

ARCS Foundation, Inc. Diversity, Equity, and Inclusion (DEI) Action Plan Task Force Report to the National Board, June 2022

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ARCS Foundation, Inc. Diversity, Equity, and Inclusion (DEI) Action Plan Task Force Report to the National Board, June 2022

SECTION 1 - Overview

A. ARCS FOUNDATION VISION

ARCS Foundation scholars significantly contribute to US and global leadership in scientific and technological innovation.

B. ARCS FOUNDATION MISSION

ARCS Foundation advances science and technology in the United States by providing financial rewards to academically outstanding U.S. citizens studying to complete degrees in science, engineering, and medical research.

C. ARCS FOUNDATION DIVERSITY, EQUITY, AND INCLUSION STATEMENT Approved by the National Board, April 14, 2021

OPENING DOORS TO SCIENTIFIC ACHIEVEMENT

- ARCS Foundation embraces diversity, equity, and inclusion as core values critical to scientific excellence and innovation.
- We believe these core values are crucial to creating a welcoming environment within our organization.
- We open doors to talented individuals who bring different perspectives to scientific research.
- ARCS Foundation celebrates and supports the efforts of our partner institutions as they eliminate barriers to academic and scientific achievement.

D. DEI APTF CHARTER

PURPOSE

The Diversity, Equity, and Inclusion (DEI) Action Plan Task Force (APTF) is a temporary working group, formed to develop recommendations for possible actions and/or initiatives to support and implement ARCS National DEI Statement.



BACKGROUND

In October of 2020 ARCS National Board (NB) was approached by the Seattle Chapter to address issues of diversity and inequity as a result of disruptions in communities around the United States. In addition, SEAC and the Council on Competitiveness, among others, have pointed out demographic disparities apparent in STEM graduate scientists and the threat those disparities pose to future scientific innovation.

At the January 2021 meeting, the NB approved, and a task force was established to develop an ARCS National statement supporting diversity, equity, and inclusion within our mission of Advancing Science in America.

Once the statement was approved by ARCS National Board at a Special Board Meeting on April 14, 2021, the DEI Statement Task Force was dissolved. An Action Plan Task Force was approved in June 2021 to develop the Action Plan. This DEI Action Plan Task Force has been co-chaired by Barb Goergen, Minnesota Chapter, and Beth Wainwright, Pittsburgh Chapter.

ACTION PLAN TASK FORCE SCOPE OF WORK

- Form a Planning Group with the responsibility of being the steering group and clearing house for the process
- Form Working Groups which mirror the structure of the DEI statement:
 - Values
 - Internal/Members
 - Internal/Scholars
 - External/Universities
 - External/Partners and Funders
- Gather information (listen/research) from various stakeholders to answer core questions identified by the Working Groups
- Evaluate feedback and brainstorm (ideate) solutions
- Develop recommendations for possible actions and/or initiatives to support and implement ARCS National DEI Statement.

REPORTING

The Task Force Co-chairs reported directly to the President of ARCS National. Upon request, the actions of the Task Force were presented to the Executive Committee and to other entities within ARCS National. This final written report is being issued at the conclusion of work for presentation at the June 2022 NB Forum and Meeting.

MEMBERSHIP

Membership of the Task Force included ARCS chapter members, current scholars, scholar alums, university personnel, funders, partner organizations and others depending on the needs of each Working Group. Membership of this Task Force lasts until the end of the Task Force's life, as defined in the Dissolution of the Task Force.



DISSOLUTION OF THE TASKFORCE

The DEI Action Plan Task Force as defined by this Charter has a fixed term life until the end of June 2022. The group may request an extension if the timeline needs adjusting to be effective.

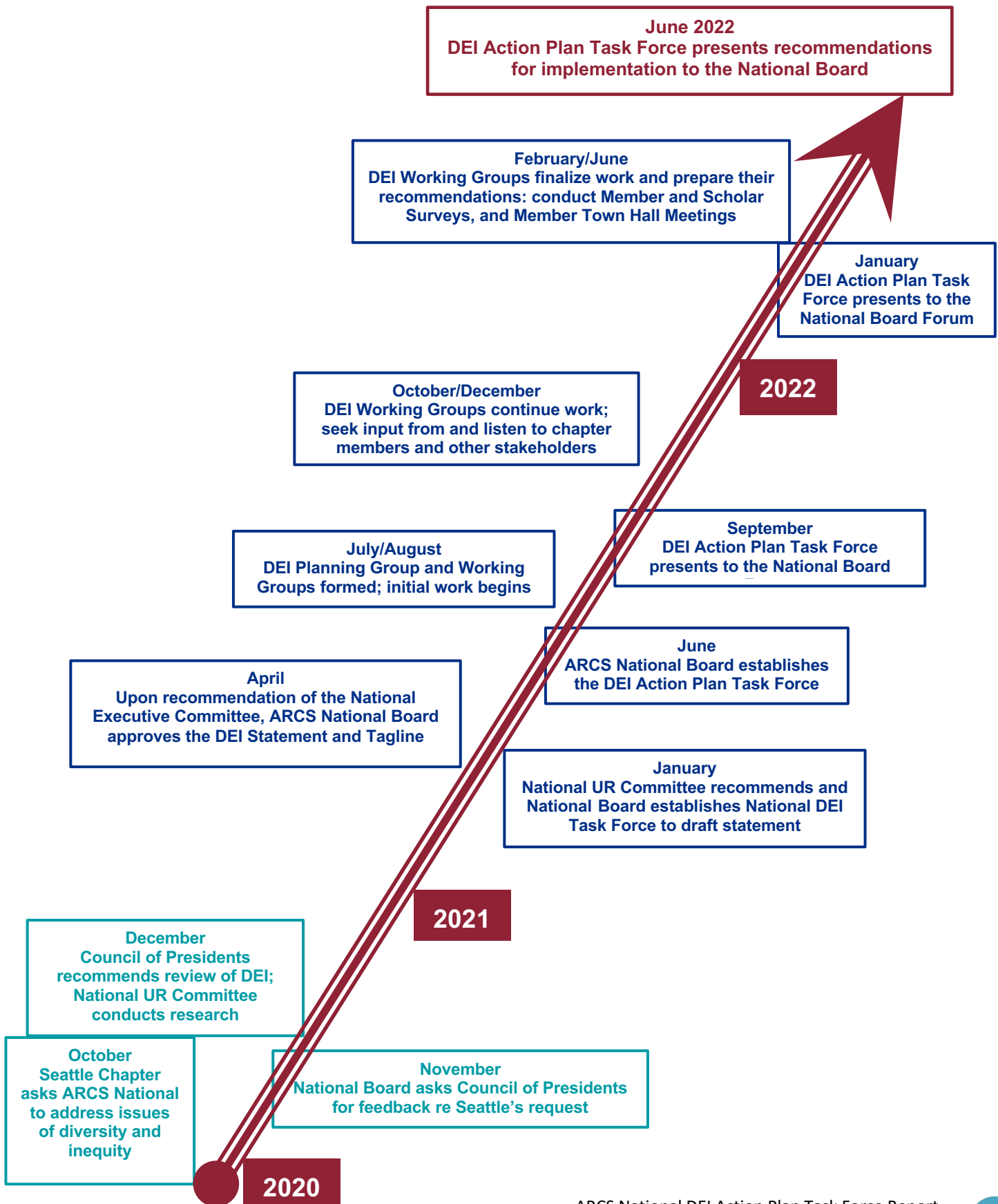
DELIVERABLES

The DEI Action Plan Task Force was tasked to deliver:

- A fully developed Action Plan which includes recommendations for possible action and/or initiatives to support and implement ARCS National DEI Statement
- Recommendations for incorporating action plan goals and objectives into the organization's strategic plan
- A strategy for ongoing NB monitoring of progress



E. ARCS DEI ACTION TASK FORCE TIMELINE



F. OVERARCHING GOAL

Why Do DEI?

GOAL

ARCS Foundation, Inc. integrates diversity, equity, and inclusion into its core organizational structure to strengthen the advancement of scientific excellence and innovation in the United States.

RATIONALE

- **Mission Consistent**

This is not a political decision. This is a decision about Excellence in Science. Our founders created a national organization to support the “best and brightest” young US scientists. We strengthen that mission by looking for both the “known and unknown best and brightest”. Research shows diversity increases innovation and creativity.

- **Supported by Demographic Data**

ARCS is responding to changing demographics of the US population as documented by the 2020 Census. Our white population is aging and decreasing. Hispanic/Asian/POC populations are projected to be the primary driver of population growth for our country. These population trends challenge ARCS Foundation to acknowledge these changes, enabling us to continue as a very relevant participant in the development of STEM talent.

- **Future Focused**

Some chapters are very healthy. Some chapters are struggling. Our overall membership numbers are decreasing. To remain credible and relevant to our scholars and to expand our donor base, ARCS must increase the diversity of our membership and leadership. We need to bring others to the table to ensure ARCS is a sustainable organization well into the future.

- **Ethical Imperative**

Dr. Francis Collins, the former director of the National Institutes of Health (NIH), in his Virtual Farewell Tribute on December 16, 2021, commented that increasing diversity is ethically the right thing to do.

G. DIVERSITY, EQUITY, AND INCLUSION DEFINITIONS

DEVELOPED BY THE DEI APTF VALUES WORKING GROUP

Diversity includes the range of all human differences.

Equity is the state of fairness that results in access for all.

Inclusion is the practice of creating open environments for all.



H. REPORT AND RECOMMENDATIONS SUMMARIES

INTRODUCTION

At the June 2021 ARCS National Board meeting the Board approved the DEI Action Planning Task Force (DEI APTF) to research and deliver recommendations on actions to support DEI initiatives at all levels of the organization. This plan is to include recommendations for possible actions and/or initiatives to support and implement the ARCS National DEI Statement adopted in April of 2021.

This report is the product of over a year's worth of work comprising meetings, surveys and research by nearly 50 individuals including ARCS board members, committee members, Chapter members, scholars, scholar alums and university partners to develop this action plan.

The DEI APTF Report is not intended to be a comprehensive set of recommendations for increasing diversity, equity, and inclusion in ARCS Foundation. Rather it is a road map to implement future actions and progress to create lasting change at all levels of the organization, now and in the future.

The majority of the recommendations are ways ARCS National Foundation can support DEI. ARCS Chapters are encouraged to consider a menu of options to implement DEI with members and scholars. Many of the recommendations are intended for ARCS National to provide ways to support Chapter efforts. Throughout the process of developing the recommendations, the DEI APTF worked hard to solicit feedback and opinions through surveys, meetings, and Town Halls with National board members, chapter Presidents, chapter members, and our Scholars. The intent of these recommendations is to form strong partnerships across the width and breadth of ARCS Foundation to support each other as we work to implement DEI principles.

Some of the recommendations put forth by the Task Force will be relatively easy to put into place. Others are more long-term projects that will require more study or pilot projects to see if they are feasible.

Suggestions for who is responsible for each recommendation are included with each recommendation. Sometimes more than one responsible committee is listed. The DEI Chair, along with the DEI Standing Committee reporting to the board, will help coordinate and oversee these efforts.

In 2022-2023 the Long-Range Planning Committee will incorporate the recommendations into the goals and strategies of the new long-range plan.

Below is a summary list of recommendations developed by the Task Force. More detailed explanations about each recommendation are listed later in this report.



NATIONAL BOARD RESOLUTIONS, STANDING RULES AND BYLAWS

Overview

At the June 2022 National Board meeting the ARCS National Board of Directors will be asked to approve Resolutions and Standing Rules amendments for the purpose of embedding accountability to the principles of DEI by the National Board and Standing and Advisory Committees.

Resolutions for June 2022 ARCS National Board Meeting

- RESOLVED, that the National Board approves the incorporation of the following definitions of diversity, equity, and inclusion, as developed by the Diversity, Equity, and Inclusion Action Plan Task Force, into the organizational and governance structure of ARCS Foundation, Inc.
- RESOLVED FURTHER, that the National Board approves the following definitions, which are intended to be broad and inclusive, as developed by the Diversity, Equity, and Inclusion Action Plan Task Force:
 - “Diversity” includes the range of all human differences;
 - “Equity” is the state of fairness that results in access for all; and
 - “Inclusion” is the practice of creating open environments for all.

Standing Rules Amendments for June 2022 ARCS National Board Meeting

Proposed Amendments to the Standing Rules and Bylaws in June 2022 to:

1. Create a Chair, Diversity Equity and Inclusion Committee as a National Board position
2. Create a Diversity, Equity, and Inclusion (DEI) Committee as a standing committee of ARCS Foundation, Inc. the purposes of which are to:
 - Develop, review and assess potential DEI initiatives of the national organization as they evolve;
 - Collaborate with Chapters as they determine what kinds of support or resources they might need on any given DEI initiative they may deem appropriate; and
 - Support a DEI Collaboration Network should one be requested by Chapters.
3. Add wording in the Charters of all ARCS Foundation’s Standing Committees to embed the principles of DEI in all levels of ARCS:
 - The Committee shall incorporate the principles of diversity, equity, and inclusion as it performs its duties and responsibilities.

FOR MORE DETAIL SEE SECTION STARTING ON PAGE 25



General Recommendations for ARCS National Foundation

Overview

General Recommendations are intended to be implemented by ARCS National committees with oversight by the DEI Standing Committee. The intent is to embed the principles of DEI into the framework of ARCS Foundation. The recommended actions encompass National marketing and communications and National leadership and Governance. Committees involved may include Governance, Communication, Librarian, Hall of Fame Committee, Long Range Planning and Nominating, among others.

- G-1. Review and conform ARCS National Foundation documents and programming to ensure they support DEI.
- G-2. Ensure the members of the External Advisory Council (if reinstated) reflect diversity, equity, and inclusion as supported by ARCS National Foundation.
- G-3. Track Scholar Alums who move to areas where ARCS Chapters exist and reach out to the Scholar Alums regarding membership in the chapter near them.
- G-4. Create a National Digital Library for DEI that includes contributions to "Best Practices" from National and Chapters to centralize information.
- G-5. WORKSHOPS/FORUMS: Provide virtual workshops/forums/training on DEI issues (NOT personal problems) open to ARCS Scholars, Alums and ARCS members.
- G-6. Selection of Hall of Fame honorees should reflect DEI and the community we serve.
- G-7. NETWORKING: Ask Hall of Fame ARCS Alums to join the National ARCS LinkedIn and TWITTER.
- G-8. ARCS National establish affiliation with/membership in prestigious national STEM-related organizations.
- G-9. Establish a DEI Collaboration Network or appoint a member of the DEI Committee to attend CN's meetings
- G-10. Ensure the leadership composition of ARCS National Foundation reflects diversity, equity, and inclusion as supported by the organization
- G-11. Review the existing bylaws which require that the President and the President-Elect of ARCS National must have served as a Chapter President
- G-12. Develop ARCS National marketing materials for use by both National and the Chapters which reflect its commitment to diversity, equity, and inclusion in order to co-ordinate messaging efforts for and among the chapters.

FOR MORE DETAIL SEE SECTION STARTING ON PAGE 28



CHAPTERS RECOMMENDATIONS

Overview

Chapters are encouraged to consider adopting from a menu of recommendations. These include suggestions to Increase diversity of members and leadership.

They also include suggestions about how to engage and support our current scholars through connection and mentoring from ARCS Chapter members and Chapter Scholar Alums.

The Scholar Working Group learned the following regarding supporting students:

- Mentorship and sponsorship—need to go hand in hand. They are not separate.
- There are 3Rs of support: Resources, Relationships, Recognition.
- Seats are not being pulled from the table; instead, we're building a bigger, more supportive table.

These concepts of support were validated by the results of the scholar survey. Of the 642 current scholars, 130 indicated they are in a group underrepresented in their field of study. Some of these students are struggling. Asked how ARCS could help, they said they would value:

- Mentorship from older scholars, members, and/or Alums
- Networking with other ARCS Scholars at their university, at other universities supported by their Chapter, and at other Chapters across the US
- Opportunities to present/discuss their research at the Chapter and National levels

Note: Chapters may choose to implement or not the following as part of their DEI efforts consistent with the message that actions will be a selection of options and not mandatory.

Recommendations

- C-1. Each Chapter establish a DEI initiative and elect a voting member of the Chapter Board as Chair of a DEI Committee. That individual may become a member of the National DEI Collaboration Network, if established.
- C-2. Recommend that membership and leadership of ARCS Foundation Chapter boards, committees, and members, reflect the values of diversity, equity, and inclusion.
- C-3. Invite current scholars and alums to virtual and in-person events at no or reduced fee.
- C-4. Provide opportunities for current Scholars or Scholar alums to speak at ARCS events.
- C-5. Offer personal relationships between ARCS Chapter Scholars and ARCS Chapter Members.

FOR MORE DETAIL SEE SECTION STARTING ON PAGE 36



WG1 VALUES RECOMMENDATIONS

Overview

The Values Working Group discovered that ARCS Foundation does not have a set of defined values. The Values Working Group created the definitions for diversity, equity, and inclusion. They also polled ARCS members in the members survey and identified a set of values related to DEI.

The Long-Range Planning Committee will need to incorporate these DEI values into an overarching set of values for the entire organization.

Recommendations

WG1-1. Adopt Values for ARCS Foundation which reflect Diversity, Equity, and Inclusion.

WG1-2. Change the descriptive terminology of “all women’s organization” to “women-led organization” and promote broadly.

[FOR MORE DETAIL SEE SECTION STARTING ON PAGE 39](#)



WG2 MEMBERS RECOMMENDATIONS

Overview

The recommendations for the Members Working Group primarily focus on the actions ARCS National can take to support the efforts of Chapters to diversify membership and leadership at the local level. This work will be coordinated by the DEI Chair and DEI Standing Committee together with the Communication committees, the management group, the Evaluation Committee, and perhaps other committees.

Recommendations

- WG2-1. ARCS National DEI Committee members and National Board members will develop recommendations based on best practices in volunteer organizations and from ARCS Chapters for managing their membership processes. These will help assist chapters as they work to grow their membership and increase diversity of members.
- WG2-2. DEI National Standing Committee and ARCS National leadership establish national-level relationships with minority-centric women's groups in STEM. These relationships could help foster relationships between ARCS Chapters and local chapters of the STEM professional societies.
- WG2-3. Conduct a Members Survey, as was done in 2008 and 2016, to better understand the diversity of ARCS members.
- WG2-4. DEI National Standing Committee together with the Communication Committee develop materials for Chapters to use to increase members and diversity of members.

Working with the IS Committee consider modifying the Member Profile form to capture basic demographic information.

Follow-up with Chapters to determine how Chapter DEI initiatives and member recruitment efforts are working.

FOR MORE DETAIL SEE SECTION STARTING ON PAGE 40



WG3 SCHOLARS AND ALUMS RECOMMENDATIONS

Overview

The Scholars Working Group learned that many Universities require potential scholars to fill out an application for an ARCS Scholar award. This can be a problem for busy graduate students. The Working Group is recommending developing ways to help scholars apply for ARCS awards in those Universities.

It is also recommending a technology solution to provide ways for scholars to connect with each other across all chapters. Another recommendation is to add a few demographic questions and statements to the Scholar Acceptance form (post-University selection) to understand who our scholars are. A survey of former Scholars to build stronger relationships with this important constituent group as potential new members and donors is also recommended.

Recommendations

WG3-1. NETWORKING: Create a National ARCS Scholar Network to enable communication/ collaboration among Scholars and Alums.

WG3-2. ACCEPTANCE FORM: Add questions and personal DEI Statement to the Scholar Awards Acceptance Form collected post-selection.

WG3-3. ALUMS: Survey ARCS Scholar Alums within the next six months to gather their input on DEI Initiative, interest in: mentoring current scholars; collaborating on research; becoming ARCS members; and, “opening doors” to new donors.

WG3-4. Consider developing a National Application Form and process for the ARCS Award as a “guide” / “best practice.”

FOR MORE DETAIL SEE SECTION STARTING ON PAGE 43



WG4 UNIVERSITIES RECOMMENDATIONS

Overview

The Universities Working Group recommends learning what DEI efforts our partner Universities are utilizing in their departments and programs. One initiative would be to participate in a pilot project with Oregon State University and Oregon Health and Science University to see how their criteria for holistic graduate student acceptance would work as a mechanism to select ARCS Scholars.

Recommendations

- WG4-1. Demonstrate our commitment to DEI by partnering with our Universities in their existing DEI initiatives and programs that align with the ARCS mission.
- WG4-2. Prioritize support for new departments and majors to align with STEM disciplines that are expected to see the most growth in undergraduate applications.
- WG4-3. Quantify and characterize the diversity within our universities among the general student enrollment, faculty, and Scholar population as a baseline for future measurement and growth.
- WG4-4. Encourage Partner Universities to solicit fully-qualified scholar candidates from the widest talent pool available. Ensure the "unknown best" have the opportunity to be considered by their university for ARCS awards.
- WG4-5. Develop a pilot program in partnership with Oregon Health & Science University (OHSU) and Oregon State University (OSU) to define holistic evaluation criteria by which ARCS Award applicants could be measured. Results from the pilot program could be used to define an alternate scholar application that may be used by chapters in conjunction with, or in place of, the traditional ARCS Graduate Scholar requirements.

FOR MORE DETAIL SEE SECTION STARTING ON PAGE 46



WG5 FUNDERS RECOMMENDATIONS

Overview

The Funders Working Group learned that DEI initiatives are very important to companies and foundation funders. They are looking to see what organizations are actually doing to support DEI, not just what they are saying.

Recommendations

WG5-1. Adopt a funding approach for ARCS that mirrors the constituents being served.

WG5-2. Obtain for ARCS National grants from Foundations and/or Corporations with commitment to ARCS and DEI to provide funds for Capacity Building.

FOR MORE DETAIL SEE SECTION STARTING ON PAGE 52



RECOMMENDATIONS FOR TASK FORCES

Overview

Certain recommendations elevated to the level of further research by designated Task Forces. The first two items on the following list, membership or affiliation of former scholars who are male and including Legal Permanent Residents as a criterion for ARCS Scholar Awards, were identified as issues in several of the Working Groups and should be acted on immediately.

Recommendations

- TF-1. Explore the question raised in the Members Survey about the possibility of having male Scholar Alums be eligible for some form of membership in or affiliation with ARCS Foundation.
- TF-2. Examine the inclusion of Permanent Legal Resident (Green Card holders) in students eligible for ARCS Awards.
- TF-3. Provide funding for bonus awards to Scholars teaching/mentoring in STEM to K-12 and/or undergrads from under-represented groups (URGs) in STEM.
- TF-4.
 1. Establish National Level award program, funded like the Roche Award, specifically to support diverse scholars at HBCUs or other minority colleges, or those who have a demonstrated commitment to fostering DEI within their chosen field.
 2. Obtain National grants from Foundations or Corporations with long-term commitment, similar to Roche Award for National and Chapter awards to promote DEI.

FOR MORE DETAIL SEE SECTION STARTING ON PAGE 54



SECTION 2 – DEI APTF PROCESSES

A. TASK FORCE STRUCTURE

The main work of the DEI Action Plan Task Force (APTF) was completed by five Working Groups (WG) overseen and coordinated by DEI APTF Co-chairs. The Working Group Leads consisted of an engineer, a corporate HR specialist, a medical research doctor, a lawyer, a volunteer leader and professional fundraiser, a non-profit executive, and founder of a health technology company. An overarching Planning Group consisting of a representative from each chapter provided opportunity for cross fertilization of ideas among and between the Working Groups.

B. PLANNING GROUP

The Planning Group (PG) was formed as a steering committee to:

- provide cross fertilization among the Working Groups as they developed their recommendations
- take messages about the DEI Task Force work back to members of their chapters.

As a group, they met five times over the course of the Task Force existence. The PG was comprised of sixteen members who represented a cross-section of members from all the chapters:

DEI Action Plan Task Force Co-chairs	
Barb Goergen	Minnesota Chapter
Beth Wainwright	Pittsburgh Chapter
Atlanta	Sherry Lundeen Janie Wilson
Colorado	Sue Zoby
Honolulu	Cheryl Ernst
Illinois	Sandra Mangurian
Los Angeles	Yolanda Walther Meade
Metro Washington	Danielle Robinson Patty Sparrell
Minnesota	Judy Benham
Northern California	Jo Whitehouse
Orange County	Ana Chu
Oregon	Julie Branford
Phoenix	Sheila Grinell
Pittsburgh	Linda Burke
San Diego	Alexa Hudnut
Seattle	Sarah Watts
Utah	Sue Dintleman



C. WORKING GROUP #1 VALUES

Lead:	Linda Burke	Pittsburgh Chapter
Members:	Meleah Ashford	Oregon Chapter
	Laura Bailey	Seattle Chapter
	Sarah Watts	Seattle Chapter
	Janie Wilson	Atlanta Chapter
	Beth Wainwright	Pittsburgh Chapter, DEI Co-chair Liaison

MISSION VALUES

Values provide the foundation for making DEI actionable in ARCS National and, as desired, by ARCS Chapters. Working Group #1 first explored and developed informal ARCS Mission Values to understand the context of DEI Values. Through initial WG thinking enhanced by the results of the DEI surveys, the WG arrived at the following informal Mission Values:

- Excellence
- Philanthropy
- Leadership
- Vision

DEI DEFINITIONS

The Values Working Group then developed definitions for DEI, as follows:

Diversity includes the range of all human differences.

Equity is the state of fairness that results in access for all.

Inclusion is the practice of creating open environments for all.

These definitions were intentionally broad so as not to exclude any person, group or population. Stakeholders and Chapters could have different emphasis areas that pertain to their Chapters or regions.

DEI VALUES

Following from the DEI definitions, a possible list of Values for DEI was developed that were reinforced by the Member Survey. The conclusion that WG #1 determined from the difference in Values is that DEI Values are **not** Mission Values (The “What”), but rather organizational values (The “How.”). **The Mission should not change.**

Definitions for DEI values were developed to make them clear and useful and to provide the basis for common understanding among the Working Groups. They are the basic tenets upon which our DEI recommendations are based.

Openness: Willing to set aside barriers or prejudices to consider and interact with different ideas and perspectives for future advantage.

Welcoming: Cultivating a feeling of belonging

Leadership: Inspiring, guiding, and empowering others for a common purpose, making an organization or community the best it can be.

Listening: Hearing with curiosity and without judgment or bias



D. WORKING GROUP #2 MEMBERS

Lead:	Julie Branford	Oregon Chapter
Members:	Jill Bray	Phoenix Chapter
	Sara Jean Burke	Atlanta Chapter
	Cheryl Ernst	Honolulu Chapter
	Julie Hohl	Metro Washington Chapter
	Yolanda Walther-Meade	San Diego/Los Angeles Chapter
	Inez Miles	Pittsburgh Chapter
	Shelley Woods Whiting	Atlanta Chapter
	Kate Timmerman	Illinois Chapter, Scholar Alum
	Barb Goergen	Minnesota Chapter, DEI Co-chair Liaison

PROCESS

WG #2 began by discussing the phases of membership: recruiting, engaging/involving, growing leadership, and resignations. At each phase, the group discussed broadening our membership to include more younger women as well as ethnically diverse women, and even the issue of male Scholar Alums wanting to join ARCS as reported in the Survey of Scholar Alums a few years ago.

MEMBER & PRESIDENTS SURVEY INSIGHTS

WG #2 learned from the surveys of Members and Chapter Presidents, as follows, and used our research and information from the surveys to determine our recommended actions for enhancing ARCS membership.

Some highlights of the survey results include:

1. Most Chapters Want to Grow Their Membership:
 - 93% of Chapter Presidents either Agreed or Strongly Agreed
 - 64% of Members either Agreed or Strongly Agreed
2. Creating an Atmosphere of Belonging:
 - Quotes from Members Survey
 - “We need to ensure that all existing members are engaged in a way they find meaningful”
 - “It is important to be a vital organization that has an imperative mission.”
 - All members must feel comfortable in chapter meetings and events
3. Most Chapter Presidents and Member-respondents Believe that “Diverse” New Members will Bring Strength and Longevity to Their Chapters:
 - 87% of Chapter Presidents either Agreed or Strongly Agreed with that question
 - 68% of Members either Agreed or Strongly Agreed with that question; 1.3% either Disagreed or Strongly Disagreed with that question
4. Members’ quotes:
 - “Let’s choose individuals based on ability, interest in promoting and supporting the ARCS mission”



E. WORKING GROUP #3 SCHOLARS

Lead:	MJ Whitehouse	Northern California Chapter
Members:	Brigitte Bouchat	Pittsburgh Chapter
	Cheryl Ernst	Honolulu Chapter
	Sheila Grinell	Phoenix Chapter
	Alexa Hudnut	Scholar Alum, San Diego Chapter
	Jenny Jacox	Scholar Alum, Northern California Chapter
	Sandra Mangurian	Illinois Chapter
	Megan Sabal	Scholar Alum, Northern California Chapter
	Yolanda Walther-Meade	Los Angeles and Orange County Chapters
	Barb Goergen	Minnesota Chapter, DEI Co-chair Liaison

PROCESS

Working Group #3 met by Zoom every two weeks from September to December and monthly thereafter.

- Meetings lasted between 60 and 90 minutes; attendance averaged 8 persons; only one participant was unable to participate in any session.
- Discussions were open, issue-focused, thoughtful, and engaged.
- Leader set the agendas and at least half of the time summarized the discussions.

WG #3 agreed that

- Increasing DEI among ARCS Scholars was important – if not critical – to supporting the third sentence in the approved DEI Statement: *“We open doors to talented individuals who bring different perspectives to scientific research.”*
- Data were important; we shared articles, reports, and programs relevant to DEI issues, identified stories from recent ARCS Scholars from under-represented groups, as well as created, conducted and analyzed a survey of current ARCS Scholars
- Listening was important; we participated in two Town Halls with ARCS members, fielding questions related to increasing DEI among ARCS Scholars
- Current national selection criteria for scholars may need to be reviewed by University Relations or a Task Force. While this WG does not recommend any immediate changes, we do recommend that University Relations committee communicate the ARCS DEI Initiative and possibly suggest some “back-pocket” tiebreakers to the Selection Committee. Universities should also be encouraged to ensure that all eligible candidates are aware of the ARCS award and provide enough time for application process.,

NOTE: While these agreements made for a cohesive group, it also made for a group that lacked “cognitive diversity” which is considered a weakness.



WHAT WG #3 DID

- Created, conducted, analyzed a DEI Scholar Survey offered to all current ARCS Scholars
- Identified possible actions with current ARCS Scholars that would support increased diversity, inclusion, and/or equity to be adopted (or not) by Chapters
- Identified possible actions with Scholar Alums that would support re-engagement with ARCS Foundation as advisors, mentors, “door-openers”, and had potential to increase a community of scientific excellence (in addition to the National ARCS LinkedIn group)
- Created several slide decks that may be used by Chapters at BOD or general membership meetings along with “listening questions”
- Started a list of stories from ARCS Scholars from under-represented groups
- Made suggestions to other Working Groups that were in “their sandbox” and to the National BOD on actions that required national efforts

WHAT WG #3 DID NOT DO

- The group did not create and conduct a survey of ARCS Alums; we recommend that this be done within the next 6 months, after an update of the national database of Alums
- Define measurements of impact of proposed actions or data needed (how to collect & analyze that data - from whom, how often, – and with what budget)
- Develop plan on how to re-engage alums: in addition to updated contact information, ARCS needs to identify reasons for alums to re-engage as advisors, mentors, members
 - Three members of this WG (all Alums) offered to pilot a collaboration platform (SLACK) among Alums to provide input on DEI issues over 6 months (perhaps July-December) with criteria for “success”; expand topics as needed

KEY MESSAGES FROM SCHOLAR SURVEY (MARCH 2022)

- Responses received from 199 of 642 Current Scholars (31% - quite good)
- WG #3 recognized that scholars who responded to the survey were most likely the ones most impacted by DEI issues. Also, most were from west coast Chapters which have the largest Scholar base.

What we learned from survey results and comments:

- 130 Scholars (65% of respondents) consider themselves to be in a group underrepresented in STEM
 - Groups underrepresented in STEM: Women & some are mothers, Older age (12% over 35), Race/ethnicity and mixed race (12% non-white or Asian), Gender identification – (LBGTQ, non-binary, transgender), Disability (hearing, vision, cognition, mental health), First generation college students, Socioeconomic issues, Religion
 - Many are in multiple categories
- 141 **think about DEI issues every day** or several times a week
 - 68 teach, coach or mentor STEM students
 - 96 work with programs focused on increasing DEI in STEM



- Discrimination is an issue in some academic institutions; Advisors play a crucial role; many scholars appear to be struggling with discrimination/inclusion
- Current Scholars would value:
 - Mentorship from older scholars and/or Alums
 - Networking with other ARCS Scholars at their university, at other universities supported by their Chapter, and at other Chapter across the US
 - Opportunities to present/discuss their research at the Chapter and National levels
- Communicating the DEI Initiative to universities with ARCS Scholars is important. Keep “merit-based” but perhaps add other factors to consider in selection (e.g., first generation to college, in financial need, English as second language, etc.)
- Connecting to ARCS members – possibly 1:1 – would be valued (For example, the San Diego Chapter started “Getting to Know You” program with Scholars.)
- Current scholars often recommended that ARCS support DEI programs at current universities and make other efforts to increase awareness of STEM for K-12.



F. WORKING GROUP #4 UNIVERSITIES

Lead:	Danielle Robinson	Metro Washington Chapter
Members:	Michelle Bailey	Metro-Washington Chapter, Scholar Alum
	Judy Benham	Minnesota Chapter
	Chris Brent	Northern California Chapter
	Rhea Coler	Seattle Chapter
	Ana Chu	Orange County Chapter
	Joan Foley	Oregon Chapter
	Kitti Lile	Seattle Chapter
	Michael Reihs	Current Scholar, Seattle Chapter
	Kathleen Simpson	Seattle Chapter
	Donna Spivey	Illinois Chapter
	Barb Goergen	Minnesota Chapter, DEI Co-chair Liaison

PROCESS

The Universities Working Group was comprised of eight regular members from a broad spectrum of chapters, as well as contributions from a current scholar and scholar alumna. Members brought their experience from careers in medicine, academia, and technical fields, as well as several members with a long history of leadership within their chapters and ARCS National.

Meeting regularly, 1-2 times per month, the group began by brainstorming topics around which the recommendations and proposed actions took shape. These ideas were further expanded through feedback received from the University Relations, Collaboration Network, the DEI Planning Group, President's, Member's and Scholar's Surveys, and the two DEI town halls.

KEY FINDINGS

The focus areas supported by the surveys and member comments were:

- Identifying existing DEI initiatives within our universities and chapters that might be leveraged by others.
- Understanding what demographic data exists and can be shared by our universities to serve as a baseline for measuring future impact/progress of DEI initiatives.
- Gaining insight into how applications are solicited by our universities. Investigate if the aperture be broadened to encourage more diverse, yet equally qualified, applicants.
- Exploring ways to receive ongoing input from universities and scholars on their DEI efforts.



G. WORKING GROUP #5 FUNDERS

Lead:	Sherry Lundeen	Atlanta Chapter
Members:	Caroline Hardin	Atlanta Chapter
	Patty Sparrell	Metro Washington Chapter
	Beth McQueston	Oregon Chapter
	Pam Meadowcroft	Pittsburgh Chapter
	Beth Wainwright	Pittsburgh Chapter, DEI CO-chair Liaison

WHAT WE DID

Working Group #5 Funders interviewed Foundations, Individual donors, Corporations and one non-funder of ARCS from a cross section of Chapters. Also interviewed a donor to National.

Questions included but were not limited to:

- What are your priorities when you are evaluating a non-profit for funding?
- Are you familiar with ARCS Guiding Principles for Scholar Awards?
- As a donor/partner/collaborator what are your critical requirements for giving to or partnering with ARCS?
- What are your companies/foundations/personal priorities for grants to (or relevant collaborations regarding) students in STEM?
- Does the fact that ARCS National/ARCS (Chapter Name) has developed a DEI statement and is working toward a DEI policy and action plan impact your decision to support ARCS now and in the future?

KEY FINDINGS

- Several who were interviewed stressed actions speak louder than words. They evaluate the actions an organization is taking toward DEI not just what is on paper or on website.
- ARCS should be intentional and transparent in how we communicate, implement and measure equity and inclusion initiatives/innovations.
- Celebrate our accomplishments locally, regionally, and nationally.
- Proposed Initiatives:
 - Plans should ensure that diversity, equity, and inclusion are consistently understood, practiced and embraced across ARCS Foundation taking into account each constituent's needs.
 - Create a clear sense of visibility and engage the ARCS community, members, scholars, alumni and partners to promote equity and access resources.
 - Create a plan that is easily shared with constituents and monitor plan to show progress.



SECTION 3 – DEI APTF RECOMMENDATIONS

A. NATIONAL BOARD RESOLUTIONS, STANDING RULES, AND BYLAWS

Resolutions for June 2022 ARCS National Board Meeting

RESOLVED, that the National Board approves the incorporation of the following definitions of diversity, equity, and inclusion, as developed by the Diversity, Equity, and Inclusion Action Plan Task Force, into the organizational and governance structure of ARCS Foundation, Inc.

RESOLVED FURTHER, that the National Board approves the following definitions, which are intended to be broad and inclusive, as developed by the Diversity, Equity, and Inclusion Action Plan Task Force:

“Diversity” includes the range of all human differences;

“Equity” is the state of fairness that results in access for all; and

“Inclusion” is the practice of creating open environments for all.

RATIONALE

- **Mission Consistent**

This is not a political decision. This is a decision about Excellence in Science. Our founders created a national organization to support the “best and brightest” young US scientists. We are strengthening that mission by looking for both the “known and unknown best and brightest”. Research shows diversity brings innovation and creativity.

- **Supported by Demographic Data**

ARCS is responding to changing demographics of the US population. Our white population is aging and decreasing. Hispanic/Asian/POC populations are projected to be the primary driver of population growth for our country. These population trends give rise to an opportunity to reimagine ARCS Foundation, enabling us to continue as a very relevant participant in the development of STEM talent.

- **Future Focused**

Some chapters are very healthy. Some chapters are struggling. Our overall membership numbers are decreasing. To remain credible and relevant to our scholars and to expand our donor base, ARCS must increase the diversity of our membership and leadership. We need to bring others to the table to ensure ARCS is a sustainable organization well into the future.

- **Ethical Imperative**

Dr. Francis Collins, the former director of the National Institutes of Health (NIH), in his Virtual Farewell Tribute on December 16, 2021, commented that increasing diversity is the ethically right thing to do.



PROPOSED ACTIONS

- ARCS National Diversity, Equity, and Inclusion Action Plan Task Force presented this resolution to the Executive Committee at their meeting on May 16, 2022. The resolution will be presented to the National Board for approval at the June 10, 2022 meeting
- Governance to add this responsibility to the charters for each of the Standing and Advisory Committees

RESPONSIBLE PARTY

ARCS National Board | June 2022 National Board Meeting

National Board Amendments to Standing Rules and Bylaws

- Create a Chair, Diversity, Equity, and Inclusion Committee as a voting position on the National Board to serve as the organizational point person to lead integrating diversity, equity, and inclusion recommendations and initiatives in ARCS Foundation, Inc.
- Diversity, Equity, and Inclusion (DEI) Committee as a standing committee of Achievement Rewards for College Scientists Foundation, Inc. (the “Foundation”), the purposes of which are to:
 - Develop, review and assess potential DEI initiatives of the national organization as they evolve;
 - Collaborate with Chapters as they determine what kinds of support or resources they might need on any given DEI initiative they may deem appropriate; and
 - Support a DEI Collaboration Network should one be requested by Chapters.
- All ARCS Standing Committees:
 - The Committee shall incorporate the principles of diversity, equity, and inclusion as it performs its duties and responsibilities.

RATIONALE

- The work the Diversity, Equity, and Inclusion Action Plan Task Force has been doing for the past nine months is just the beginning of the process of transforming ARCS Foundation into a strong non-profit with the goal of Advancing Science in America in today’s world and in the future.
- By its actions, National will set an example for the chapters, our scholars, our partner universities, our funders and other community members that Diversity, Equity, and Inclusion (DEI) are important core values and matter to the continued viability of ARCS Foundation as a champion of our Nation’s future STEM leaders.
- National will reinforce that commitment by identifying and electing a person with Board authority who is accountable for the integration of and measurement of DEI Initiatives as recommended by the DEI Action Plan Task Force previously instituted by the Board.



- The DEI Task Force recognizes that commitment to integrating DEI initiatives is an organizational evolution, and one that may require the development of additional initiatives as an on-going, multi-year effort.
- A dedicated leader and a DEI Standing Committee will ensure the work of the DEI Task Force continues and there is follow through on institutionalizing DEI into ARCS Foundation operations.
- A National DEI Standing Committee will provide the women-power to support this work.
- A National DEI board position with authority and a standing committee will maintain visibility and provide consistent guidance to chapters who are at different stages in adoption of DEI initiatives.

PROPOSED ACTIONS

- At the National Board meeting in June 2022, approve the position of Chair, Diversity, Equity, and Inclusion as a voting member of the National Board of Directors.
- At the National Board meeting in June 2022, approve a Diversity, Equity, and Inclusion Committee Charter as a Standing Committee of the National Board.
- At the National Board meeting in June 2022, elect an individual to serve as Chair, Diversity, Equity, and Inclusion.
- In consultation with the DEI Committee Chair, the President shall appoint members of the Committee to be approved by the National Board no later than September 2022.

PROPOSED IMPLEMENTATION

Write a Charter and Job Description for the Chair, DEI and the DEI Committee for approval which includes but is not limited to:

- Report directly to the President and others as requested
- Work closely with the President and the Executive Committee on DEI matters
- Chair the National DEI Committee
- Serve on the National Long Range Planning Committee
- Monitor and measure the progress of approved DEI Initiatives
- Work with Governance to review all Governance and Organizational documents and structures with a view towards DEI
- Work with Communications to develop materials and templates which reflect diversity, equity, and inclusion for use at the National and Chapter levels
- Review website pages to ensure the DEI Committee information is current and notifies IS Advisory Committee of any necessary updates
- Work with the Chapters who wish to develop their own DEI initiatives and strategies
- Work with all National committees to integrate DEI into their operations
- Maintains the DEI Committee folder and materials in the National Library

RESPONSIBLE PARTIES

Governance Committee

ARCS Foundation National Board June 2022



B. GENERAL RECOMMENDATIONS FOR ARCS NATIONAL FOUNDATION

General Recommendation #1

RECOMMENDATION

Review and conform ARCS Foundation National documents and programming to ensure they support DEI

RATIONALE

- As part of the process of embedding DEI into the culture of the organization, documents, programs, practices need to support and reflect commitment to DEI
- As our voice to outsiders, update the website to reflect ARCS National's commitment to DEI.

PROPOSED ACTIONS

Actions to include but not be limited to:

- Conform all organizational governing documents such as bylaws, standing rules, policies, procedures
- Conform documents such as the Style Guide, newsletter, forms and templates
- Newsletter: needs to reflect ARCS values and commitment to DEI
- Ensure programming reflects commitment to DEI
- Ensure DEI is represented in both the public and member only sides of the website

RESPONSIBLE PARTIES

National Governance
Executive Committee
National Board
Communications
ARCS Forward
Information Strategies

General Recommendation #2

RECOMMENDATION

Ensure the members of the External Advisory Council (if reconstituted) reflect diversity, equity, and inclusion as supported by ARCS National Foundation.

RATIONALE

- ARCS National needs to show by actions that we take diversity, equity, and inclusion seriously and are acting on our approved statement
- The diverse composition of an Advisory Council conveys to an external audience the commitment of ARCS in achieving its DEI initiatives



- The diverse composition of an Advisory Council also sends a message of commitment to our community of scholars we serve
- An Advisory Council comprised of individuals with different life experiences would show that ARCS values bringing a range of perspectives to the table, people who see things differently, engage in different ways, and create new and innovative options

PROPOSED ACTIONS

- Recruit members with different life experiences and perspectives to serve on the Advisory Council
- Assess potential members commitment to diversity, equity, and inclusion as a requirement for consideration for service
- Ensure that those who are invited to serve bring diversity to the table

RESPONSIBLE PARTIES

Executive Committee
Long Range Planning

General Recommendation #3

RECOMMENDATION

Track Scholar Alums who move to areas where ARCS Chapters exist and reach out to the Scholar Alums regarding membership in the chapter near them.

RATIONALE

The diversity of our Scholars and Scholar Alums is broader than the membership in most chapters. One way to bring younger professionals into our chapters is to welcome Scholar Alums at reduced or free membership fees. Scholars may also bring other kinds of diversity beyond simply being much younger.

PROPOSED ACTIONS

- Work with the Scholar Relations Collaboration Network to track Scholar Alums who move to areas where ARCS Chapters exist and reach out to the Scholar Alums regarding membership in the chapter near them.
- Develop a tracking system for Scholar Alums.
- Use LinkedIn or other social media platforms to notify Scholar Alums of where ARCS chapters are located. Each chapter may want to have a person dedicated to searching for Scholar Alums working in their regional areas to welcome them to membership
- Determine if the chapter wants to create a Scholar Alum category of membership and what the fee structure might be to make membership affordable for these young professionals.
- Incorporate discussion of how scholars are identified into the University visit talking points and/or formalize as part of the UR Visit Form.
- If scholar alums do not live in the area of a chapter, encourage them to join the chapter which gave them the scholar award. Or they could join the chapter near where they live or any chapter virtually.



RESPONSIBLE PARTIES

DEI Standing Committee
Chapter Engagement/Membership
Scholar Collaboration Network
IS Committee

General Recommendation #4

RECOMMENDATION

Create a National Digital Library for DEI that includes contributions to "Best Practices" from National and Chapters to centralize information.

RATIONALE

- Enables ARCS to leverage research and resources "discovered" and "developed" (for starters, see contents of DEI Action Plan Task Force Dropbox)
- A DEI library on the National website will:
 - allow ARCS members to access and contribute information/resources to the DEI Initiative
 - allow ARCS members to access and contribute information/resources to the DEI Initiative
 - allow sharing of information and progress
 - provide a site for Chapter DEI questions/requests

PROPOSED ACTIONS

- Determine best location; possibilities include the Document Library or PATS Portal
- Requires time from IS Committee to update Document Library and/or PATS Portal
- May require a librarian to organize/keep functional
- May require a budget to implement
- Requires ongoing support for updates – perhaps quarterly
- Include reports, slide decks, publications, scholar stories from URGs, DEI information used in "pitches" to potential donors; web content on DEI to use by Chapters;
- Share Best Practices through Collaboration Networks;
- Ask for help from current donors (3M, Agilent) plus Seattle Chapter
- Begin to populate the site with contents from the DEI Action Plan Task Force Dropbox

RESPONSIBLE PARTIES

National DEI Standing Committee
Input from National and Chapters
IS Committee
National Librarian



General Recommendation #5

RECOMMENDATION

WORKSHOPS/FORUMS: Provide virtual workshops/forums/training on DEI issues (NOT personal problems) open to ARCS Scholars, Alums and ARCS members

RATIONALE

- Opening virtual forums on DEI issues to all will provide opportunity for an exchange of ideas.
 - DEI training could be one topic.
 - Communicating science effectively might be another.
- ARCS Foundation does not have DEI expertise internally. Alternatives might be to support consultations by scholars with a consultant specializing in DEI issues or publicize workshops by universities on DEI.
- This recommendation was suggested in comments in the DEI Scholar & Member Surveys.

PROPOSED ACTIONS

- Hold workshops/forums, perhaps quarterly; model after ARCS Forward events or include as part of ARCS Forward events
- Explore more deeply what scholars need as support
- Identify a moderator for the workshop. To foster open discussion, suggest no recordings be made, or if recordings are made, provide clear instruction to participants that it might be added to "DEI Digital Library"
- Explore programs that support graduate students at partner universities:
 - Ask UCSC how this worked and if the program continues
 - Research the program at UC Santa Cruz: link to the life/career coaching offered: <https://graddiv.ucsc.edu/grad-horizons/personal-dev-well-being/remy-franklin-coaching.html>
- ASG Management company may have suggestions for training programs
- Consider companies such as Salesforce, which is willing to share their workshops/trainings on DEI at no cost

RESPONSIBLE PARTIES

National DEI Standing Committee
ARCS Forward



General Recommendation #6

RECOMMENDATION

Selection of Hall of Fame honorees should reflect DEI and the community we serve

Rationale:

ARCS National needs to show by actions that we take DEI seriously and are acting on our approved statement.

Proposed Actions:

Ensure that Diversity, Equity, and Inclusion as defined as approved by ARCS National are foremost in the minds of the Hall of Fame Selection Committee

Responsible Party:

Hall of Fame Selection Committee

General Recommendation #7

RECOMMENDATION

NETWORKING: Ask Hall of Fame ARCS Alums to join the National ARCS LinkedIn and TWITTER

RATIONALE

Adds value - Posts on ARCS networks from Jessica Meir and others would increase value of signing up (which allows us to stay in touch)

PROPOSED ACTIONS

Northern California Chapter names "Outstanding ARCS Alum" from their Chapter - from time to time; ask them to sign up too.

Responsible Party:

National Hall of Fame Committee

General Recommendation #8

RECOMMENDATION

ARCS National establish affiliation with/membership in prestigious national STEM-related organizations

Rationale:

- Similar to our affiliation with the Council on Competitiveness
- Brings national credibility and awareness to ARCS Foundation and the work we do in supporting scholars
- Takes ARCS Foundation to a higher level in advancing science in America



- Provides a wider audience for our scholars and the research they are doing

Proposed Actions:

- Explore organizations which might be an opportunity for alignment
- Use a reinstated Executive Advisory Council to open doors for ARCS National
- Incorporate into the Long-Range Plan

Responsible Party:

Long Range Plan

General Recommendation #9

RECOMMENDATION

Establish a DEI Collaboration Network or appoint a member of the DEI Committee to attend CN's meetings.

RATIONALE

- Chapter leaders may want to share ideas about increasing the diversity in their chapter's membership.
- Collaboration Networks have been valuable in other ARCS functional areas, so ARCS national should provide a Collaboration Network to assist chapters with DEI initiatives.

PROPOSED ACTIONS

- The National Board will authorize the initiation of a Diversity, Equity, and Inclusion Collaboration Network to be created under the leadership of the Chair, Diversity, Equity, and Inclusion on the National Board.
- Or the National DEI Committee will appoint members to attend Collaboration Network meetings to promote DEI activities.
- As with other Collaboration Networks, chapter participation is optional.

RESPONSIBLE PARTY

National DEI Standing Committee

General Recommendation #10

RECOMMENDATION

Ensure the leadership composition of ARCS National reflects diversity, equity, and inclusion as supported by the organization

Rationale:

- The leadership of ARCS is the face of the national organization to the outside world
- ARCS National needs to show by actions that we are seriously committed to DEI and are acting on our approved statement



- According to academic and anecdotal studies, successful DEI initiatives are those generated and supported by leadership at the top. (<https://www.nonprofithr.com/role-of-exec-leadership-in-advancing-dei/>)
- Diversity of backgrounds, experiences, and viewpoints are important considerations for members of the leadership team. It would confirm commitment to DEI at the highest level and put into practice the beliefs articulated in ARCS DEI statement
- National needs to set an example to the chapters that DEI matters

Proposed Actions:

- Recruit board members with different life experiences and perspectives to serve on the National Board
- Assess potential members commitment to diversity, equity, and inclusion as a requirement for consideration for service
- Ensure that those who are invited to serve support diversity, equity, and inclusion as defined by ARCS National and bring diversity to the table

Responsible Party:

National Nominating Committee

General Recommendation #11

RECOMMENDATION

Review the existing bylaws which require that the President and the President-Elect of ARCS National must have served as a Chapter President

RATIONALE

- The existing ARCS National Bylaws state:
ARTICLE V: OFFICERS AND AGENTS
Section V.1. Officer Election and Qualifications. No person shall be eligible to serve as President or President-Elect unless she has previously served as a Chapter president.
- Removing this bylaw requirement would allow the National Nominating Committee to consider any member of an ARCS chapter as a candidate for National President.
- This would allow ARCS National to elect a chapter member who is a recognized leader, perhaps from a diverse background and already experienced with leading a national organization, to possibly add a different and broader perspective to the board.
- There are chapter members, who have never been asked to serve or who have never served as Chapter President because of other commitments, who are well qualified, to serve as ARCS National President because of their experience and expertise.
- As other organizations do, look for the skill set most desired in a National President. Where the chapter president leadership is lacking, build the leadership team around the President to bring that skill set.
- This is an opportunity to reimagine ARCS Foundation for the future. Imagine a National President who is poised to open the doors to other organizations supporting STEM. This can benefit our chapters, our membership, and our credibility.



PROPOSED ACTIONS

- Review this proposal as part of the Long-Range Plan update
- National Nominating Committee reassess its processes for selecting a National President
- Consider individuals who have not been a chapter president but who have held a leadership position on the National Board
- National Nominating Committee consider national exposure and reputation as important life experiences needed at the level of National President

RESPONSIBLE PARTIES

Long Range Planning

Governance

National Nominating Committee

General Recommendation #12

RECOMMENDATION

ARCS National develop marketing materials for use by both National and the Chapters which reflect its commitment to diversity, equity, and inclusion in order to co-ordinate messaging efforts for and among the chapters.

RATIONALE

- Nationally developed materials would provide a single, consistent message, in concert with the ARCS mission statement, rather than piecemeal responses from chapters with various stances on the initiative.
- This messaging would convey to an external audience the growth of ARCS in achieving its DEI goals in aggregate, rather than a spectrum of results from separate chapters.
- This messaging would implement growth measures for the organization as a whole so that the full spectrum of actions by chapters is consolidated into an overall demonstration of national growth over time.

PROPOSED ACTIONS

- National Communications and the DEI Standing Committee work with ASG to develop DEI marketing materials for use by both National and the Chapters.

RESPONSIBLE PARTIES

National Communications

National DEI Standing Committee



C. CHAPTER RECOMMENDATIONS

Chapters are encouraged to consider adopting from a menu of recommendations. These include suggestions to Increase diversity of members and leadership.

The recommendations also include suggestions about how to engage and support our current scholars through connection and mentoring from ARCS Chapter members and Chapter Scholar Alums.

Note: Chapters may choose to implement or not the following as part of their DEI efforts consistent with the message that actions will be a selection of options and not mandatory. ARCS National will provide support, if requested, as a partner in DEI chapter initiatives.

Chapter Recommendation #1

RECOMMENDATION

Each Chapter is encouraged to establish a DEI initiative and elect a voting member of the Chapter Board as Chair of a DEI Committee. That individual may become a member of the National DEI Collaboration Network, if established.

RATIONALE

Creates a "point person" for messaging, progress, input, needs, and vision for what comes next and represents DEI issues at the Chapter level and in the Collaboration Networks

PROPOSED ACTIONS

Chapter options for proposed Actions:

- Chapters may create a DEI chair position on their Chapter Board.
- Chapters may be asked to include whether or not their Chapter adopted this recommendation in their annual report.
- National DEI Standing Committee will develop a sample job description for this role, addressing need to represent and communicate DEI issues at the Chapter level, outreach to Chapter's universities, members, donors, and participate in meetings of the DEI Collaboration Network.
- National DEI Standing Committee will also provide draft wording for changes to bylaws or standing rules that Chapters may use.

RESPONSIBLE PARTIES

Chapter Board

Chapter Governance Committee

National DEI Standing Committee



Chapter Recommendation #2

RECOMMENDATION

It is recommended that membership and leadership of ARCS Foundation Chapter boards, committees, and members, should reflect the values of diversity, equity, and inclusion.

RATIONALE

- DEI Initiative is mission driven; it is supported by data; it is forward focused and it's the right thing to do.
- Each Chapter is different in make-up and in the community in which it resides. Demographic data and scholar survey input does not discriminate between communities

PROPOSED ACTIONS

Chapter options

- Make an effort to recruit members from diverse backgrounds
- Work to develop these members to assume Chapter leadership positions

RESPONSIBLE PARTIES

Chapter Board

Chapter Membership Committee

Chapter Nominating Committee

Chapter Recommendation #3

RECOMMENDATION

Invite current scholars and alums to virtual and in-person events at no or reduced fee.

Rationale:

Scholar participation in ARCS Chapter events encourages connections, collaborations, relationships, and sense of belonging. The DEI Scholar Survey strongly supported the value of networking.

Proposed Actions:

Chapter Options:

- Invite Scholars and Scholar Alums to Chapter events at no or reduced charge.
- Encourage scholars and alums to attend the National AMC meetings

Responsible Party:

Chapter Board

Chapter Event chair



Chapter Recommendation #4

RECOMMENDATION

Provide opportunities for current Scholars or Scholar alums to speak at ARCS events.

RATIONALE

Speaking opportunities to non-scientific audiences. Recognition is important to current scholars - might expand to Alums.

PROPOSED ACTIONS

Chapter Options:

- Support the work of ARCS Forward team – featuring current ARCS Scholars. More attendance by scholars, alums, and ARCS members is needed
- Provide coaching on presentations and/or feedback to the scholars; NCC has a member and Scientific Advisor who coach scholars on their presentations before the event
- Develop a template for scholar videos that can be posted on the Chapter website
- Invite an ARCS Scholar to present at General Meetings
- Encourage Scholar presenters to include this on their resumés

RESPONSIBLE PARTIES

Chapter Board

Chapter Event chair

Chapter Scholar Relations Chair

Chapter Recommendation #5

RECOMMENDATION

Offer personal relationships between ARCS Chapter Scholars and ARCS Chapter Members.

Rationale:

Supportive relationships increase sense in belonging / inclusion.

- San Diego Chapter started a "Getting to Know You" event.
- Minnesota Chapter holds monthly "happy hours" (lately by zoom) with their scholars.

Proposed Actions:

Chapter options:

- Find ways to get to know scholars at informal and lower or no-cost events.
- Consider matching Scholars and members by demographics and interests.

Responsible Party:

Chapter Board

Chapter Scholar Relations Chair

Chapter Membership Chair



D. VALUES RECOMMENDATIONS

Values Recommendation #1

RECOMMENDATION

Adopt Values for ARCS Foundation which reflect Diversity, Equity, and Inclusion.

RATIONALE

- Values provide the foundation for making DEI actionable in ARCS National and, as desired, by ARCS Chapters
- DEI Values are not Mission Values (The “What”), but rather organizational values (The “How.”)

PROPOSED ACTIONS

- As part of the Long-Range Planning process, complete values statement
- A possible list of Values for DEI that were reinforced by the Member Survey includes:
 - **Openness:** Willing to set aside barriers or prejudices to consider and interact with different ideas and perspectives for future advantage.
 - **Welcoming:** Cultivating a feeling of belonging
 - **Leadership:** Inspiring, guiding, and empowering others for a common purpose, making an organization or community the best it can be.
 - **Listening:** Hearing with curiosity and without judgment or bias

RESPONSIBLE PARTIES

Long Range Planning
National DEI Standing Committee

Values Recommendation #2

RECOMMENDATION

Change the descriptive terminology of “all women’s organization” to “women-led organization” and promote broadly.

Rationale:

- “Women-led” places more emphasis on leadership by women
- The term “all women’s” can be confusing to the wider audience; the assumption is often made that we only fund women
- The terminology of “all women’s” is discriminatory in the minds of many

Proposed Actions:

- Review as part of the Long-Range Planning process
- Term “women” to include any, who identify as women, are women for purposes of membership and inclusion

Responsible Party:

Long Range Planning



E. MEMBERS RECOMMENDATIONS

Members Recommendation #1

RECOMMENDATION

ARCS National DEI Committee members and National Board members develop recommendations based on best practices in volunteer organizations and from ARCS Chapters for managing their membership processes. These will help assist chapters as they work to grow their membership and increase diversity of members.

RATIONALE

Overall membership in ARCS Chapters has been, and continues to, decline. This has been an issue, since fewer members mean fewer people to work and lower revenue from dues to support Scholar awards and Chapter operations. Each chapter has unique processes for attracting, retaining, growing leaders, and dealing with resignations. These practices may need to be revised and updated, if the chapter chooses to do so.

PROPOSED ACTIONS

Suggestions to Chapters may include:

- Examining whether existing caps on membership categories help or hinder the chapter's membership numbers and diversity.
- Encouraging Chapters to look at their websites to evaluate how easily a potential member can find the process for joining an ARCS chapter and how accessible the application form is.
- Having Chapters consider opening their membership to any woman interested in joining an ARCS chapter, without requiring a sponsor or endorser in order to join a chapter. If she has interest in STEM education and can afford the Chapter's dues, would those qualities qualify her for membership?
- Conducting Exit Interviews of departing members to learn the causes of their resignations. This might provide information the Chapters could use to mitigate factors within their control. These departing members may provide suggestions for Chapter improvements.
- The Council of Advisors may provide useful consulting on strategies for growing membership and developing DEI goals that any Chapter may request help with.

RESPONSIBLE PARTIES

National DEI Standing Committee
Council of Advisors
Member Collaboration Network



Members Recommendation #2

RECOMMENDATION

DEI National Standing Committee and ARCS National leadership establish national-level relationships with minority-centric women's groups in STEM. These relationships could help foster relationships between ARCS Chapters and local chapters of the STEM professional societies.

RATIONALE

Broadening membership diversity includes reaching out to other organizations where there might be women who would like to become members in ARCS chapters or support ARCS chapters financially or with mentoring.

PROPOSED ACTIONS

- ARCS DEI National Standing Committee will develop lists of professional societies and other STEM-related organizations as resource documents for chapters to determine if any of those organizations are within their geographic territory.
- ARCS National should create recruiting materials encouraging membership for chapters to use to recruit members from minority-centric women's groups in STEM.

RESPONSIBLE PARTIES

National DEI Standing Committee
Chapters

Members Recommendation #3

RECOMMENDATION

Conduct a Members Survey, as was done in 2008 and 2016, to better understand the diversity of ARCS members.

RATIONALE

- The 2016 survey showed that we had 59% of our responding members choose the age bracket of 65+ in comparison with 49% of responding members in that age bracket in 2008.
- In addition, in 2016, 26% of our responding members were employed in comparison with 17% of our responding members being employed in 2008.
- Our demographics have changed, leading to question whether our Chapters have adapted to these changes or retain the same operating practices and expectations of reasonable volunteer time as in 2008 when fewer members were employed.
- In 2016, approximately 95% of members who responded to the survey stated they classified themselves as Caucasian which does not reflect the diversity of many of the locales we serve.
- Metrics provide indications of the effectiveness of interventions taken to improve processes in organizations.



PROPOSED ACTIONS

ARCS National should conduct a survey of all members to determine:

- How many consider themselves to be underrepresented in ARCS and ask if that is an issue.
- Suggestions for how to improve the ARCS membership experience.
- What keeps them committed and excited to be members of ARCS Foundation.

Reference questions from 2018 ARCS member survey.

RESPONSIBLE PARTIES

Evaluation Committee

National DEI Standing Committee

Members Recommendation #4

RECOMMENDATION

- DEI National Standing Committee together with the Communication Committee develop materials for Chapters to use to increase members and diversity of members
- Working with the IS Committee consider modifying the Member Profile form to capture basic demographic information
- Follow-up with Chapters to determine how Chapter DEI initiatives and member recruitment efforts are working

RATIONALE

- National should check in with Chapters to determine what Chapters need in terms of support from National to increase membership and any chosen goals in terms of diversity (age, race, ethnicity, etc.)
- Capturing basic demographic information in the member profile form will help determine baseline data
- DEI Scholar survey indicated that 1:1 relationship with member mentors would be valuable

PROPOSED ACTIONS

- Marketing materials emphasizing ARCS Foundation's commitment to DEI can be used by any chapter to recruit minority members.
- Based on results of the all-member survey, consider modifying the membership profile form. Consider adding questions to profile, perhaps similar to survey questions. Also ask if the member is willing to mentor local Scholars.
- Follow-up assessments can occur through the Council of Presidents or through a Membership or DEI Collaboration Network.
- Use resources available from other organizations, companies

RESPONSIBLE PARTIES

National DEI Standing Committee

Communication Committee

IS Committee

Member Collaboration Network



F. SCHOLARS & ALUMS RECOMMENDATIONS

Scholars & Alums Recommendation #1

RECOMMENDATION

Create a National ARCS Scholar Network to enable communication and collaboration among Scholars and Alums.

RATIONALE

Networking is valued by young scientists. This will require a flexible platform such as Slack or a similar communication platform. This recommendation was strongly supported by the Scholar Survey.

PROPOSED ACTIONS

- Three Scholar Alums from Working Group #3 have volunteered to create and pilot this project for six (6) months with the support of the DEI Standing Committee
- Important to include both current scholars and alums
- A GO / NO GO decision to continue should be made by January 2023

RESPONSIBLE PARTIES

National DEI Standing Committee
Scholar Collaboration Network
University Relations

Scholars & Alums Recommendation #2

RECOMMENDATION

Revise the Scholar Acceptance Form to include questions related to DEI issues

RATIONALE

After a Scholar is selected by the University, they need to fill out an acceptance form and answer some profile questions. Adding a few “prefer not to answer” questions about demographics to the standard ARCS Scholar acceptance form would provide annual scholar DEI data that might be sufficient to determine trends. In addition, asking for an optional personal DEI statement about how DEI issues have impacted the Scholar or how the Scholar is working on DEI endeavors will provide personal stories. Many Scholars who completed the Scholar survey voluntarily provided this information. The acceptance form might be a simple way to collect data on questions such as – do they self-identify as part of an under-represented group in STEM? And are they involved in DEI programs or mentoring?



PROPOSED ACTIONS

- Ask scholars to complete their profile in the National database, answer optional demographic questions and provide an optional DEI statement
- Brainstorm other ways that scholar cohort data might be gathered
- To accelerate analysis of trends, determine if universities may be willing to provide anonymized demographic data on ARCS scholars over the past 3-5 years

RESPONSIBLE PARTIES

University Relations
National DEI Standing Committee
IS Committee

Scholars & Alums Recommendation #3

RECOMMENDATION

Survey ARCS Scholar Alums within the next six months to gather their input on DEI Initiative, interest in: mentoring current scholars; collaborating on research; becoming ARCS members; and, “opening doors” to new donors.

RATIONALE

Alums have a lot to offer ARCS and vice versa. Re-engaging Alums requires a long-term commitment. To date, ARCS has not focused on maintaining connections with Alums. Doing so might increase the value of ARCS award, the sense of belonging to a community of scientific excellence, and a way to give back.

PROPOSED ACTIONS

- Update the national database of contact information of ARCS Alums – probably focus on the last 10 years
- Design the survey questions; conduct the survey; communicate results to Alums, current scholars, ARCS members
- Develop a Communication Strategy for Alums: what would make them re-engage and keep ARCS Award on their resume
- May require outside resources, paid or pro-bono, to accomplish. Members of Working Group #3 may be available to help create the survey.

RESPONSIBLE PARTIES

National DEI Standing Committee
Evaluation Committee



Scholars & Alums Recommendation #4

RECOMMENDATION

Consider developing a National Application Form and process for ARCS Award selection process as a “guide” or “best practice”

RATIONALE

Offering a standardized application form and process might solve some of the barriers to selection that were identified by scholars, including:

- Scholars being nominated by Principal Investigator (PI) and picked by the Selection Committee without an application by the scholar.
- Eligible candidates not being aware of this financial award.
- Applicants notified about ARCS award availability but only having a short time to complete the application.

PROPOSED ACTIONS

- Collect more data on application form and process from each university and possibly department
- Ask Universities how all eligible candidates are made aware of ARCS Award
- Develop a standardized ARCS Scholar application form that schools can choose to use or not
- Consider adding an ARCS Scholar or ARCS Scholar alum to the selection committee

RESPONSIBLE PARTIES

University Relations
National DEI Standing Committee



G. UNIVERSITIES RECOMMENDATIONS

Universities Recommendation #1

RECOMMENDATION

Demonstrate our commitment to DEI by partnering with our Universities in their existing DEI initiatives and programs that align with ARCS mission.

RATIONALE

- Supporting existing programs is an expedient way to gain insight into university efforts to identify challenges and eliminate barriers to increased diversity in STEM fields.
- Gaining this insight allows ARCS to offer expanded networking and mentoring to existing scholars and potentially younger students in the STEM pipeline.
- Involvement in these programs increases the visibility of ARCS as a leader in promoting scientific excellence to the broadest talent pool.
- Spotlighting our partner universities' specific initiatives that students have found helpful, and working with them in those, demonstrates to our scholars that ARCS is invested in providing students the opportunity to thrive. It further demonstrates our commitment to connecting with students and was reflected in the responses to the Scholar Survey as one of the benefits they see in ARCS awards.
- The absence of representative role models with whom a student can identify can be a barrier to pursuing advanced degrees.

PROPOSED ACTIONS

- Working with the approval of UR VP/Chairs at the chapter level, survey (through one consistent form) our Universities to understand what programs/policies they have in place to support DEI among their students. What do they see as the challenges/barriers to overcoming a lack of diversity in STEM fields? Where do they see ARCS being able to help the most (both in monetary and non-monetary areas (e.g. mentoring, networking). Explore funding/investment sources and collaborations/partnerships to eliminate those barriers. *** See Draft University Survey.
- Identify initiatives in which ARCS could partner with Universities to support existing University efforts.
- Survey Individual Chapters to understand what programs/policies they may already have in place to support DEI among Underrepresented student communities at their supported universities. ** See Draft Chapter Survey.
- Explore funding/investment sources and collaborations/partnerships to eliminate barriers for students wanting to pursue STEM fields.
- Through mentor connections, learn the barriers our scholars face and identify their ideas for how ARCS can help them overcome.
- Identify mentors from within the chapters who are willing to work with university representatives and scholars to share experience and guide.



Proposed Survey questions to Chapters:

- How is your chapter encouraging and supporting DEI among STEM scholars? With your partner universities
- Does your chapter have programs for outreach, to groups that have historically been underrepresented (e.g. STEM for Her)? What programs are working well?
- What can National do to help with your chapter's programs/efforts?
- Are members of your chapter involved in any symposia or panel activities related to DEI? If so, are they sponsored by your chapter or in conjunction with one of your partner universities?
- Does your chapter offer any networking opportunities for your scholars? These can include poster sessions, Social occasions with members and supporters, and collaboration by scholars across universities and among departments within the same university.

Proposed questions for Chapters to use with their universities on Site Visits or other exchanges:

- How are you encouraging and supporting DEI among STEM scholars? How might we work with you to support your initiatives?
- Do you have programs for outreach, recruitment and retention of PhD candidates that have historically been underrepresented? What programs are working well?
- Do you have historical and current data regarding the diversity of your STEM Scholars and in particular/in comparison with the ARCS Scholar cohorts? Are you able to share such data?
- What do you see as the main obstacle(s) for underrepresentation in STEM graduate programs? In PhD programs in particular?
- Would you be interested in discussing with ARCS potential ways to increase Diversity, Equity, and Inclusion (DEI) among the ARCS Scholars?
- Would you recommend any changes to our criteria for the selection of ARCS Scholars, while remaining committed to ARCS Awards going to the most accomplished and promising scholars? E.g. Holistic review in addition to traditional academic success measures. (Resilience, persistence and life experience) Is your university moving away from using GPA as a measurement? If so, what other measurements/assessments are being used?
- Do you have programs for outreach, recruitment and retention of faculty members that have historically been underrepresented? What programs are working well?
- Are ARCS awards used to recruit scholars? If so how?
- Are ARCS awards advertised or communicated to a broad pool of graduate students to solicit applications from a diverse community?
- What are the methods by which you identify potential scholars?
- Does your university have a policy, or is it considering a policy, whereby scholar awards will have to be open to permanent residents?

RESPONSIBLE PARTIES

National DEI Standing Committee
University Relations Committee
Chapters (menu item)



Universities Recommendation #2

RECOMMENDATION

Prioritize support for new departments and majors to align with STEM disciplines that are expected to see the most growth in undergraduate applications.

RATIONALE

- Supporting programs with the largest number of students in the talent pipeline increases the opportunities for ARCS to reach a broad range of talented scholars.
- Undergraduate program enrollment is a leading indicator of future graduate degree growth.
- Diversity is higher within undergraduate programs. Looking to support graduate programs in those same areas, or even scholars at the undergraduate level, will encourage students to continue to graduate degrees in those areas.
- Growth in the number of students selecting a given major is often aligned with the job market and industry's desire for a diverse talent pool. Similarly aligning our department support with those majors will make our scholars attractive to future employers who are also funders/donors to ARCS.

PROPOSED ACTIONS

- Working with the approval of UR VPs/Chairs at the chapter level, survey Universities to determine where they see the most growth in STEM in terms of interest in and advancement for underserved student communities. (Talent Pipelines) Ask if there are specific Undergraduate programs that could/should be explored.
- Survey corporate donors/funders to determine where they see the most growth in STEM in terms of the hiring needs to support their business and DEI initiatives.
- Utilize the gathered information to develop recommendations for additional programs to be supported by ARCS awards.
- Utilize the gathered information to determine if support for undergraduate awards would allow talented students who would otherwise be unable to pursue graduate degrees to continue in the STEM pipeline.

RESPONSIBLE PARTIES

National DEI Standing Committee
University Relations
Chapters (menu item)

Universities Recommendation #3

RECOMMENDATION

Quantify and characterize the diversity within our universities among the general student enrollment, faculty, and Scholar population as a baseline for future measurement and growth.

RATIONALE

- Demonstrating our commitment to DEI within our organization and among our scholars requires us to know the baseline against which progress will be measured.



- Understanding the diversity of the student and faculty population at our partner universities is important to allowing constructive comparison to our scholar class with the goal to have our scholars represent the constituent population. * Note, this will vary by Chapter and University.
- Identifying trends in recruitment, enrollment and retention will allow ARCS to both measure progress against the diversity of the communities they serve and forecast areas for potential growth.

PROPOSED ACTIONS

- Clearly define what data we need to support measurable progress, and how the demographic information is intended to be used as the DEI initiatives progress. Then, communicate that to our partner universities so they understand why it is being asked.
- Solicit scholar demographic data voluntarily (post-award) on a yearly basis.
- Working with the approval of UR VPs/Chairs at the chapter level, survey universities to understand what student data is collected, what is shareable and to what level of granularity. Alternatively, start with the data available through the NSF and other post-secondary education sources and ask the universities to confirm they can provide the same.

RESPONSIBLE PARTIES

National DEI Standing Committee
 University Relations
 Chapters (menu item)

Universities Recommendation #4

RECOMMENDATION

Encourage Partner Universities to solicit fully-qualified scholar candidates from the widest talent pool available. Ensure the "unknown best" have the opportunity to be considered by their university for ARCS awards.

RATIONALE

- The methods by which University Partners identify and select ARCS Scholars vary greatly from chapter to chapter and even among universities and departments.
- Asking questions about their solicitation processes either during site visits or another forum, will encourage University Partners to open the aperture to candidates who may not have historically been considered.
- Familiarity with known candidates and expediency to complete the process may cause implicit biases to be magnified. By seeking to understand the candidate identification process, common practices will be examined in a fresh light.
- Scholar Survey had multiple comments about need to receive information about the ARCS Award in a timely fashion. Some suggested advertising but not a favored process.



PROPOSED ACTIONS

- Working with the approval of UR VP/Chairs at the chapter level survey Universities to understand how ARCS award applications are solicited to determine if they are targeted or a broad callout for applicants.
- Identify student communities/organizations/societies that have been overlooked or could be encouraged to propose applicants.
- Incorporate discussion of how scholars are identified into the University visit talking points and/or formalize as part of the UR Site Visit Form. Consider recommending that current scholars at the universities be part of the selection process.
- Ensure that all Principal Investigators and ALL eligible candidates know about ARCS awards in a timely fashion.

RESPONSIBLE PARTIES

National DEI Standing Committee
UR Committee
UR Collaboration Network
Chapters (menu item recommendation)

Universities Recommendation #5

RECOMMENDATION

Develop a pilot program in partnership with Oregon Health & Science University (OHSU) and Oregon State University (OSU) to define holistic evaluation criteria by which ARCS Award applicants could be measured. Results from the pilot program could be used to define an alternate scholar application that may be used by chapters in conjunction with, or in place of, the traditional ARCS Graduate Scholar requirements.

RATIONALE

- A 2016 report by the Council of Graduate Schools (CGS) found, “Holistic review is widely viewed as a useful strategy for improving diversity of higher education” and that, “undue weight on quantitative measures of student merit such as standardized test scores and GPA may not accurately predict success in graduate school, and may disadvantage underrepresented, non-traditional and older students.” (Kent, J.D. and McCarthy, M.T. (2016). Holistic Review in Graduate Admissions: A Report from the Council of Graduate Schools. Washington, DC: Council of Graduate Schools
- Research conducted by CGS points to quantitative measures, like G.P.A., being used early in the Graduate School application process, but eschewed by evaluators later in the review cycle in favor of letters of recommendation, personal statements, and interviews.
- OHSU and OSU approached the ARCS Oregon Chapter in April of 2021 with a proposal to explore the use of a holistic evaluation process for ARCS award applicants. The letter cited work by both schools in defining rubrics that were successfully predictive of Ph.D. completion, and which had shown early success in increasing the percentage of students of color.



PROPOSED ACTIONS

- Working with the approval of UR VP/Chairs at the chapter level, survey Universities to determine if they have transitioned to, or are planning to use, holistic applicant evaluation for graduate school admissions.
- Review the rubrics developed by OHSU and OSU (and other universities identified through the Universities Survey) for their graduate school admissions process to determine what portions could be applicable to ARCS Scholar evaluation.
- Develop an updated ARCS Scholar Application using questions and requests for statements that align with the holistic evaluation criteria developed in partnership with OHSU and OSU.
- Solicit feedback from other Chapters to determine if there is additional interest, beyond the Oregon Chapter, in participating in the pilot program for holistic review.
- Define criteria against which the results of the holistic review pilot program will be measured as related to the traditional evaluation criteria.
- Conduct two-year pilot program with results reported to the National Board via the DEI Chair and Standing Committee.

RESPONSIBLE PARTIES:

National DEI Standing Committee

Oregon Chapter President and Chair of University Relations.



H. FUNDERS RECOMMENDATIONS

Funders Recommendation #1

RECOMMENDATION

Adopt a funding approach for ARCS that mirrors the constituents being served

RATIONALE

- In order to make funding decisions, the ARCS DEI Task Force Funders Working Group discussed with donors, foundations and corporations the DEI policy ARCS as an organization has embraced
- Several corporations and foundations who were interviewed stressed actions speak louder than words. They evaluate the actions an organization is taking towards DEI not just what is on paper or on website.
- ARCS should be intentional and transparent in how we communicate, implement and measure equity and inclusion initiatives/innovations.
- Celebrate our accomplishments locally, regionally, and nationally

PROPOSED ACTIONS

- Plans should ensure that diversity, equity, and inclusion are consistently understood, practiced and embraced across ARCS Foundation taking into account each constituent's needs.
- Create a clear sense of visibility and engage ARCS community, members, scholars, alumni and partners to promote equity and access resources.
- Create a plan that is easily shared with constituents and monitor plan to show progress.

RESPONSIBLE PARTIES

Philanthropy

Communications

National DEI Standing Committee

Funders Recommendation #2

RECOMMENDATION

Obtain for ARCS National grants from Foundations and/or Corporations with commitment to ARCS and DEI to provide funds for Capacity Building.

RATIONALE

- In order for meaningful, sustainable change to occur a transformative process is necessary. A capacity building grant for ARCS National is essential for the health and longevity of ARCS.
- Capacity Building Grant could be used for:
 - Mission and vision strategy: strategic planning



- Governance and leadership: Leadership development; Board development; Succession planning
- Resource Development: Fund development; Grant writing
- Internal operations and management: Operations; Website technology and IS; Legal and risk assessment

PROPOSED ACTIONS

- Secure a funding initiative to support efforts to foster organizational change to move ARCS toward a more diverse, equitable and inclusive organization.
- Ear-mark some of our operating budget for a capacity-building initiative is an investment in our organization's future strength and capability. Create a clear sense of visibility and engage the ARCS community, members, scholars, alumni and partners to promote equity and access resources.
- Seek capacity-building support from grant makers/ foundations/ corporations wishing to leverage their philanthropic donations.
- Alternatively, pro bono or in-kind consulting services might be available.

RESPONSIBLE PARTIES

VP Finance

Philanthropy

Long Range Plan



I. FUTURE TASK FORCES

Task Force Recommendation #1

RECOMMENDATION

Explore the question raised in the Members Survey about the possibility of having male Scholar Alums be eligible for some form of membership in or affiliation with ARCS Foundation.

RATIONALE

- In the 2020 Scholar Alum Survey conducted by ARCS National, when Scholar Alums were asked if they would like to be members in ARCS, 42% of the male respondents indicated they are interested in becoming an ARCS member.
- Some organizations and foundations have stated that they decline to financially support ARCS because we do not allow male members and are, therefore, an exclusionary organization which runs counter to the DEI Statement.

PROPOSED ACTIONS

- The National DEI Action Plan Task Force recommends that the President form a Task Force to examine the issue of ARCS Foundation being perceived as an exclusionary organization by potential external donors due to the fact that we do not allow men to be members, even the male Scholar Alums who have benefited by ARCS support while pursuing their degrees.
- Should ARCS Foundation find a way to include male Scholar Alums in its organizational structure?
- To what extent are we losing funding due to the perception by potential external donors that we are an exclusionary organization?

RESPONSIBLE PARTIES

Requires further research

President

Special Task Force

National DEI Standing Committee

Task Force Recommendation #2

RECOMMENDATION

Examine the inclusion of Legal Permanent Residents (Green Card holders) in students eligible for ARCS Awards.

RATIONALE

- As a result of the Supreme Court Decisions (Graham v. Richardson, 403 U.S. 365 (1971); Nyquist v. Mauclet, 432 U.S. 1 (1977), nonprofit colleges and universities (public or private) cannot discriminate against or deny benefits to permanent residents.
- The Supreme Court ruling has been interpreted by several partner universities to extend to scholarships granted from University endowments. This directly impacts chapters whose



endowments are under a university umbrella and/or receive matching funds from the universities.

- Our membership may not be fully versed in the requirements imposed on individuals holding permanent legal residency status. Especially as it pertains to requirements to live and work within the country for extended periods of time - the same is not required of US citizens.
- US citizens (e.g., our current Scholars) can take their PhDs to another country and work for as long as they want, while Legal Permanent Residents who get PhDs in the US need to stay in the US if they have any hope of becoming a US citizen with a PhD. With our stated mission, permanent legal residents are as likely as US Citizens to remain and "advance science in America".
- Per the National Science Board's 2022 report on the state of US Science and Engineering, The U.S. STEM labor force depends heavily on foreign talent. At the doctorate level, the United States trains many of these workers. Most U.S.-trained S&E doctorate recipients expect to stay in the United States after graduation. Maintaining pathways for foreign talent and providing educational opportunities for international students are critical to sustaining the STEM workforce.
- In 2018, both Minnesota and Pittsburgh dealt with the citizenship issue with university partners with one university severing its relationship with the Pittsburgh Chapter due to the qualification of US Citizenship.
- In 2022, the Oregon Chapter is facing push back about the citizenship issue with its universities.
- Universities, both public and private, are legally not allowed to discriminate between US Citizens and Legal Permanent Residents (LPR's).
- ARCS Foundation risks losing more partners as additional universities raise this issue
- According to a recent survey of chapter presidents, nine (9) out of fifteen 15 chapters have had conversations with their partner universities about recognizing Legal Permanent Residents

PROPOSED ACTIONS

- ARCS National President form a Task Force separate from the DEI Standing Committee to investigate the impact to our university partnerships, endowments, and donor relations that will be impacted by inclusion or exclusion of Legal Permanent Residents in future ARCS awards.
- Review ARCS Foundation mission statement with respect to the requirement of US citizenship and Legal Permanent Residents (LPR) requirements.
- Explore the possibility of allowing chapters to operate as is or as determined in discussions with their university partners.
- Based on discussions with university partners and legal discrimination issues they face, chapters can decide to continue to operate with existing scholar requirements until, and if, forced to change
- Develop a mission statement with no citizenship requirement which allows chapters to operate as is or as determined in discussions with their university partners
- Continue education of Membership on the evolving discussions/requirements related to Legal Permanent Residents.



RESPONSIBLE PARTIES

President
Special Task Force
Governance
National DEI Standing Committee

Task Force Recommendation #3

RECOMMENDATION

Provide funding for bonus awards to Scholars teaching/mentoring in STEM to K-12 and/or undergrads from under-represented groups (URGs) in STEM.

RATIONALE

- Annual Award of approximately \$1000 acknowledges their time to increase awareness of STEM & number of candidates from URGs for grad education;
- Action in this area combines two strong recommendations from Scholar Survey: 1) increase monetary support and 2) demonstrate ARCS support for DEI issues
- Disparities in K–12 STEM education and student performance across demographic and socioeconomic categories and geographic regions are challenges to the U.S. STEM education system, as is the affordability of higher education. (NSB Report 2022, p2)
- Inspiring students in grades K-12 to pursue careers in STEM is a top priority for providing a robust pipeline of students interested in pursuing PhDs and research careers.
- Many ARCS Scholars work with students in grades K-12, showing them that science is fun and interesting. This work could & should be recognized and encouraged.

PROPOSED ACTIONS

- The National DEI Action Plan Task Force recommends that the President form a Task Force within the Long-Range Planning Committee to research providing funding/award bonus to scholars engaged in DEI
- Identify funding source or National grant (might be a Chapter donor) from a Foundation or Corporation with long-term commitment to DEI.
- Add the opportunity for bonus to Award Application
- Establish Annual Award(s) (~\$1000) to acknowledge the time spent by scholars volunteering in these areas.
- Recognize their contributions to increase awareness of STEM and the number of candidates from URGs for graduate education.

RESPONSIBLE PARTIES

President
Long Range Plan
National DEI Standing Committee
Philanthropy
Possibly Chapters



Task Force Recommendation #4.1

RECOMMENDATION

Establish a National Level award program, funded like the Roche Award, specifically to support diverse scholars at HBCUs or other minority colleges, or those who have a demonstrated commitment to fostering DEI within their chosen field.

RATIONALE

- Demonstrates, at a national level, ARCS commitment to supporting diverse scholars, institutions who champion diversity, and individuals who have personally committed to expanding STEM involvement among diverse students.
- Provides a framework outside of the traditional scholar awards that does not change the current scholar selection processes employed by university partners.
- Allows opportunities for new or increased involvement by funders who have identified support for DEI as one of their crucial focus areas.

PROPOSED ACTIONS

- The National DEI Action Plan Task Force recommends that the President form a Task Force within the Long-Range Planning Committee to research the issue of a National Level award program to support diverse scholars.
- Research HBCUs and other minority colleges and universities to determine which ones give degrees in science, engineering & technology.
- Consider having ARCS Chapters “adopt” an HBCU or other minority-focused Universities to give awards to promising undergrads (Nationally funded, separate from traditional ARCS Scholar awards.)
- Look for National grant opportunities that could fund National & Chapter awards.
- Consider a National awards program different from ARCS Scholar Awards (perhaps modeled after the Oregon State University CATALYST program) to be given to outstanding STEM undergraduate students from those universities.
- Provide a framework to individual chapters to have the option to establish chapter-level awards similar to the National award discussed above.

RESPONSIBLE PARTIES

President
Long Range Plan
Special Task Force
Philanthropy



Task Force Recommendation #4.2

RECOMMENDATION

Obtain National grants from Foundations or Corporations with long-term commitment, similar to Roche Award for National and Chapter awards to promote DEI.

RATIONALE

- Many corporations/foundations are looking to recognize/support/inspire college students underrepresented in STEM.
- According to United Negro College Fund (UNCF), 25% of STEM degrees earned by African American graduates are earned at HBCUs. Eight HBCUs were among the top 20 institutions to award the most science and engineering bachelor's degrees to Black graduates from 2008 to 2012. (3M Diversity report)

PROPOSED ACTIONS

- Create an ARCS National Awards Program to give financial awards to diverse STEM students from HBCUs or other minority-centric Universities. Create an ARCS National Awards Program to give financial awards to diverse STEM students from HBCUs or other minority-centric Universities
- Think of Catalyst program from Oregon State.

RESPONSIBLE PARTIES

President
Long Range Planning
Special Task Force
Philanthropy



SECTION 4 – ACKNOWLEDGMENTS

Little did we know that the journey we were beginning last June would take us so far and provide a clear view of our goal. We did this with honesty, openness and a knowledge that it was a very important assignment that would, if successful, go a long way to make ARCS Foundation stronger and improve the long-term future of our organization.

Over this past year, we became friends with so many people and came to admire the incredible skills and passion which ARCS members have for this organization and our mission of Advancing Science in America. There are so many people to thank for their involvement in our Diversity, Equity, and Inclusion efforts – members, scholars, scholar alums, university partners, and community people. We wish we could thank everyone individually...

Thank you to Sherry Lundeen, immediate past president, and Caron Ogg, president, who believed that ARCS should embark upon this journey and provided their unwavering support during this past year. They encouraged writing of our DEI Statement and establishment of the DEI Action Plan Task Force to put our words into action.

Thank you to all the members of our Planning Group and Working Groups. Your collective vision, brain power, and commitment during this past year resulted in this Final Report which is a road map for future actions and progress to create lasting change within ARCS Foundation.

Thank you to our Chapter Presidents, members, and current scholars who took the time to complete our surveys and provide feedback to support our research and keep us on the right track. And, to all who attended our Town Hall meetings to provide additional insight, thank you for taking time out of your valuable days to zoom with us.

Lastly, we were blessed with our Working Group Leads – Linda Burke, Julie Branford, Jo Whitehouse, Danielle Robinson, and Sherry Lundeen. What a talented and dedicated group of women! Thank you, thank you! Their commitment was unwavering. Their skills and background experiences brought so much to the table and complimented each other perfectly. Our meetings were stimulating, thought provoking, frequent, productive, invigorating, and, lastly, fun. We were challenged to give you a product which supported diversity, equity, and inclusion within ARCS Foundation. We believe we met that challenge.

Our report is the first step to enabling real change within ARCS Foundation. It includes many recommendations for consideration at all levels. The challenge for ARCS Foundation will be to keep Diversity, Equity, and Inclusion Initiatives going by putting the necessary processes in place and monitoring our progress. Our actions matter...we have a lot of work ahead of us!

As Ruth Bader Ginsberg said during her 1994 Supreme Court Confirmation hearing on July 20, 1993: “Real change, enduring change, happens one step at a time.”



We have been honored to serve as Co-chairs of the DEI Action Plan Task Force. This report is submitted with great appreciation to everyone who was involved and who will carry this initiative forward.

Respectfully submitted,

Barb Goergen, Minnesota Chapter
Beth Wainwright, Pittsburgh Chapter
DEI APTF Co-chairs



SECTION 5 – APPENDICES

A. DEI ACTION PLAN TASK FORCE DOCUMENTS

The following informational topics will link to folders within the National Library where the individual documents can be accessed:

CHARTER

Diversity, Equity, and Inclusion Action Plan Task Force Charter, Approved June 12, 2021

MESSAGING

- Excellence in STEM
- Rationale and Taking the Pulse of Our Chapters

DEI ACTION PLAN TASK FORCE MEMBERS

- Planning Group Members
- Working Group Members
- Schedule of Meetings

PRESENTATIONS

- Chapter Presidents
- Council of Advisors, May 25, 2022

- National Board Forum, June 2021
 - Population Trends and Demographic Trends in STEM Education
 - DEI Task Force Presentation
 - ARCS Foundation Oregon Inclusive Excellence Journey 2020-2021
 - ARCS Northern California Chapter National Forum / 11 June 2021: Diversity/Equity/Inclusion Update

- National Board Forum, September 2021
 - Pre-read: Background Information; Statements & Statistics from NASEM, AAAS, Council on Competitiveness, SEAC
 - NB DEI Presentation, Agenda
 - UPDATE FROM DEI Action Task Force (ATF)
 - Diversity, Equity, and Inclusion Action Plan Task Force Breakout Room Questions
 - Breakout Room Discussion Summary of Responses Condensed

- National Board Forum and Board Meeting, January 2022
 - NB Forum Agenda
 - NB Forum DEI Presentation
 - Report to National Board, January 22, 2022



- Town Hall Meetings with Members
 - April 14 and April 19, 2022
 - DEI Presentation for both Town Halls

- Town Hall Meeting with Current Scholars
 - Scheduled for June, 2022

SURVEY RESULTS

- Chapter President Survey Responses
- Member Survey Responses
- Current Scholar Survey Responses
- Summary of Survey Responses



B. REFERENCES AND RESOURCES

GENERAL REFERENCES

1. 3M State of Science Index 2022. <https://multimedia.3m.com/mws/media/2183175O/3m-state-of-science-index-sosi-2022-global-report.pdf>

Quote from Jayshree Seth - 3M Chief Science Advocate

"We need science to get us to these solutions – and that means, we also need scientists. Since there is no fast route to solve the world's most pressing challenges, it is more important than ever to keep the pipeline of future scientists, robust. Across the globe, the 2022 data shows that the public believes barriers to a strong STEM education are increasing. Thirteen of the 17 countries surveyed saw a year-over-year increase in the percentage of people who reported STEM education roadblocks. While 87% of people believe it's important to increase diversity and inclusion in STEM fields, 71% say underrepresented minorities often do not receive equal access to STEM education. Survey respondents show particular concern for women and girls in STEM."

2. Georgetown University, McCourt School of Public Policy. Advancing Racial Equity Within Nonprofit Organizations, 2018 Research Results. <https://cpnl.georgetown.edu/news-story/racial-equity-nonprofits/>.

3. The Economist. How sex and race affect academic research. https://www.economist.com/graphic-detail/2022/02/14/how-sex-and-race-affect-academic-research?utm_medium=cpc.adword.pd&utm_source=google&utm_campaign=a.22brand_p_max&utm_content=conversion.direct-response.anonymous&gclid=Cj0KCQjw1tGUBhDXARIsAIJx01mK5xldr-tnlGKagg0bQhVOt2WMPbrFWu8DUAQKLiHcq0K393ukxIYaAuBpEALw_wcB. Feb 14, 2022.

Diego Kozlowski, Vincent Larivière, Cassidy Sugimoto and Thema Monroe-White, collected the names of more than 1.5m researchers in America who published papers between 2008 and 2019, as well as an overall lack of representation of women, black and Latino people in academia, researchers of different races and genders tended to cluster within certain research topics. While white men were the most evenly spread across academia, women, black and Latino researchers tended to study topics that received fewer citations... The study estimates that if researchers over the past 40 years had been reflective of the American population, there would have been 29% more articles on public health, 26% more on gender-based violence, 25% more on gynaecology and 18% more on mental health.

4. National Science Board. The State of US Science and Engineering 2022. <https://nces.nsf.gov/pubs/nsb20221/preface>

"The data indicate some capacity-building areas in the U.S. S&E enterprise as (1) investing in R&D and supporting innovation activities that translate the resulting knowledge into products and services, (2) improving STEM education at the K–12 level, (3) increasing participation in STEM fields of study and careers to include all socioeconomic and demographic groups and



U.S. geographic regions, and (4) building a strong STEM labor force by training and educating domestic talent and by recruiting and retaining foreign talent.”

“The data show the importance of building capacity by investing in R&D, enhancing education, and training opportunities, and bringing underrepresented groups into a STEM-educated labor force that reflects the nation’s diversity.”

“The U.S. STEM labor force depends heavily on foreign talent. At the doctorate level, the United States trains many of these workers. Most U.S.-trained S&E doctorate recipients expect to stay in the United States after graduation. Maintaining pathways for foreign talent and providing educational opportunities for international students are crucial to sustaining the STEM workforce.”

NATIONAL ACADEMIES PRESS PUBLICATIONS

1. The Endless Frontier: The Next 75 Years in Science (2020)

<https://mail.google.com/mail/u/0/-label/ARCS+NATIONAL%2FUniversity+Relations%2FUR+Committee+2020-2021/WhctKJWJHdLDlpCxxNbXJKJJSWFLNgnSttzvztXkNGzwJwrhrzjWpMLIVWkFsnTtQrQcdLG>

Chapter 8: Four Concluding Points: “Science needs more exciting new projects to attract young people to research. It also needs to prepare and reach out to everyone, not just to the members of particular groups. “If we don’t engage the full of American society in being excited about the scientific enterprise—all genders, all races, everyone, pulling from our full talent—we aren’t going to be at the top in science and technology anymore.” In turn, creating a diverse workforce requires changing the “indentured servitude model” of graduate school education so that more students remain in science rather than leaving for other fields.

2. Promising Practices for Addressing the Underrepresentation of Women in Science, Engineering, and Medicine: Opening Doors (2020)

<https://www.nap.edu/catalog/25585/promising-practices-for-addressing-theunderrepresentation-of-women-in-science-engineering-andmedicine?>

Preface: (p. xiii). Unfortunately, many fields of science, engineering, and medicine continue to face a formidable shortage of talent, and women—who make up more than 50 percent of the population—are significantly underrepresented in these fields. Although the number of women pursuing education and careers in science, technology, engineering, mathematics, and medicine (STEMM) has increased in many STEMM fields, and has even reached parity in some of those fields, representation of women in STEMM is a persistent challenge. Women of color are severely underrepresented in every STEMM discipline. Notably, women are underrepresented in engineering, computer science, and physics and at every level. In those fields in which women are at parity among degree earners and early career professionals, such as medicine, they are underrepresented in senior leadership.

3. Graduate STEM Education for the 21st Century (2018)

<https://www.nap.edu/catalog/25038/graduate-stem-education-for-the-21stcentury?>

Chapter 2 provides information on Trends and “Data and Trends” By Gender, Race and Ethnicity, Citizenship, Disability Status



4. 4) Minority Serving Institutions: America's Underutilized Resource for Strengthening the STEM Workforce (2019) (p.14) <https://www.nap.edu/catalog/25257/minority-serving-institutions-americas-underutilizedresource-for-strengthening-thestem?>

“...Although America’s STEM workforce has grown more diverse over time, its numbers are still far below the level of diversity represented in the general population (Pew Research Center 2018). The impact of this underrepresentation is critical to understand, given the imminent transition toward a non-White majority in the United States. In 2016, nearly 50 percent of the nation’s population 0-17 years of age was non-White; based on current projections, by year 2060, two-thirds of the nation’s youth will be of color (U.S. Census Bureau 2015, 2018). A clear takeaway from these population estimates is that the educational outcomes and STEM readiness of students of color will have direct implications on the nation’s economic growth, national security, and global prosperity.”

5. Expanding Underrepresented Minority Participation: America's Science and Technology Talent at the Crossroads (2011). <https://www.nap.edu/download/12984>
Summary p.2

“...The United States stands again at the crossroads: A national effort to sustain and strengthen S&E (science and engineering) must also include a strategy for ensuring that we draw on the minds and talents of all Americans, including minorities who are underrepresented in S&E and currently embody a vastly underused resource and a lost opportunity for meeting our nation’s technology needs.”

6. The Impacts of Racism and Bias on Black People Pursuing Careers in Science, Engineering, and Medicine (Proceedings of a Workshop 2020)
<https://www.nap.edu/catalog/25849/the-impacts-of-racism-and-bias-on-blackpeople-pursuing-careers-in-science-engineering-andmedicine?>

Website Description excerpt: Despite the changing demographics of the nation and a growing appreciation for diversity and inclusion as drivers of excellence in science, engineering, and medicine, Black Americans are severely underrepresented in these fields. Racism and bias are significant reasons for this disparity, with detrimental implications on individuals, health care organizations, and the nation as a whole. The Roundtable on Black Men and Black Women in Science, Engineering, and Medicine was launched at the National Academies of Sciences, Engineering, and Medicine in 2019 identify key levers, drivers, and disruptors in government, industry, health care, and higher education where actions can have the most impact on increasing the participation of Black men and Black women in science, medicine, and engineering.



UNIVERSITY HOLISTIC ADMISSION POLICIES

Leaders from the University of Oregon and Oregon Health and Science University wonder “whether by transitioning to a more balanced (if complicated) assessment, ARCS can use its national influence and reputation as a force to engage programs in moving toward holistic admissions as well. Perhaps a pilot project in a few of the OSU programs could test the idea. We would welcome the opportunity to discuss this further.”

They provided these links as references to their thinking:

References:

1. Council of Graduate Schools. A Holistic Approach to Graduate School Admissions. https://cgsnet.org/ckfinder/userfiles/files/CGS_HolisticReview_final_web.pdf
A good resource for understanding holistic admissions.
2. Liz Wessel, CEO & Co-Founder at WayUp. Data Shows That Your GPA Requirements Are Hurting Your Diversity Goals
<https://www.wayup.com/employers/blog/data-shows-that-your-gpa-requirements-are-hurting-your-diversitygoals>
3. James E. Ford and Nicholas Triplett. E(race)ing Inequities: The intersection of race and grade point average in NC schools. Education North Carolina.
<https://www.ednc.org/eraceing-inequities-the-intersection-of-race-and-grade-point-average-in-nc-schools/>. August 23, 2019.
4. Inside Graduate Admissions: Merit, Diversity, and Faculty Gatekeeping by Julie Posselt,
5. Measuring Noncognitive Variables: Improving Admissions, Success, and Retention for Underrepresented Students. By William Sedlacek.

