentoring Program Evaluation and Final Recommendation

The RFP produced mentoring program proposals from six different companies. After evaluation of the proposals by the working group, the top three prospective companies were: Art of Mentoring, Chronus, and MentorCity. Demos were provided by the three companies and further evaluated, resulting in Art of Mentoring and Chronus as the top two candidates for our Society-wide mentoring program platform. A more detailed rubric was developed and used to compare the two companies for a final recommendation, as well as several follow-up discussions with each vendor.

Based on final evaluations, the Mentoring working group recommends Chronus as the mentoring program platform for the Societies.

Additional Mentoring Program Information

Mentoring Program Three-Year Plan

Based on the research conducted, including an understanding of mentoring, feedback from members, and prospective program selection process, programmatic goals have been established. Note that these are tentative based on the approval process and funding approvals.

Year 1 - 2024

- Contract with mentoring system provider
- Complete discovery and development phases with provider
- Define usage goals/metrics/assessment process
- Develop sustainable marketing plan, including launch
- Launch to membership by Q3
- Pilot group system for Golden Opportunity/Greenfield Scholars, Bridge Scholars
- Year-end success report to funders, members

Year 2 - 2025

- Launch Mentoring Oversight Committee
- First year assessment review
- Build pilot programs for internal groups/events (annual meeting events with divisions, communities, specialty groups)
- Quarterly assessments/data analysis
- Year end success report to funders, members

Year 3 - 2026

- Year two assessment review
- Assess year two internal pilot programs for updates/additional programs
- Quarterly assessments/data analysis
- Year end success report to funders, members

Metrics

Ensuring that the data analytics and measurement capacities provided us with the information to assess and improve the program, a base list of metrics were developed and vetted with the potential vendors. These base metrics include

- Number of mentees, across cohorts/for different cohorts
- Number of mentors, across cohorts
- Number of matches
- Based on tracking, number of trainings mentors/mentees participate in
- Satisfaction with experience (on a scale)
- Repeat mentors

Sustainability Plan

Business Plan - 2 Pages - how it will be sustainable over the course of 2-3 ((3-5)) years

- Benefits societies and sciences by building stronger scientists that stay in the sciences and ASA, CSSA, and SSSA.
- Member-only benefit
Attachment to report

Success Strategies

- Quality over quantity
- Attention to detail - mentoring program participant engagement, communications, assessment
- Dedicated staff or outsourced program manager *ASF to partially fund?

Funding

- Sustained funding request from the Agronomic Science Foundation for 5 years to ensure ongoing support. ASA, CSSA, SSSA matching support will come from staff time for the project or outsourced program manager.
- Potential for NRCS funding?

Marketing - meet with staff, about of hours needed to meet

Bulleted List of 3-4 highlights on how the company will help market the program and what we can do internally

Moving Forward

Overall, mentoring can be a powerful tool for developing talent, improving employee engagement, and promoting diversity and inclusion. By following these best practices, organizations can create successful mentoring programs that deliver real results.

Addendums:

Excel Chart: **Art of Mentoring** and **Chronus** Comparison

Financial Review