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**DRAFT AGENDA – OPEN SESSION  
2021-2022 BOARD OF GOVERNORS MEETING**

**Fairmont Scottsdale Princess Hotel, Scottsdale, AZ  
Princess Ballroom F&G  
Sunday, June 19, 2022 - 9:00 am to 12:00 pm (MST)**

**1. Opening of the Meeting (Start Time 9:00 am)**

- 1.1. Call to Order  
Mahantesh Hiremath
- 1.2. Adoption of the Agenda ACTION
- 1.3. President's Remarks (10 minutes) INFORMATION  
Mahantesh Hiremath
- 1.4. Executive Director/CEO's Remarks (10 minutes) INFORMATION  
Tom Costabile
- 1.5. Consent Items for Action ACTION

Identification of items to be removed from Consent Agenda

Consent Items for Action are items the Board is asked to take action on as a group. Governors are encouraged to contact ASME Headquarters with their questions prior to the meeting as it is not expected that consent items be removed from the agenda.

- 1.5.1. Approval of Minutes of April 19, 2022
- 1.5.2. Proposed By-law changes to B5.2 and B5.3, first reading
- 1.5.3. New Society Level Award
- 1.5.4. Proposed Appointments

**2. Open Session Agenda Items**

- 2.1. YTD Financial Report (15 minutes) INFORMATION  
Bill Garofalo
- 2.2. Committee on Finance Update (10 minutes) INFORMATION  
John Goossen
- 2.3. HBCU and CC Pilot Update (45 minutes) INFORMATION  
Anand Sethupathy and Ashley Huderson

**BREAK (15 minutes)**

- 2.4. Diversity, Equity & Inclusion Plan (20 minutes) INFORMATION  
Chandra Clouden and Kevin Russ

- 2.5. Philanthropy Committee Report (10 minutes) INFORMATION  
 Keith Roe
- 2.6. Comments from Outgoing Board Members, Senior Vice President and ECLIPSE Intern (30 minutes) INFORMATION  
 Bryan Erler, Todd Allen, Laura Hitchcock, Tom Kurfess, George Papadopoulos and Jacalynn Sharp
- 2.7. Reflections on the Past Year (10 minutes) INFORMATION  
 Mahantesh Hiremath

**3. New Business**

**4. Open Session Information Items**

- 4.1. Approved Society Awards Listing
- 4.2. CY 2021 Fellows Listing
- 4.3. Unit/Committee Report(s)
  - 4.3.1. Auxiliary
  - 4.3.2. Committee on Honors (COH)
  - 4.3.3. Committee on Organization and Rules (COR)
  - 4.3.4. Committee of Past Presidents (CPP)
  - 4.3.5. Diversity, Equity, and Inclusion Strategy Committee (DEISC)
  - 4.3.6. History & Heritage Committee (H&H)
  - 4.3.7. Industry Advisory Board (IAB)
  - 4.3.8. Member Development and Engagement Sector (MDE)
  - 4.3.9. Philanthropy Committee
  - 4.3.10. Public Affairs and Outreach Sector (PA&O)
  - 4.3.11. Scholarship Committee
  - 4.3.12. Standards and Engineering Services (SES) – Engineering Operations
  - 4.3.13. Standards and Engineering Services (SES) – Standards Operations
  - 4.3.14. Student and Early Career Development Sector (SECD)
  - 4.3.15. Technical and Engineering Communities (TEC)
  - 4.3.16. VOLT Academy
- 4.4. Dates of Future Meetings

| DATE             | DAY       | TIME               | LOCATION       |
|------------------|-----------|--------------------|----------------|
| June 21, 2022    | Tuesday   | 8:00 am – 2:00 pm  | Scottsdale, AZ |
| July 11, 2022    | Monday    | 1:00 pm – 5:00 pm  | Houston, TX    |
| July 12, 2022    | Tuesday   | 8:30 am – 5:00 pm  | Houston, TX    |
| July 13, 2022    | Wednesday | 8:30 am – 12:00 pm | Houston, TX    |
| October 30, 2022 | Sunday    | 8:30 am – 3:00 pm  | Columbus, OH   |

## **5. Adjournment – Open Session**

**Lunch (12:00 PM – 1:00 PM) – Princess Ballroom D&E**

### **List of Appendices**

- 1.5.2 Proposed By-law changes to B5.2 and B5.3, first reading
- 1.5.3 New Society Level Award
- 1.5.4 Proposed Appointments
- 2.2 Committee on Finance Update
- 2.3 HBCU and CC Pilot Update
- 2.4 Diversity, Equity & Inclusion Plan
- 2.5 Philanthropy Committee Report
- 4.1 Approved Society Awards Listing
- 4.2 CY 2021 Fellows Listing
- 4.3.1. Auxiliary
- 4.3.2. Committee on Honors (COH)
- 4.3.3. Committee on Organization and Rules (COR)
- 4.3.4. Committee of Past Presidents (CPP)
- 4.3.5. Diversity, Equity, and Inclusion Strategy Committee (DEISC)
- 4.3.6. History & Heritage Committee (H&H)
- 4.3.7. Industry Advisory Board (IAB)
- 4.3.8. Member Development and Engagement Sector (MDE)
- 4.3.9. Philanthropy Committee
- 4.3.10. Public Affairs and Outreach Sector (PA&O)
- 4.3.11. Scholarship Committee
- 4.3.12. Standards and Engineering Services (SES) – Engineering Operations
- 4.3.13. Standards and Engineering Services (SES) – Standards Operations
- 4.3.14. Student and Early Career Development Sector (SECD)
- 4.3.15. Technical and Engineering Communities (TEC)
- 4.3.16. VOLT Academy

**ASME Board of Governors  
Agenda Item  
Cover Memo**

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**Date Submitted: May 25, 2022**  
**BOG Meeting Date: June 19, 2022**

**To: Board of Governors**  
**From: Committee on Organization and Rules**  
**Presented by: Emily Boyd**  
**Agenda Title: Proposed By-Law Changes**

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**Agenda Item Executive Summary:**

The proposed changes to B5.2 assign the Scholarship Committee and History and Heritage Committee to the Executive Committee.

The proposed changes to B5.3 note that the Chairs of the Industry Advisory Board and Diversity, Equity and Inclusion Strategy Committee are no longer on the PAO Council.

**Proposed motion for BOG Action:**

To approve for first reading changes to By-Laws B5.2 and B5.3.

**Attachments:** Document attached.

## B5.2 SECTORS AND COMMITTEES REPORTING TO THE BOARD OF GOVERNORS

B5.2.1 The sectors reporting to the Board of Governors shall be the Member Development and Engagement Sector, the Standards and Certification Sector, the Technical and Engineering Communities Sector, the Public Affairs and Outreach Sector and the Student and Early Career Development Sector.

Each sector shall be led by a council. The council of each sector shall consist of such voting members as specified in the sector By-Laws. Individuals, as may be required or designated pursuant to any statute, regulation, or court order or consent decree may also be voting or non-voting members of a sector council. A member of the senior staff of the sector, if any, may be a voting member of the sector council. The sector council may designate both volunteer and staff non-voting members.

The duties and responsibilities of the sectors shall be as designated from time to time by the Board of Governors. Each sector shall maintain its own operation guide as prescribed by Society Policy. Each sector shall be chaired by a senior vice president who shall serve a term of three years. Additional service as the same senior vice president may occur after an interruption of one or more years or following a partial term. Senior vice presidents shall attend meetings of the Board of Governors without vote.

B5.2.2 The following Standing Committees shall report to the Board of Governors and shall be appointed by the Board as determined in the By-Laws: Executive Committee, Committee on Organization and Rules, Committee on Finance, Audit Committee, Committee on Executive Director/CEO Evaluation and Staff Compensation, Committee on Honors, Committee of Past Presidents, Philanthropy Committee, Diversity, Equity and Inclusion Strategy Committee, Industry Advisory Board, and Volunteer Orientation and Leadership Training Academy. Each Standing Committee shall maintain its own operation guide as prescribed by Society Policy. If a Standing Committee includes individuals who are not Governors, it is not a committee of the Board and may not bind the Board.

B5.2.3.1 The Executive Committee shall act on behalf of the Board of Governors between Board of Governors meetings, its authority limited to those matters specifically provided for in these By-Laws and specifically delegated to it, consistent with applicable law, by the Board of Governors from time to time. All such actions shall be ratified by the Board of Governors at its next scheduled meeting. The Executive Committee shall have responsibility to accept grants, gifts or bequests in accordance with By-Law B4.4.4. The Executive Committee shall meet from time to time as deemed necessary by the Committee. The Executive Committee shall have responsibility for overseeing ASME's scholarship program and history and heritage program.

B5.2.3.2 The President will serve as Chair of the Executive Committee. One Elected Governor from each class, who is selected by closed written ballot by the Board of Governors at the Board's first meeting of the fiscal year, shall constitute the remaining voting members of the Executive Committee. If a round of closed written balloting shall fail to produce a majority vote of those present and constituting a quorum in support of a Governor, the lowest vote-getter shall be removed from the ballot for one or more subsequent rounds of closed written balloting until a single candidate shall receive a majority vote of those present and constituting a quorum. If a round of closed written balloting shall produce a tie, the tie shall be broken by a drawing of straws by the tied candidates, and the candidate who draws the shorter or shortest straw shall be removed from the ballot for

one or more subsequent rounds of closed written balloting until a single candidate shall receive a majority vote of those present and constituting a quorum. The Executive Director/CEO is a non-voting member of the Executive Committee.

- B5.2.4.1 The Committee on Organization and Rules, under the direction of the Board of Governors, shall have responsibility for ensuring that the Society is organized and supplied with qualified leadership to serve the current and anticipated future needs of the membership, and shall reexamine regularly the Constitution, By-Laws and Policies of the Society.
- B5.2.4.2 The Committee on Organization and Rules shall select its own Chair and Vice Chair. Its membership shall be determined by the Board of Governors. The President may select a Governor to serve as Liaison to the Committee during their Presidential term.
- B5.2.5.1 The Committee on Finance, under the direction of the Board of Governors, shall have responsibility for supervising the financial affairs of the Society and supporting the Board and its committees by conducting an annual review of the Society's budgets.
- B5.2.5.2 The Committee on Finance shall consist of four members-at-large (serving staggered terms on the Committee), the Treasurer, the Chief Financial Officer and the Assistant Treasurer, if any. At least one but not more than two at-large members shall have previously served on the Board of Governors. At the first meeting of the fiscal year, the Committee shall select its Chair from among its members-at-large.

The Treasurer shall be an ex officio member of the Committee with vote and shall serve as Vice Chair. The Chief Financial Officer and the Assistant Treasurer, if any, shall be ex officio members of the Committee without vote. The Committee shall nominate candidates for the member-at-large positions for appointment by the Board of Governors. The term of the members-at-large shall be three years. A member-at-large can serve no more than two consecutive terms (or a total of six years) without a break of at least two years. The President may select a Governor to serve as Liaison to the Committee during their Presidential term.

- B5.2.6.1 The Committee on Executive Director/CEO Evaluation and Staff Compensation, under the direction of the Board of Governors, shall have responsibility for making recommendations to the Board regarding the Executive Director/CEO's performance planning and evaluation and for making recommendations to the Board regarding the Executive Director/CEO's compensation, including salary and bonus recommendations.

The Committee shall also have the responsibility to advise the Board of Governors on activities of the Society's staff regarding: staff compensation, including bonus programs; and staff and retiree benefit programs. The Committee will also be responsible for staff related Society Policies P-7.1, (Recognition of Staff Members - 5 Years or More of Service) and P-7.2, (Staff Employment Guidelines).

In addition, the Committee has oversight responsibilities for the Retirement Plan Committee.

- B5.2.6.2 The Committee on Executive Director/CEO Evaluation and Staff Compensation shall consist of the President, and three current Elected Governors (serving staggered terms on the Board). The President shall nominate an incoming first year Elected Governor for appointment by the Board. The President shall serve as an ex officio member of the Committee with vote.. The Chair shall be the senior Governor and the Vice Chair shall be the second-most senior Governor. The Elected Governors shall serve a three year term unless their term on the Board of Governors expires earlier than three years.

B5.2.6.3 The Retirement Plan Committee, under the direction of the Committee on Executive Director/CEO Evaluation and Staff Compensation, shall have responsibility, as specified in the ASME Thrift Plan, the ASME Defined Contribution (DC) Plan, the ASME 457(b) Plan, and the ASME 401(k) Plan documents, including to act as Plan Administrator and Named Fiduciary for such plans and assume such responsibilities as developing investment policy statements, selecting and monitoring investment choices, benchmarking Plan administration expenses and investment plan administrators performance and selecting, appointing and retaining plan investment, governance and plan administration compliance advisors, as well as having the power to make ministerial and technically required plan amendments.

The Retirement Plan Committee shall consist of four members: two members of the Executive Management Team, one member of the Human Resources Department and one Volunteer member selected by the EDESC. The three staff members will be nominated by the Executive Director/CEO and appointed at the discretion of the EDESC.

The ASME Staff members of the Committee may be members with vote for as long as they hold the positions described in this By-Law B5.2.6.3.

B5.2.7.1 The Committee on Honors, under the direction of the Board of Governors, shall have responsibility for recommending properly selected candidates for honors, medals, Honorary Members, and awards, and as required shall recommend recipients of joint awards, all subject to approval by the Board of Governors. However, the Board may delegate to the Committee on Honors the power to approve candidates for any honor, medal or award other than Honorary Member or ASME Medalist.

B5.2.7.2 The Committee on Honors shall select its own Chair and Vice Chair. Its membership shall be determined by the Board of Governors. The Chair of the General Awards Committee shall be an ex officio member with vote. The President may select a Governor to serve as Liaison to the Committee during their Presidential term.

B5.2.7.3 The General Awards Committee, under the direction of the Committee on Honors, shall seek candidates for all honors and awards except Honorary Members, the ASME Medal, and group-level awards, and shall screen nominations and make recommendations to the Committee on Honors.

The General Awards Committee shall consist of a Chair, a Vice Chair and a membership as determined by the Committee on Honors.

B5.2.7.4 Other Society award committees, including special award committees, shall in accordance with the policies and procedures administered by the Committee on Honors, seek nominees for honors in their several areas of interest, shall screen nominations, and make recommendations to the Committee on Honors.

B5.2.8.1 The Committee of Past Presidents, under the direction of the Board of Governors, shall have responsibility for electing Fellows, overseeing the ethical practice of engineering, and providing guidance on matters where its experience may be useful, upon request by the President, Board of Governors, and other units of the Society.

B5.2.8.2 The Committee of Past Presidents shall select its own Chair and Vice Chair. Its membership shall consist of all living Past Presidents, unless the Board of Governors, Executive Committee or Ethics Committee makes a finding that results in the censure, expulsion, suspension or other disciplinary action of a Past President involving the following conduct:

- (a) violation or attempted violation of the Society Policies with respect to Ethics, Code of Conduct or Discrimination and Discriminatory Harassment, knowingly assisting or inducing another to violate or attempt to violate the Society Policies with respect to Ethics, Code of Conduct, or Discrimination and Discriminatory Harassment, or doing so through the acts of another;
- (b) illegal conduct that adversely reflects on the Past President's honesty, trustworthiness or fitness to serve ASME in a position of trust;
- (c) conduct involving breach of fiduciary duty, dishonesty, fraud, deceit or misrepresentation; or
- (d) other conduct that is or reasonably could be harmful to the reputation and administration of the Society.

Disciplinary action for conduct described in B5.2.8.2 (a) through (d) shall render a Past President ineligible for membership on the Committee of Past Presidents and shall result in the expulsion from the Committee of any current member of the Committee of Past Presidents.

- B5.2.9.1 The Audit Committee, under the direction of the Board of Governors, shall have responsibility for overseeing the accounting and financial reporting process of the Society and the audit of its financial statements and report its activities to the Board. The Committee will be responsible for overseeing the adoption and implementation of, and compliance with, the Society Policies on whistleblowers and conflicts of interest. The Committee will annually consider the performance and independence of the independent auditor and recommend retaining or renewing the retention of the independent auditor to the Board. The Committee will liaise with the independent auditor prior to the commencement of the audit and upon completion of the audit, review and discuss the audit results and any related management letter with the auditor, including:
  - (a) any material risks and weaknesses in internal controls identified by the auditor;
  - (b) any restrictions on the scope of the auditor's activities or access to requested information;
  - (c) any significant disagreements between the auditor and management; and
  - (d) the adequacy of the Corporation's accounting and financial reporting processes.
- B5.2.9.2 The Audit Committee shall consist of three current Elected Governors- (serving staggered terms on the Board) who serve as voting members. The Committee membership is determined by the Board of Governors and consists solely of "independent" members of the Board as defined under Section 102(a) (21) of the New York Not-for-Profit Corporation Law. The Chair shall be the senior Governor and the Vice Chair shall be the second-most senior Governor.

The Treasurer shall be an ex officio member of the Committee without vote. The Chief Financial Officer and the Assistant Treasurer shall be ex officio members of the Committee without vote. The President shall nominate an incoming first-year Elected Governor for appointment by the Board. The Governors shall serve a three year term unless their term on the Board of Governors expires earlier than three years.
- B5.2.10.1 The Philanthropy Committee, under the direction of the Board of Governors, shall have responsibility for advising the Board of Governors and assisting the Society in connection with fundraising activities and philanthropic programs carried out using the Society's name or other resources.
- B5.2.10.2 The Philanthropy Committee shall select its own Chair and Vice Chair. The ASME



Executive Director/CEO, the ASME Managing Director of Philanthropy and the ASME Managing Director of Programs shall be ex officio members of the Committee without vote. Other members shall be determined by the Board of Governors. The President may select a Governor to serve as Liaison to the Committee during their Presidential term.

- B5.2.11.1 The Diversity, Equity and Inclusion Strategy Committee, under the direction of the Board of Governors, shall have responsibility for providing insight and advice into promoting diversity, equity and inclusion within ASME and mechanical engineering.
- B5.2.11.2 The Diversity, Equity and Inclusion Strategy Committee shall select its own Chair and Vice Chair. Its membership shall be determined by the Board of Governors. The President may select a Governor to serve as Liaison to the Committee during their Presidential term.
- B5.2.12.1 The Industry Advisory Board, under the direction of the Board of Governors, shall have responsibility for providing a voice for industry within ASME through the communication of the needs of engineers that are engaged in industry.
- B5.2.12.2 The Industry Advisory Board shall select its own Chair and Vice Chair. Its membership shall be determined annually by the Board of Governors. The President may select a Governor to serve as Liaison to the Board during their Presidential term.
- B5.2.13.1 The Volunteer Orientation and Leadership Training Academy, under the direction of the Board of Governors, shall have responsibility for developing ASME's volunteer leadership. VOLT's programmatic offerings extend to volunteers serving throughout the Society at all levels.
- B5.2.13.2 The Volunteer Orientation and Leadership Training Academy shall select its own Chair and Vice Chair. Its membership shall be determined by the Board of Governors. The President may select a Governor to serve as Liaison to the Academy during their Presidential term.

### **B5.3 PUBLIC AFFAIRS AND OUTREACH SECTOR**

- B5.3.1.1 The Public Affairs and Outreach Sector, under the direction of the Board of Governors, is responsible for the coordinated outreach to industry, government, education, and the public. It is responsible for initiatives that address diversity and humanitarian programs. The Public Affairs and Outreach Sector will maintain a current Sector Operation Guide that will contain operational details of the Public Affairs and Outreach Sector that are not in these By-Laws.
- B5.3.1.2 The Public Affairs and Outreach Sector shall be led by a Council that consists of the following voting membership: a Senior Vice President as Chair; three members-at-large; and the Chairs for the following ~~Board and~~ Committees: Committee on Engineering Education, Committee on Government Relations, Engineering for Global Development Committee, ~~Industry Advisory Board, Diversity, Equity and Inclusion Strategy Committee,~~ and Pre-College Education Committee. The Managing Director, Global Public Affairs, is a non-voting member.
- B5.3.1.3 The incoming Senior Vice President, Public Affairs and Outreach shall be nominated by the Public Affairs and Outreach Council from among its past or present volunteer members for appointment by the Board of Governors for a term of three years. In the event that a past or present volunteer member is not available from the Public Affairs and Outreach Council, then the Council shall defer to the Board of Governors for the selection. Chairs who have been elected to a term that extends more than one year into a new term of the Senior Vice President of Public Affairs and Outreach are not eligible to become the Senior Vice President.
- B5.3.1.4 The members-at-large shall be appointed by the Board of Governors, as recommended by the Public Affairs and Outreach Council. The term of the members-at-large shall be one year and they may be re-appointed for up to three terms.
- B5.3.2.1 The following Board and Committees will report directly to the Public Affairs and Outreach Council: the Committee on Engineering Education, the Committee on Government Relations, the Engineering for Global Development Committee, and the Pre-College Education Committee.
- B5.3.2.2 The Committee on Engineering Education, under the direction of the Public Affairs and Outreach Council, is responsible for the activities of the Society that relate to engineering education. The Committee shall consist of a Chair, Engineering Education and a membership as determined by the Public Affairs and Outreach Council.
- B5.3.2.3 The Committee on Government Relations, under the direction of the Public Affairs and Outreach Council, is responsible for the development of programs for interaction between the Society and government at all levels. The Committee shall consist of a Chair, Government Relations and a membership as determined by the Public Affairs and Outreach Council. The Government Relations Committee shall recommend policies and procedures, and supervise activities that involve Society interaction with government entities.
- B5.3.2.4 The Engineering for Global Development Committee, under the direction of the

Public Affairs and Outreach Council, shall be responsible for the collaboration among the engineering and global development stakeholders to create avenues and opportunities within ASME and mechanical engineering around the world to meet the challenges faced by under-served communities. The Committee shall consist of a Chair, appointed by the Senior Vice President, Public Affairs and Outreach, and a membership, as determined by the Public Affairs and Outreach Council.

- B5.3.2.5 The Pre-College Education Committee, under the direction of the Public Affairs and Outreach Council, shall be responsible for educational activities aimed at enhancing pre-college science, technology, engineering, and mathematics education. The Committee shall consist of a Chair, appointed by the Senior Vice President, Public Affairs and Outreach, and a membership, as determined by the Public Affairs and Outreach Council.

**ASME Board of Governors  
Agenda Item  
Cover Memo**

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**Date Submitted:** May 23, 2022  
**BOG Meeting Date:** June 19, 2022  
**To:** Board of Governors  
**From:** Committee on Honors  
**Presented by:** David Bogy, COH Chair  
**Agenda Title:** New Society Level Award

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**Agenda Item Executive Summary: *(Do not exceed the space provided)***

The Committee on Honors at their April 27, 2022, meeting approved the establishment of the ASME Edward S. Grood Interdisciplinary Team Science Medal in Bioengineering.

**Proposed motion for BOG Action:**

To accept the Committee on Honors recommendation to establish the ASME Edward S. Grood Interdisciplinary Team Science Medal in Bioengineering.

**Attachment:** Yes

**Date:** April 1, 2022

**To:** ASME Committee on Honors

**From:** Executive Committee of the Bioengineering Division of the ASME

**Subject:** ASME Edward S. Grood Interdisciplinary Team Science Medal in Bioengineering

Dear ASME Committee on Honors:

The purpose of this memorandum is to seek approval from the ASME Committee on Honors for the establishment of the Edward S. Grood Interdisciplinary Team Science Medal in Bioengineering, with sponsorship by a prospective individual donor. This is in accordance with society policy P-3.2.

#### Background

Professor Edward S. Grood was a Professor of Orthopaedic Surgery, Applied Mechanics and Biomedical Engineering at the University of Cincinnati for over 30 years. His research program focused on musculoskeletal mechanics including joint kinematics, surgical knee reconstruction, and prosthetic ligaments. Dr. Grood also served as President of Brace Technologies, Inc. a medical device company that he founded to develop knee braces for treating ligament injuries. He received his B.S. degree in Physics and Mathematics from Rensselaer Polytechnic Institute in 1965, followed by M.S., and Ph.D. degrees from the State University of New York at Buffalo in 1968 and 1973, respectively, in Mechanical Engineering.

After working as a research engineer at Bell Aerospace Company and the University of Dayton Research Institute, Dr. Grood joined the University of Cincinnati in 1975 as an Assistant Professor in Orthopaedic Surgery. After a distinguished and highly successful career, he became Professor Emeritus in Biomedical Engineering in 2008. Professor Grood was elected Fellow of American Society of Mechanical Engineering (ASME-1984), Founding Fellow of the American Institute of Medical and Biological Engineering (AIMBE-1992), and Fellow of the Biomedical Engineering Society (BMES-2005). He was a recipient of the Kappa Delta Award (1977) from the American Academy of Orthopaedic Surgeons and a two-time winner of the Cabaud Award (1987, 1992) from the American Orthopaedic Society of Sports Medicine. Dr. Grood was honored with the O'Donoghue Award (1988) from the American Orthopaedic Society of Sports Medicine and the Dedicated Service Award (1990) from the American Society of Mechanical Engineers. In 2004, Dr. Grood was a co-recipient (with Dr. Frank R. Noyes) of the Clinical Investigator Award from the American Academy of Orthopaedic Surgeons. In addition to four issued patents, he published over 115 peer-reviewed journal articles and gave over 80 invited lectures around the world on research topics related to knee and ligament mechanics.

### Name of Award

The proposed name of this award is the ASME Edward S. Grood Interdisciplinary Team Science Medal in Bioengineering.

### Description of the Award

The Edward S. Grood Interdisciplinary Team Science Medal in Bioengineering seeks to annually recognize a team of researchers who have collaboratively carried out impactful interdisciplinary science and engineering research relevant to the ASME Bioengineering Division. Medal recipients would be invited to present their work at the Summer Biomechanics, Bioengineering, and Biotransport Conference (SB<sup>3</sup>C) conference and would be recognized with an award and a monetary prize. Teams comprising bioengineering professionals from academia, industry, national laboratories, medical establishments, and governmental organizations with distinguished and sustained contributions to and impact in the bioengineering field will be eligible for this ASME society-wide medal. The impact of the team's collaboration and interdisciplinary work must be clearly documented and supported and evidenced through joint contributions to one or more of the following exemplar areas: pioneering research, innovative technology development/transfer, inspirational mentorship of diverse teams including those early in their careers, and groundbreaking scholarship/writings. It is believed that the above criteria capture the large and influential impact that Dr. Grood has had on the bioengineering field.

The team that receives the Edward S. Grood Interdisciplinary Team Science Medal will receive a vermeil medal, a \$1,500 honorarium (to be divided equally among the team members), certificates and travel expense to attend the award presentation in accordance with the Committee on Honors policy, subject to availability of funds.

The team leader shall receive travel support to attend the meeting presentation in accordance with the Committee on Honors policy. Medals may be awarded to all team members at the discretion of the Committee on Honors.

The medals and certificates will be presented at the SB<sup>3</sup>C, which is organized in conjunction with the ASME Bioengineering Division. To cover the costs of production of the medals, certificates and honorarium, an Award Endowment Fund will be established within the ASME Foundation.

### Needs Filled

This award fills multiple needs of the ASME Bioengineering Division. Scientific teams typically include members at many career stages. The Grood medal would ensure that trainees and early career investigators and trainees, whose contributions are often overlooked, would have a chance to be recognized. This award would encourage increased participation of industry partners and clinicians who are members of teams and would be invited to participate in SB<sup>3</sup>C. The award would encourage and recognize diverse teams, acknowledging that diversity is key to innovation and often needed to achieve excellence. The award would reflect how science and engineering are done in practice, increasingly with interdisciplinary teams instead of individuals. The award would encourage increased interaction with industry and participation from industry partners in SB<sup>3</sup>C and the ASME Bioengineering Division.

This would be the first Medal awarded by ASME for team science. None of the existing ASME awards related to bioengineering overlap with the description above. Rather, existing ASME awards in the bioengineering field (see Appendix) are focused on the following areas of recognition:

- Early and mid-career investigators: ASME Y.C. Fung Early Career Award; Van C. Mow Medal
- Education and mentorship: ASME Robert M. Nerem Education and Mentorship Medal;
- Translational research (individual award): Savio L-Y. Woo Translational Biomechanics Medal;
- High quality scientific publications: Richard Skalak Award;
- Outstanding achievements in Bioengineering: H.R. Lissner Medal

### Financial Provisions

Individual donors are prepared to provide at least \$75,000 to the ASME Foundation to manage and bestow the award. These donors stand ready to provide \$6,000 to fund the award in the short term.

## **ASME Edward Grood Interdisciplinary Team Science Medal in Bioengineering Rules of Award**

### Form of award

A vermeil medal, certificate and \$1,500 honorarium (to be divided equally among the team members) and travel expenses to attend the award presentation in accordance with, the Committee on Honors policy, subject to availability of funds.

The team leader shall receive travel support to attend the meeting presentation in accordance with the Committee on Honors policy. Medals may be awarded to all team members at the discretion of the Committee on Honors.

### Achievement recognized

The award seeks to recognize a team of scientists and engineers for a body of impactful achievements in the field of bioengineering.

### Limitations

The individuals are not eligible to receive the medal. There, is no upper limit on the size of the team.

### Nominations

Nominations are accepted from teams and individuals

### Edward Grood Medal Committee Composition

Members of the Edward Grood Committee shall be nominated by the Executive Committee of the Bioengineering Division for approval by the Committee on Honors.

The Committee shall consist of seven members: a chair, two past recipients of the award, and four at-large members. Diversity and membership among industry, academia, and government shall be achieved through selection of the at-large members. Each member of the committee shall serve no more than two consecutive three-year terms, commencing on July 1 and concluding on June 30. Terms will be staggered for continuity, so that all members' terms will not expire at the same time.

An initial committee of five will be appointed for the first two years of the award. (Four at-large members and a chair.)

Members of the Edward Grood Medal Committee shall refrain from nominating or writing support letters. Members of the committee are not eligible to receive the award during their time of service.



### Review Process

Considerations for selection include:

- Impact of work, including peer reviewed publications (e.g., in JBME), entrepreneurial and translational activities, clinical impact, advancing the field
- Interdisciplinary make-up of team including basic scientists, engineers, clinicians, and industry partners
- Diversity of team including investigators from multiple career stages (emphasizing inclusion of undergraduate, graduate, and postdoctoral trainees), gender and racial / ethnic diversity

### Nomination deadlines

September 1 to the Edward S. Groot Interdisciplinary Team Science Medal Committee and October 15 to the Committee on Honors.

### **Appendix: Existing ASME and BED awards**

- Y.C. Fung Early Career Award. Established to recognize young investigators who are committed to pursuing research in the field of Bioengineering and have demonstrated significant potential to make substantial contributions to the field of Bioengineering
- The Van C. Mow Medal is bestowed upon an individual who has demonstrated meritorious contributions to the field of bioengineering through research, education, professional development, leadership in the development of the profession, mentorship to young bioengineers, and with service to the bioengineering community.
- The Savio L-Y. Woo Translational Biomechanics Medal, established in 2015, recognizes an individual who has translated meritorious bioengineering science to clinical practice through research, education, professional development, and with service to the bioengineering community.
- The Robert M. Nerem Education and Mentorship Medal is given to an individual who has demonstrated a sustained level of outstanding achievement in education and mentoring of trainees.
- The H.R. Lissner Medal recognizes outstanding achievements in the field of bioengineering. These achievements may be in the form of (1) significant research contributions in bioengineering; (2) development of new methods of measuring in bioengineering; (3) design of new equipment and instrumentation in bioengineering; and/or (4) educational impact in the training of bioengineers.
- The Richard Skalak Award is given for Best paper published in the Journal of Biomechanical Engineering

**ASME Board of Governors  
Agenda Item  
Cover Memo**

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**Date Submitted: May 25, 2022**  
**BOG Meeting Date: June 19, 2022**

**To: Board of Governors**  
**From: Committee on Organization and Rules**  
**Presented by: Emily Boyd**  
**Agenda Title: Proposed Appointments**

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**Agenda Item Executive Summary:**

Proposed appointments reviewed by the COR on May 25, 2022.

**Proposed motion for BOG Action:**

To approve the attached appointments.

**Attachments:** Document attached.

**MAY PROPOSED APPOINTMENTS TO ASME UNITS**

| <b>Internal Unit</b>                               | <b>Nominee</b>             | <b>Appointment Position/Title</b> | <b>Appointment Term/Category</b> | <b>Appointment Type</b> | <b>History</b>  |
|--|----------------------------|-----------------------------------|----------------------------------|-------------------------|---|
| Committee on Organization and Rules                | Emily Boyd                 | Member-at-Large                   | July 2022 – June 2025            | Re-appointment          | Current COR Chair, VOLT Executive Committee               |
| Committee on Organization and Rules                | Joseph Radisek             | Member-at-Large                   | July 2022 – June 2025            | Re-appointment          | Nominating Committee, ECLIPSE Intern                      |
| Diversity, Equity and Inclusion Strategy Committee | Alexander Marrero-Laureano | Member-at-Large                   | July 2022 – June 2025            | New Appointment         | Johnson And Johnson DEI Award Committee                   |
| Diversity, Equity and Inclusion Strategy Committee | Khalid Umar                | Member-at-Large                   | July 2022 – June 2025            | New Appointment         | Participation in corporate and association DEI activities |
| VOLT Academy                                       | Siddarthsinh Jadeja        | Member-at-Large                   | July 2022 – June 2025            | New Appointment         | E-Fest Steering Committee, Student Section Advisor        |
| VOLT Academy                                       | Sam Sanders                | Member-at-Large                   | July 2022 – June 2025            | New Appointment         | VOLT Trainer  |



## Board of Governors Meeting Agenda Item Cover Memo

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|                   |   |
|-------------------|---|
| Date Submitted:   | May 23, 2022                              |
| BOG Meeting Date: | June 19, 2022                             |
| To:               | Board of Governors                        |
| From:             | William Garofalo, Chief Financial Officer |
| Presented by:     | William Garofalo                          |
| Agenda Title:     | YTD Financial Update                      |

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Agenda Item Executive Summary:

A year-to-date financial update will be provided.

Proposed motion for BOG Action:

**None**

Attachment(s):

**None**



## Board of Governors Meeting Agenda Item Cover Memo

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|                   |   |
|-------------------|---|
| Date Submitted:   | June 2, 2022                              |
| BOG Meeting Date: | June 19, 2022                             |
| To:               | Board of Governors                        |
| From:             | John Goossen, Chair, Committee on Finance |
| Presented by:     | John Goossen                              |
| Agenda Title:     | Committee on Finance Update               |

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### Agenda Item Executive Summary:

An update will be provided on the membership and work of the committee.

Proposed motion for BOG Action: None

Attachment(s): PowerPoint Presentation

# Committee on Finance

Board of Governors  
June 19, 2022

Draft June 1, 2022

# Role

- The Committee on Finance (COF) shall under the direction of the Board of Governors, provide an independent review of the ASME financial affairs and key items of the ASME business and strategy planning.
- In this capacity the COF will participate in periodic and an annual review of the ASME operations, investments and budget.
- COF may also be asked to provide an independent review of select business and/or strategic initiatives.
- The COF will also interact with an Investment Advisory Panel (name to be finalized) that will advise the COF and BOG on the Investment affairs of the Society.
- The COF will provide periodic reports to the Executive Committee and Board of Governors on review findings and recommendations.



# Committee on Finance (COF)

## Members Competing FY21-22 Term

- Chair – John Goossen
- Vice Chair – Rob Pangborn (ex-officio, ASME Secretary/Treasurer)
- Member - Richard Benson

## Members Moving Forward

- Chair – Stacey Swisher Harnetty – Term FY22-FY25
- Vice Chair – John Goossen (ex-officio, ASME Secretary/Treasurer) – Term FY22-FY25
- Member - Richard Benson – Term FY22-FY24
- 2 open member positions for candidates without BOG experience
  
- Chief Financial Officer – Bill Garofalo (ex-officio)

# Financial Oversight

- ASME Monthly Operation results, released monthly 7<sup>th</sup> - 9<sup>th</sup> , will be shared with COF:
  - COF members will review and provide any comments by email to Bill Garofalo
  - A conference call (with the appropriate individuals) will only be established if there are questions on the report or an issue that requires a more detailed discussion
- COF will continue to receive the monthly investment results provided by Bill Lowery
- COF will be invited to quarterly Executive Committee meetings for a 1/2 to 3/4 hours, for updates, reviews and discussions on predetermined items:
  - Bill Lowery will be invited to the call to discuss the markets and the investment results
  - Meeting schedule issued to COF when available
- Three yearly meetings will be held with COF, Tom Costabile, Bill Garofalo, Michael Johnson and Jeff Patterson (others as needed) to review and discuss selected strategic and operational items:
  - January/February – Review 6-month results, new initiatives and operation/strategy changes
  - April/May – Review 9-month results and the draft annual budget for the next fiscal year
  - September – Review fiscal year June 30 results and potential impact on current fiscal year

# COF Accomplishments

- Defined COF membership:
  - Defined number of COF members to be four plus a BOG liaison and the Secretary/Treasurer
    - One to two members with BOG experience
    - Two to three members without previous BOG experience and would consider becoming a future BOG candidate
  - Defined qualifications for membership
  - Defined staggered 3 year terms
  - Conducted a search for new COF candidates/members
  - Selected Stacey Swisher Harnetty as a new member with BOG experience and selected her as Chair
- Updated COF Operating Guide, including defining roles and responsibilities, based on the needs of ASME for an independent review group
- Participated with the Executive Committee on quarterly reviews of the investment portfolio and operational/financial results
- Participated in reviews with Tom Costabile, Bill Garofalo, Michael Johnson and other executive staff members on:
  - Selected strategic opportunities
  - Nine-month financial results and draft annual budget for next fiscal year
  - Approved FY22-23 Budget

# COF Items Going Forward

- Finalize COF membership:
  - Select two new COF members without BOG experience
  - Work with IAB to identify potential candidates
  - Finalize candidate pool ( includes candidates identified by the Sr VPs and other ASME leaders from members at large)
- Participate in a review of ASME strategy/planning with Michael Johnson and his organization
- Work with Tom Costabile, Bill Garofalo and Michael Johnson to establish the Investment Advisory Panel (IAP)
- Continue to participate in periodic and an annual review of the ASME operations, investments and budget.



## Board of Governors Meeting Agenda Item Cover Memo

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|                   |   |
|-------------------|---|
| Date Submitted:   | May 26, 2022  |
| BOG Meeting Date: | June 19, 2022   |
| To:               | Board of Governors  |
| From:             | Engineering Education and Outreach  |
| Presented by:     | Ashley Huderson & Kathleen Kosmoski   |
| Agenda Title:     | <b>Historically Black Colleges &amp; Universities (HBCU) &amp; Community College Pilot Update</b> |

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### Agenda Item Executive Summary:

The Community College/HBCU Pilot Program addresses three critical ASME priorities: (1) fostering greater diversity, equity, and inclusion across the engineering community; (2) developing the future engineering and skilled technical workforce; and (3) sustaining and expanding ASME's membership base. By deepening ASME's penetration into the Community College and Minority Serving Institution space, the program aims to increase participation in the engineering and technical workforce among those who have been historically underrepresented in technical fields.

The primary goal of the Pilot Program was to craft an engagement model that can reach 80+ Community Colleges and 3,000+ Community College students, 35+ MSIs and 1,500+ MSI students within the next five years by collecting data to inform the adaptation of ASME's existing programs to make them more effective in the Community College/HBCU context.

Based on the key learning outcomes produced by the data collected, Engineering Education recommends scaling the Pilot Program by implementing six priorities:

1. Transition HBCU Student Sections to Section Operations
2. Craft a Flexible Student Engagement Model for Community Colleges
3. Use FY23 to Explore Developing an Apprenticeship Program
4. Deepen and Enhance Transfer Pathways
5. Enhance Corporate Leadership Engagement
6. Build Philanthropic Support to Scale and Sustain Program Impact

Proposed motion for BOG Action: None

Attachment(s): Presentation Slide Deck

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# Community College & HBCU Pilot Programs

## Presenters:

Ashley Huderson, PhD  
Kathleen Kosmoski  
Anand Sethupathy

## Guest presenters:

Imani Caldwell  
James Morra  
Jason Treadway, PhD

Agenda Appendix 2.3  
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## Imani Caldwell

- May 2022 graduate, North Carolina A&T
- ASME Student Section outgoing chair
- ASME Student Ambassador Board co-chair

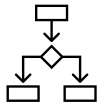


# What to expect from this presentation

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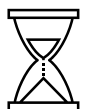
**Brief description:** The Community College/HBCU Pilot Program addresses three critical ASME priorities: (1) fostering greater diversity, equity, and inclusion across the engineering community; (2) developing the future engineering and skilled technical workforce; and (3) sustaining and expanding ASME's membership base. By deepening ASME's penetration into the Community College and Minority Serving Institution space, the program aims to increase participation in the engineering and technical workforce among those who have been historically underrepresented in technical fields.



**Desired outcome:** Feedback requested



**Questions:** Please ask only clarifying questions during the presentation



**Duration:** 45 minutes (25 min. of presentation followed by 20 min. of Q&A/feedback)



# Opening new roads to engineering education

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## Community College Engineering Pathways

Opening New Roads to Technical Careers

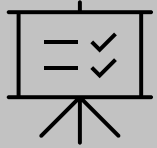


ASME has **launched a pilot initiative** with Community Colleges and Historically Black Universities and Colleges (HBCUs) to increase our engagement with these stakeholders. We wanted to better understand if our current offerings to institutions, faculty, and students translate effectively to these stakeholders.

Agenda Appendix 2.3  
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# Engineering Educational Pathways pilot program: Goals

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**Aligning:** Community College and HBCU curriculum with rapidly changing technology



**Building:** Community College and HBCU resources for career development support



**Cultivating:** An employer network accessible to Community College students

# Community colleges

- Over 1,000 community colleges across the U.S.
- Offer 2-year degrees or less
- Utilized a series of metrics to select 7 colleges for the pilot program

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VALENCIA COLLEGE







# Community college environment

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- **65%** of students are registered as part-time and **35%** as full-time
- The average student age is **27**
- **60%** of students are women and **40%** are men
- **44%** of students are white, **27%** are Hispanic, **12%** are Black, and **7%** are Asian/Pacific Islander
- **80%** of students work, with nearly **40%** working full-time
- **29%** of students are the first generation in their families to attend college
- **15%** are single parents

*Data from the Community College  
Research Center (CCRC)*

Agenda Appendix 2.3  
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## James Morra

- Senior, Valencia College
- ASME Student Section chair
- ASME Student Ambassador Board co-chair

VALENCIA COLLEGE

# Historically Black Colleges & Universities

*HBCUs are the institution of origin among almost 30% of black graduates of science and engineering doctorate programs. A large part of preparing first-generation, low-income African American students for success in STEM is **providing the resources and guidance that they often lack long before enrollment in college.***

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UNIVERSITY OF THE  
DISTRICT OF  
COLUMBIA  
— 1851



TENNESSEE  
STATE UNIVERSITY







# HBCU environment

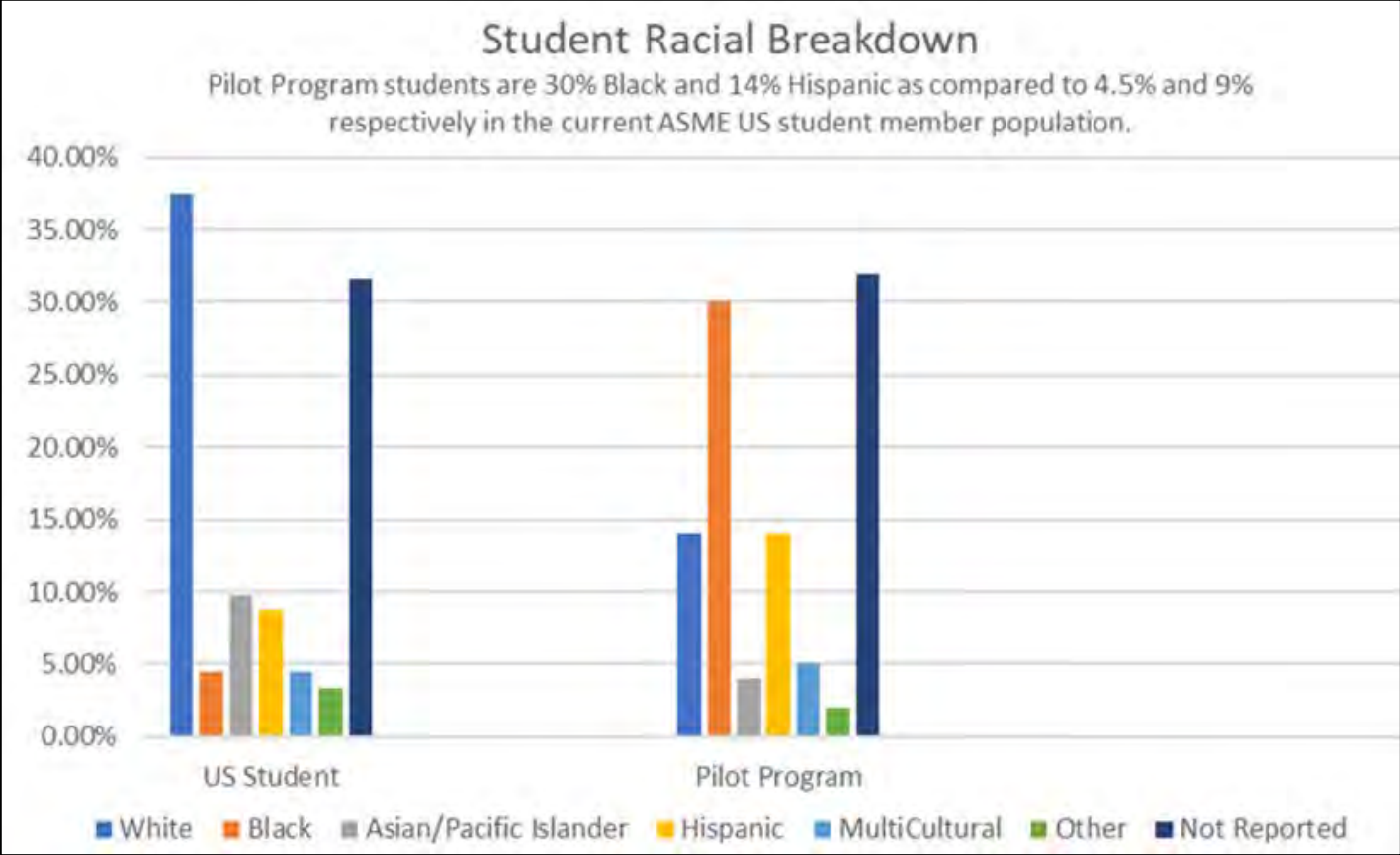
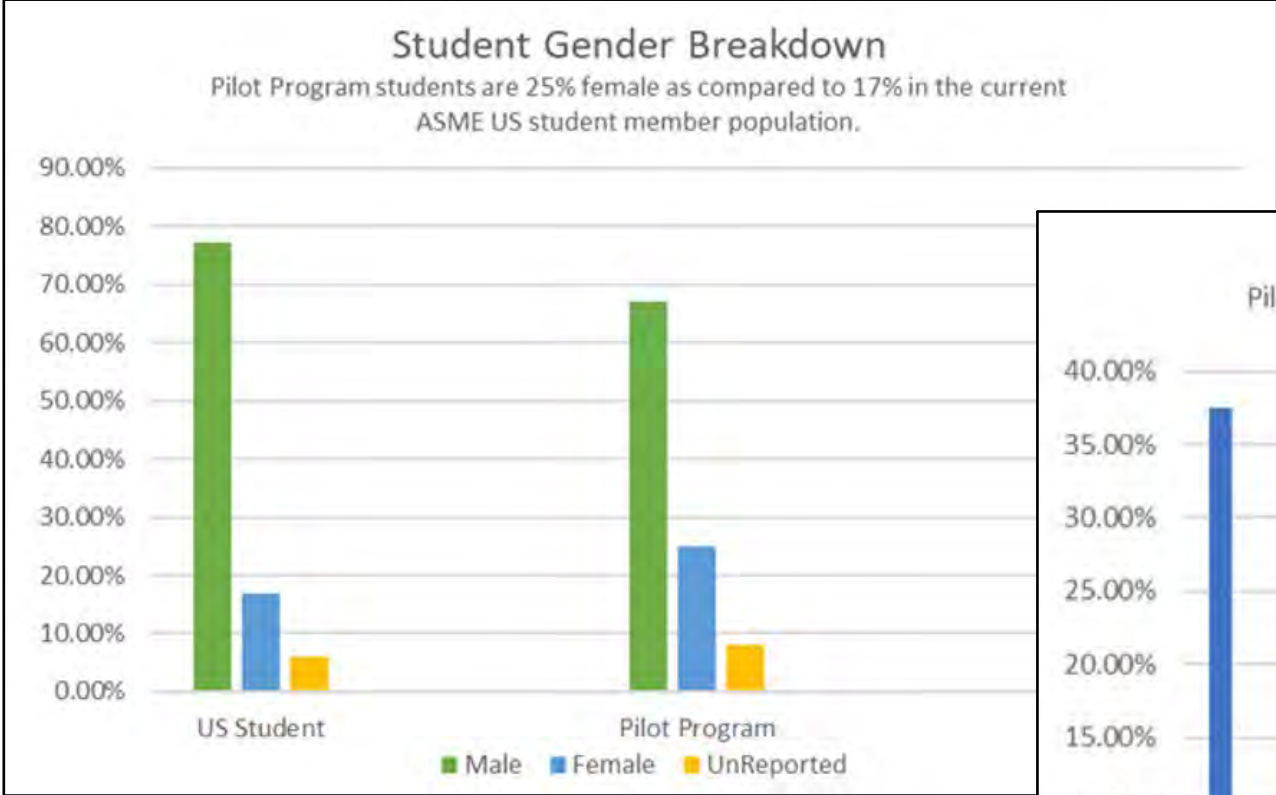
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- **101** HBCUs in the U.S.
- Only **9** offer a Mechanical Engineering program
- Enroll **10%** of all Black students seeking a college education
- Produce **25%** of all Black graduates with STEM degrees
- **70%** are from low-income families
- **72%** take on debt while attending college

*Data from the United Negro  
College Fund (UNCF)*

Agenda Appendix 2.3  
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# Diversity metrics





# Potential impact of scaled program



## Estimated reach:

|                                       | FY22       | FY23       | FY24         | FY25         | FY26         |
|---------------------------------------|------------|------------|--------------|--------------|--------------|
| <b>Community college variables</b>    |            |            |              |              |              |
| # of community colleges               | 6          | 10         | 20           | 40           | 80           |
| CC student section advisors           | 6          | 10         | 20           | 40           | 80           |
| Students per CC section               | 20         | 25         | 30           | 35           | 40           |
| CC student members                    | 120        | 250        | 600          | 1,400        | 3,200        |
| <b>HBCU &amp; MSI variables</b>       |            |            |              |              |              |
| HBCUs & MSIs                          | 3          | 6          | 12           | 24           | 36           |
| HBCU/MSI student section advisors     | 3          | 6          | 12           | 24           | 36           |
| Students per HBCU/MSI                 | 25         | 30         | 35           | 40           | 45           |
| HBCU/MSI student members              | 75         | 180        | 420          | 960          | 1,620        |
| <b>Total institutions engaged</b>     | <b>9</b>   | <b>16</b>  | <b>32</b>    | <b>64</b>    | <b>116</b>   |
| <b>Total student advisors engaged</b> | <b>9</b>   | <b>16</b>  | <b>32</b>    | <b>64</b>    | <b>116</b>   |
| <b>Total students (per year)</b>      | <b>195</b> | <b>430</b> | <b>1,020</b> | <b>2,360</b> | <b>4,820</b> |

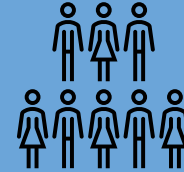
**Estimated diversity impact:**  
*3,000 to 6,000 students from groups long underrepresented in the engineering profession will participate in the program.*

## Programs leveraged:

- Student Sections
- Faculty committees
- Career Engagement Center
- E-Fest/EFx
- Membership
- Scholarships & student loans
- Conferences (SLTC, IMECE)
- Industry Advisory Board (IAB)
- Connections to industry
- Learning and Development (L&D)

# Benefits to all stakeholders

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## Students

- Jobs & internships
- Career readiness
- Scholarships
- Competitions
- Conferences/events
- Technical skills
- Community
- Networking & peer community

## Faculty

- Community
- Networking
- Professional dev.
- Industry access
- Guest lectures
- Competitions

## Colleges

- Industry connections
- Employment connections
- Networks

## Employers

- Access to a better-trained, more diverse workforce
- Employee engagement & volunteering opps.
- Community engagement

## Everyone

- Cultivate diversity, equity & inclusion in engineering-related fields
- Contribute to economic development of local communities

# Pilot program timeline

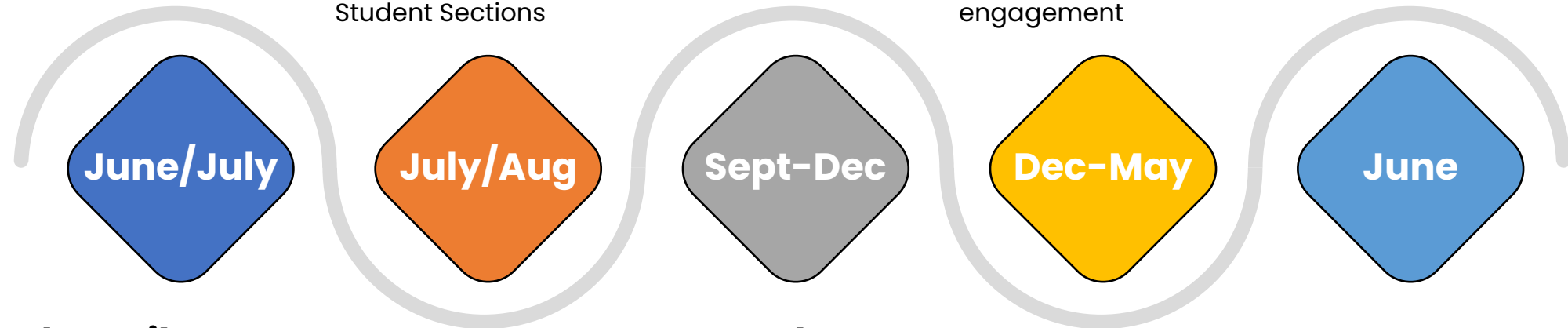


## Marketing & outreach

- Secure faculty & admin lead from each college
- Work with CC leads to set up Student Sections

## Adapt & test

- Based on faculty & student feedback, adapt elements of the program
- Continue to collect feedback & test engagement



## Select pilot orgs

- Outreach to 20+ CCs & HBCUs
- Identify 6 CCs & 3 HBCUs that can commit to the pilot

## Launch!

- Official launch of program
- Market Student Sections & attract at least 20 students into each Section
- Faculty leads meet on a monthly basis to share what is & isn't working

## Report

- Present the pilot's findings & recommendations to the ASME Board of Governors

# Program elements & implementations

## Workshops

- Gathered input from faculty & students
- Provided workshops with hands-on activities
- High student engagement

## Scholarships

- Eligibility requirements were a barrier at first
- Offered scholarship application training session
- Positive student engagement

## Internships

- Full program too ambitious
- Offering virtual internship in June
- High student interest

# Program elements & implementations

## Membership

- Recruited over 170 new members
- Mostly from underrepresented groups
- Continue increasing awareness

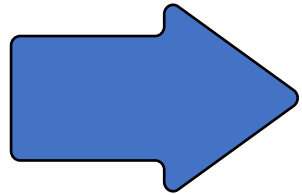
## E-Fest

- Begin marketing at the start of fall semester
- Pandemic posed obstacle to forming teams
- Adapt rules to allow joint entries

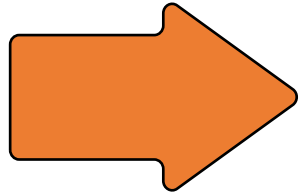
## Student Sections

- Gain institutional leadership support
- Include other campus departments for holistic approach
- Cultivate local champions to build trust & credibility

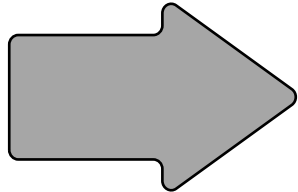
# Shared key outcomes



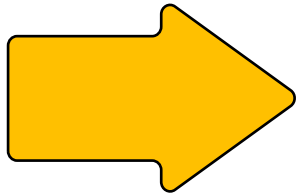
Gaining support from institutional executive leadership is paramount.



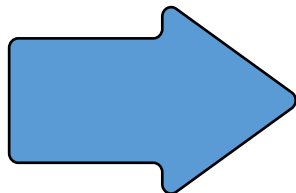
Transfer collaboration: Need to strengthen transfer partnerships between CCs & four-year institutions.



Volunteer engagement: CCEP/HBCU outreach is a robust vehicle to increase engagement of ASME member & funder volunteers.

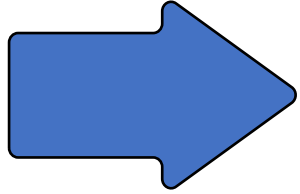


Workforce development: CCEP/HBCU program is a powerful tool to advance ASME's workforce development priorities.

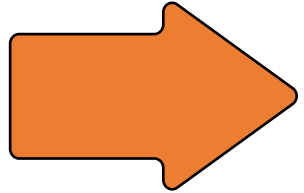


Corporate & foundation funders are interested in supporting efforts that address both core program goals: advancing DEI as well as workforce development.

# CC key outcomes & path forward



Traditional ASME Student Section model must be modified for community college settings.



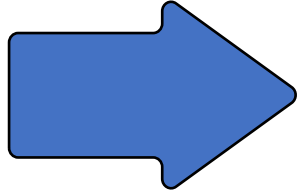
Relatively low awareness of ASME, especially among community college students, is an impediment to rapid program growth.



## Next steps

- Craft a flexible student engagement model
- Use FY23 to explore developing an apprenticeship program

# HBCU key outcome & path forward



Traditional ASME Student Section model is appropriate for HBCUs.



## Next steps

- Transition HBCU Student Sections to Section Ops. & MDE
- Deepen & enhance transfer pathways





## **Dr. Jason Treadway**

- Director, Dallas College STEM Institute
- ASME Faculty Advisory Council member



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# Thank you! Questions?

**ASME Foundation**

Two Park Avenue, 7th Floor  
New York, NY 10016-5990

Agenda Appendix 2.3  
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## Board of Governors Meeting Agenda Item Cover Memo

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|                   |   |
|-------------------|---|
| Date Submitted:   | May 24, 2022  |
| BOG Meeting Date: | June 19, 2022                                       |
| To:               | Board of Governors                                  |
| From:             | Kevin Russ, Director, Diversity, Equity & Inclusion |
| Presented by:     | Kevin Russ  |
| Agenda Title:     | Diversity, Equity & Inclusion Plan                  |

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### Agenda Item Executive Summary:

The DEI FY 2023 Goals & Objectives Presentation is an overview of the proposed strategy, action items, and signature programs and initiatives. The presentation includes a DEI approach and planning framework, a list of “best practices”, an outline of signature programs, and key initiatives to be implemented over the next year.

Proposed motion for BOG Action: None

Attachment: PowerPoint Presentation



# ASME DEI Strategy FY23

## Presentation

Kevin Russ, Director of Diversity, Equity, & Inclusion

01 Introduction/Agenda

02 Current Landscape

03 DEI “Best Practices” Framework

04 FY 2023 Goals & Objectives



# ASME Executive Summary



## Our Vision

ASME's vision is "to become the premier resource for the engineering community globally."



## Our Mission

ASME's mission is to, "advance engineering for the benefit of humanity."



## ASME Credo

Setting the Standard. . . .

- In Engineering Excellence
- In Knowledge, Community, & Advocacy
- For the benefit of humanity



## Core Values

- Embrace integrity and ethical conduct;
- Embrace diversity, respect the dignity and culture of all people;
- Nurture the environment and our natural man-made resources;
- Facilitate the development, dissemination, and application of engineering knowledge;
- Promote the benefits of continuing education and of engineering education;
- Respect and document engineering history while continually embracing change; and
- Promote the technical and societal contribution of engineers.



## Other Information You Deem Pertinent

Murder of George Floyd occurs on May 24, 2020, leaving many ASME employees wanting to know how the organization is going to respond. The Executive Director & CEO, Board of Governors, and Leadership Team are challenged with publicly stated imperatives

# ASME Audience and Target Market - The Inside/Outside Game





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# DEI “Best Practices” Framework

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# American Society of Mechanical Engineers (ASME) - DEI Strategic Plan Themes Framework

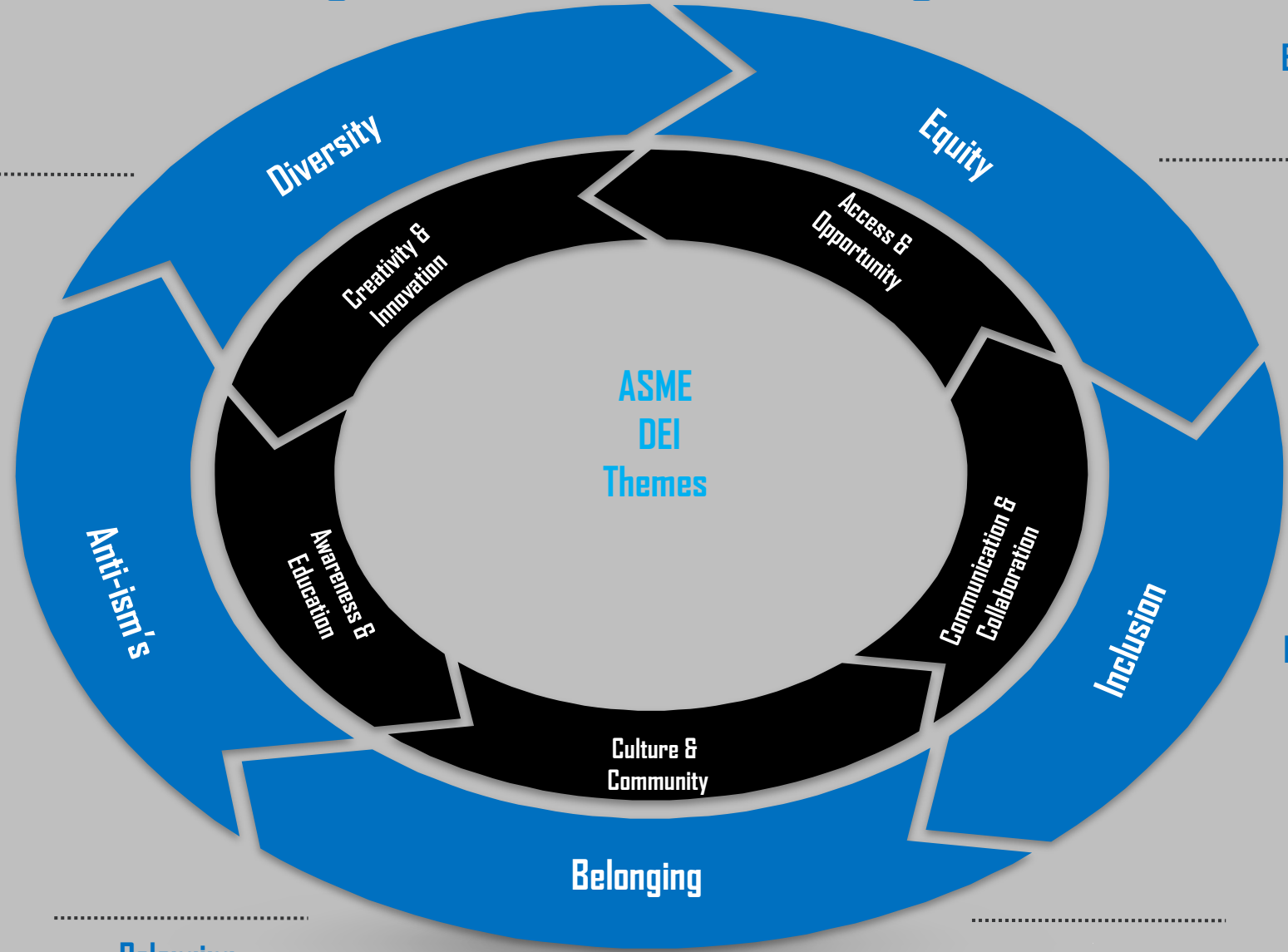
Diversity

Equity

Anti-ism's

Inclusion

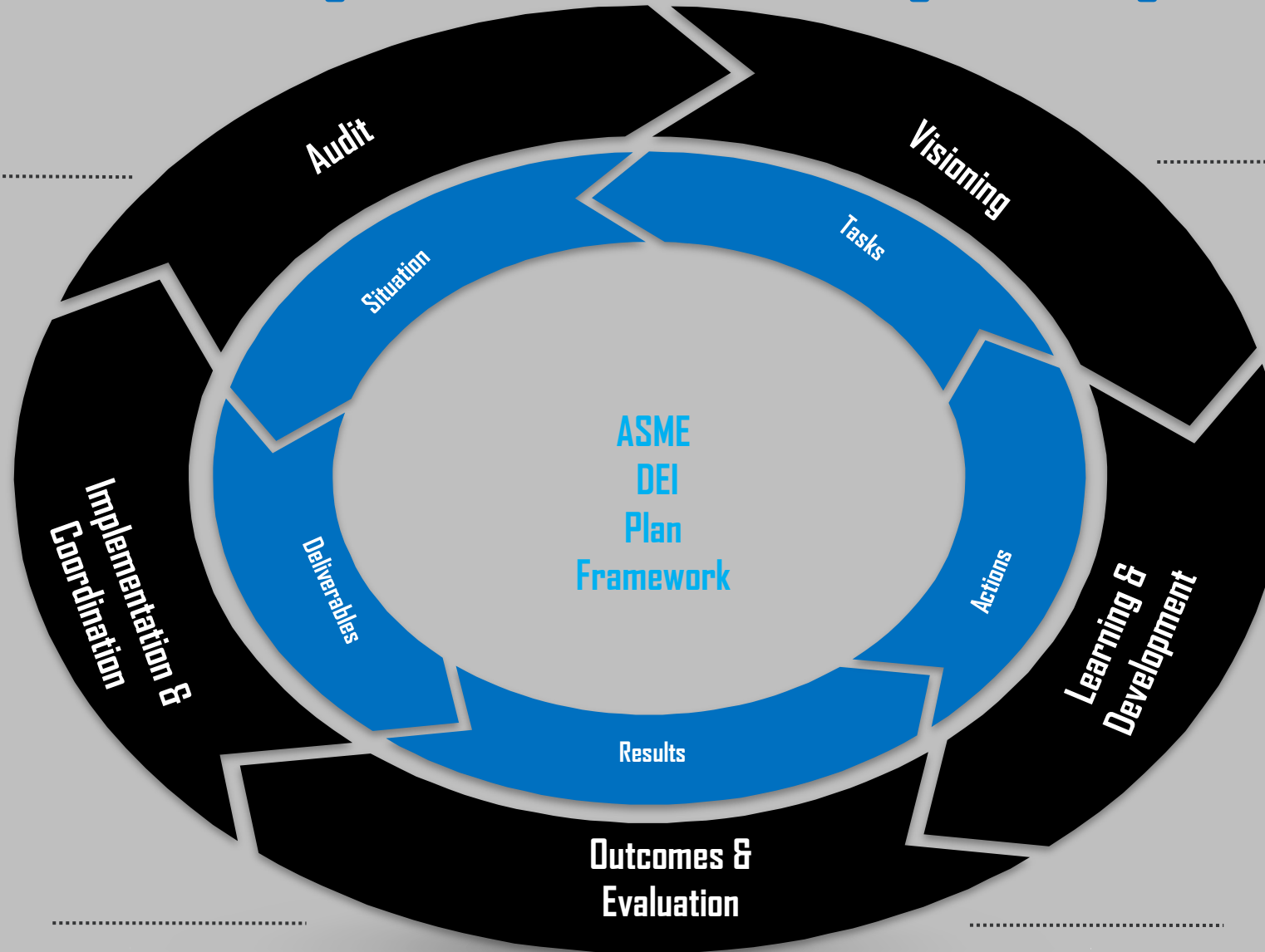
Belonging



# American Society of Mechanical Engineers (ASME) - DEI Strategic Planning Framework

360° Assessment & Assessment  
Reporting

Strategic Planning & Visioning

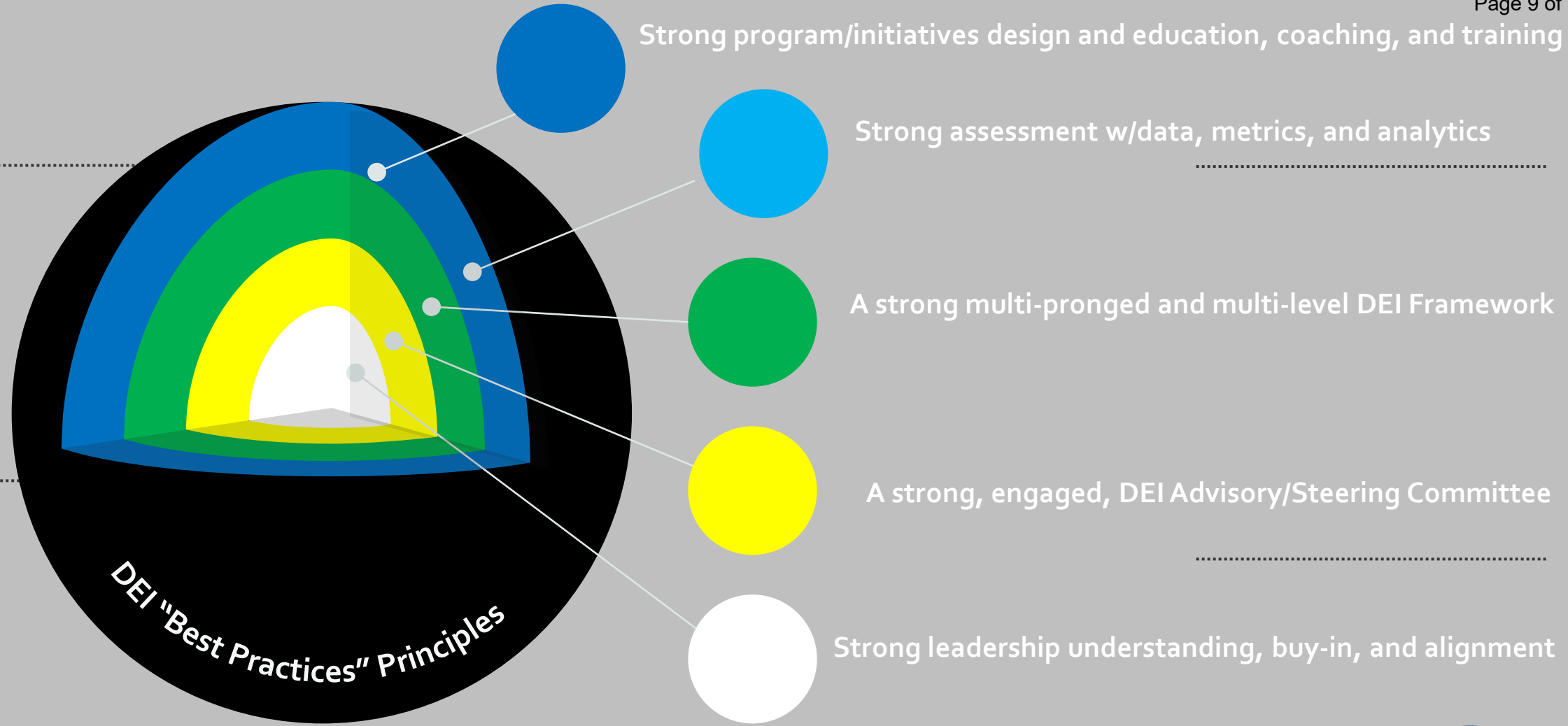


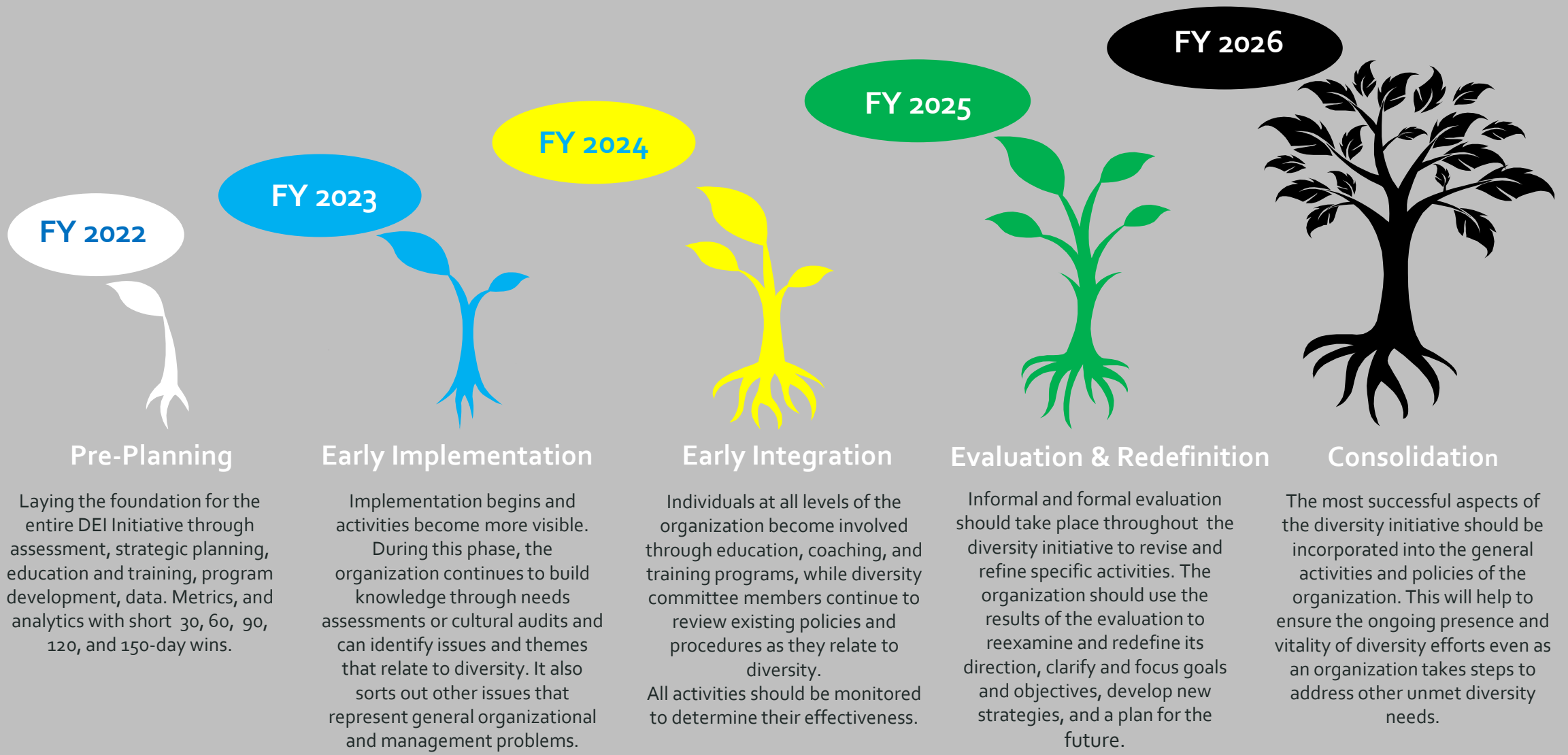
Programs & Initiatives

Education, Training, & Coaching

Data, Metrics, & Precision Analytics

# American Society of Mechanical Engineers (ASME) - DEI Framework "Best Practices" Principles





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# FY 2023 Goals & Objectives

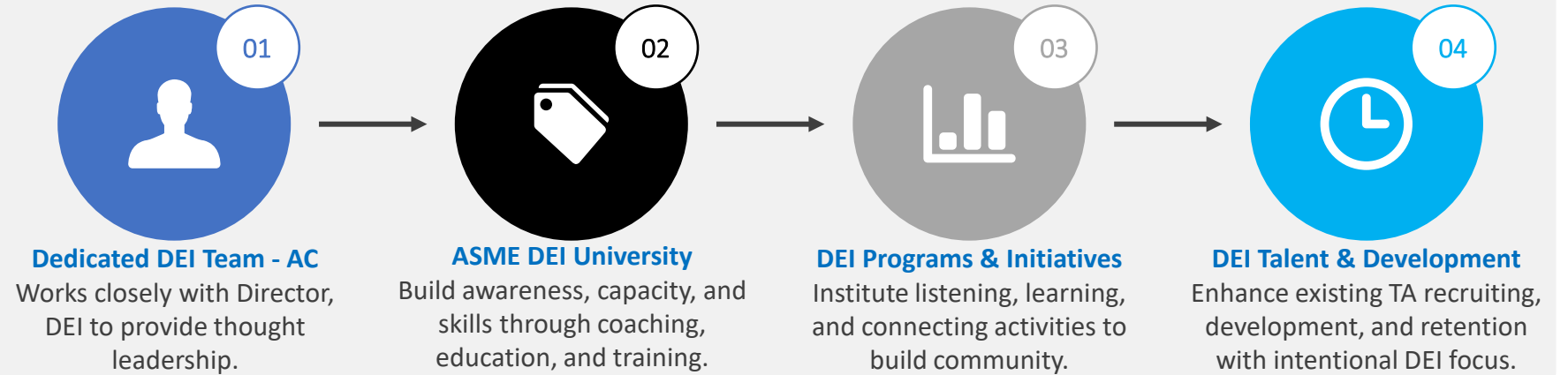
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# FY 2023 - Goals & Objectives - 1

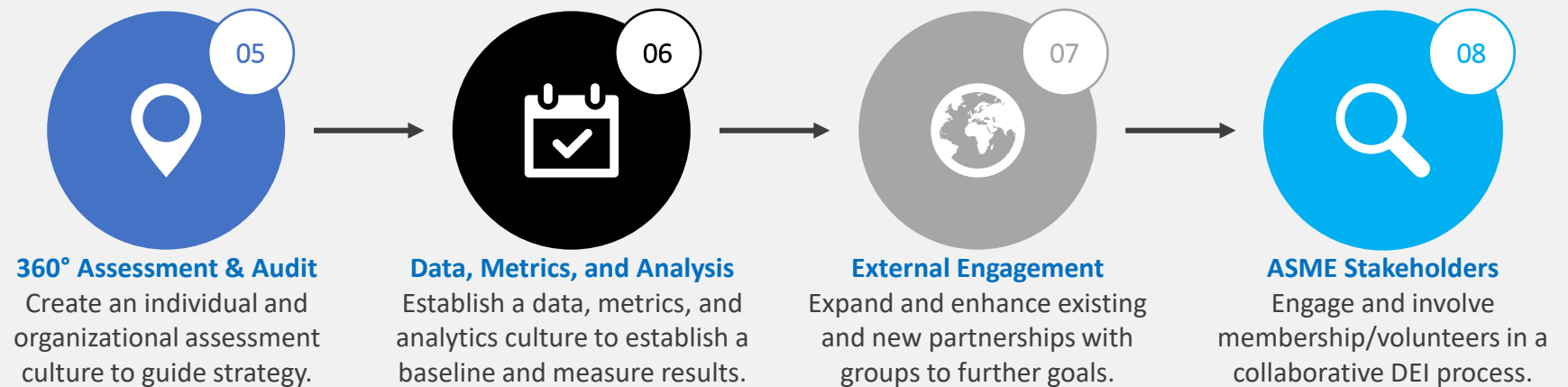


# FY 2023 - Goals & Objectives - 2

## Primary



## Secondary



# FY 2023 - Signature Programs

01

## DEI Ambassador Corps Initiative

Establishes a group of designated individuals in each department who can help embed, monitor, and coordinate diversity related programming.

04

## “Diversity Matters”

Provides a platform for staff, volunteers, and members to expand learning of DEI and build awareness and connections through real stories and experiences.

02

## “Diversity Dives”

Expands the knowledge and learning around DEI through exploration of activities, concepts, and personalities at the departmental, staff, volunteer, members, and partner levels.

05

## DEI University

DEI education, coaching, and training focused on expanding personal and organizational development via online, in-person, and guided learning resulting in DEI certification.

03

## ERG’s and Affinity Groups

Provides groups of employees in the workplace a platform to build community, provide support, enhance career development, and contributes to personal development.

06

## External Engagement & Outreach

Creates opportunities to give back, get involved, and provide community engagement and outreach with partners and constituents in diverse and inclusive way.





## Board of Governors Meeting Agenda Item Cover Memo

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|                   |  |
|-------------------|--|
| Date Submitted:   | May 27, 2022   |
| BOG Meeting Date: | June 19, 2022  |
| To:               | Board of Governors   |
| From:             | Keith Roe, Philanthropy Committee & Capital Campaign Chair |
| Presented by:     | Keith Roe  |
| Agenda Title:     | Philanthropy Committee Report                              |

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### Agenda Item Executive Summary:

A brief presentation to the Board of Governors will be provided conveying what the funds being raised through the “Campaign For Next Generation Engineers” are being used for, and illustrating the enormous impact of ASME’s Philanthropic Programs.

Proposed motion for BOG Action: None

Attachment(s): PowerPoint Presentation

*The American Society of  
Mechanical Engineers®*  
**ASME®**

**ASME**  
FOUNDATION

# What the Capital Campaign Funds

Presentation to the ASME Board of Governors  
June 19, 2022

# What to Expect from this Presentation

Philanthropy Committee Chair Keith Roe will make a brief presentation conveying what the funds being raised through the “Campaign For Next Generation Engineers” are being used for, as well as illustrating the enormous impact of ASME’s Philanthropic Programs.

Proposed motion for BOG Action: None



## Financial Performance

Completion Rate on  
2-Year Cumulative Goal  
**76.25%**

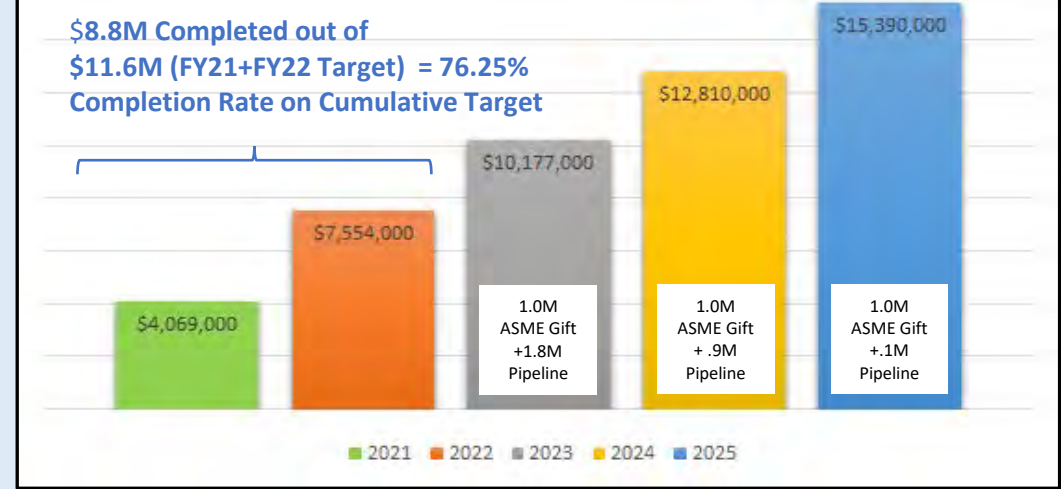
|               |         |
|---------------|---------|
| Actuals*      | \$8.3M  |
| Committed**   | \$.5M   |
| “COMPLETED”   | \$8.8M  |
| FY22 Pipeline | \$.08M  |
| FY21-22 Goal  | \$11.6M |

Committed = 90% or greater probability  
Completed = Actuals + Committed  
Pipeline = < 90% Probability

## Productivity Measure

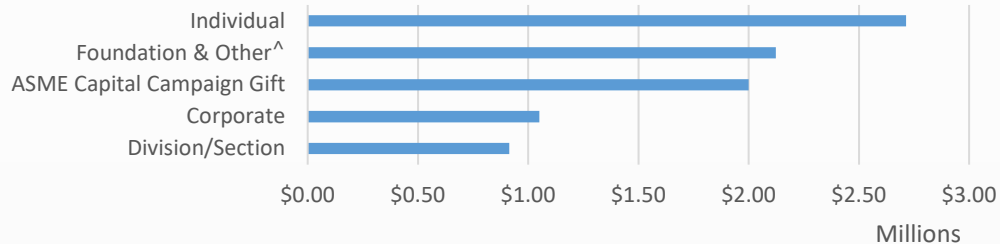
### Fundraising Goals by Year

\$8.8M Completed out of  
\$11.6M (FY21+FY22 Target) = 76.25%  
Completion Rate on Cumulative Target



The Foundation’s 5-year Capital Campaign Target is \$50 Million; through the first 2 years, we have secured signed commitments totaling \$11.8 Million.

## Donations by Donor Type



## Assets/Other

- PLANNED GIVING\*\*\* HIGHLIGHTS:** The ASME Foundation currently has 73 members of the Archimedes Club (individuals who have made commitments re: planned gifts)

\*\*\*Due to the uncertain timing of when Planned Gifts will come to fruition, these “expectancies” are excluded from the Pipeline Forecast

\*Actuals include Capital Campaign Donations from 11/1/19 through 4/30/22 directed to ASME, the ASME Foundation, and E4C entities. | \*\* Committed includes estimates through end of FY22. |

^Foundation & Other includes Nonprofits, Universities, and Government Agencies



*Powerful and Proven*

# ASME's Global Philanthropic Programs

Empowering the diverse, multidisciplinary engineers of tomorrow who will solve humanity's greatest challenges.

## Education that Inspires

Igniting a lifelong passion for engineering, K-12 through graduate school

- ASME INSPIRE K-12 STEM Education (includes DropMEIn!)
- ASME E-Fest and EFx
- Scholarships
- Community College Engineering Pathways; HBCUs Initiative

## Careers that Matter

Propelling young engineers toward a lifetime of meaningful work

- ASME FutureME: Comprehensive Career Engagement Center
- ASME Fellowships
  - E4C Fellows
  - Graduate Teaching Fellows
  - Federal Government Fellows
- ASME Honors & Awards

## Ideas that Innovate

Nurturing breakthrough ideas to improve quality of life for everyone

- Engineering for Change (E4C) Digital Community
- ASME ISHOW Idea Lab (From Concept to Prototype)
- ASME ISHOW (Bringing Prototypes to Market)



*Education that Inspires*

# Revealing the Wonders of Engineering

## illuminating the “E” in STEM for all students

- **Engineering** is the only STEM discipline not typically included in the **K-12 curriculum**
- Reaching **750,000+ students annually** through alliance with Discovery Education, delivering engineering-related STEM curriculum
- 77% of participating schools are Title I qualified; program champions **a more inclusive, better prepared pipeline of K-12 students** energized to pursue STEM

**The American Society of Mechanical Engineers**®  
**ASME**®





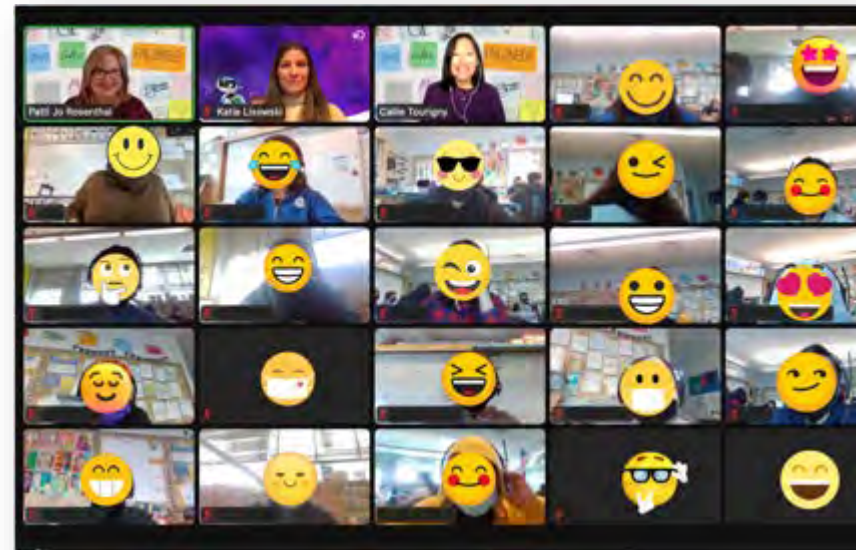
## Bringing ASME Volunteer Engineers into K-12 Classrooms

**Problem:** Engineering is the only STEM discipline not typically included in the K-12 curriculum. Women and people of color are underrepresented in the engineering community

**Goal:** Introduce diverse young students to the wonders of engineering and the possibilities of an engineering career

**Solution:** Introduce children to professional engineers who look like them

ASME's DropMEIn!: in AY 2021/22, reached **3500+ students** in **90+ classroom visits**





# Sample of Engineer Participants, AY21-22



**COLUMBIA MISHRA, PH.D.**

Sr. Staff Sys. Architecture Engineer  
Spacecraft Engineering  
Maxar Technologies Inc.



**SAYAN BISWAS**

Benjamin Mayhugh Asst. Professor  
University of Minnesota



**ANTOINE SANDS, CEng, PMP**

Sr. Engineer V  
CHA Consulting, Inc.



**ALEXANDER MARRERO-LAUREANO**

Supplier Quality Launch Leader  
General Motors



**KALAN GUILLEY**

Sr. Mgr., Global Aviation Safety  
Boeing Commercial Airplanes



**BRIDGET BROWN**

CEO, Pages & Posts  
formerly at United Space Alliance and  
Southern Company Services



**AMY MENSCH, PH.D.**

Engineered Fire Safety Group of the Fire  
Research Division (FRD) of the  
Engineering Laboratory (EL), NIST



**CALLIE TOURIGNY**

Chair, Volunteer Orientation & Leadership  
Training Academy, ASME  
formerly at GE and Pratt & Whitney



*Education that Inspires*

# Where Global Student Teams Come to Invent



Brought to you by ASME Engineering Festivals®.

**The American Society of Mechanical Engineers®**  
**ASME®**

- College and high school teams work creatively and enhance career skills
- Features innovative design competitions structured around multidisciplinary engineering
- Cultivates creativity, innovation, and teamwork

**22,000+**  
participants since 2017

**40+**  
countries reached through recent digital events

**900+**  
teams have participated to date

*Education that Inspires*

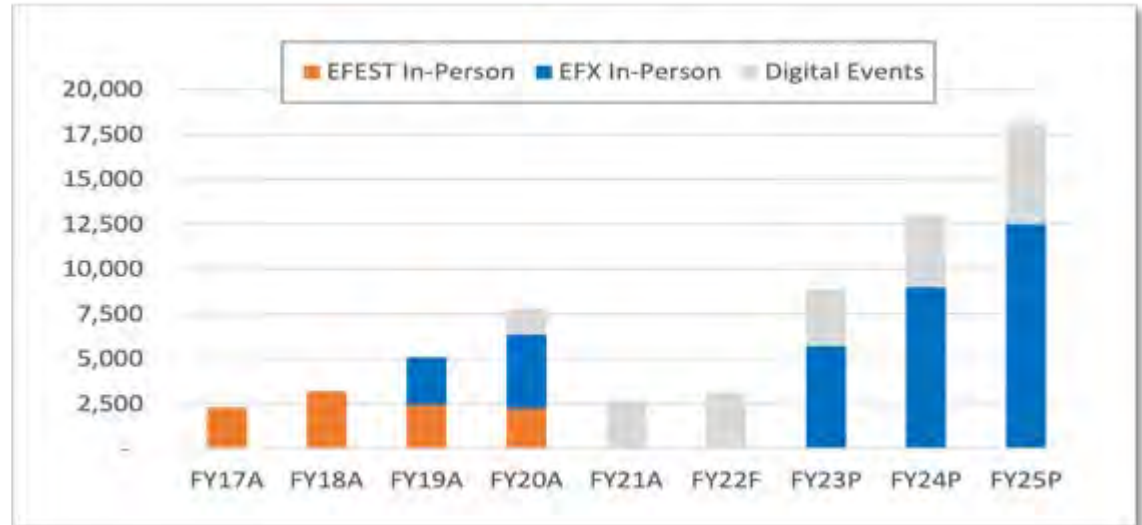


## Evolving E-Fest into a Global Brand



*“It gave me a huge platform to put forth my thoughts. I had never spoken in front of people other than my comfort zone, so this gave me confidence. It was simply amazing. I will surely participate in this competition next time.”*

*“It’s the best competition I have ever come across; the Student Design Challenge made me wrack my brain and helped me build upon my problem-solving skills. That’s what I love to do.”*



### E-Fest/EFx Program Strategy

- Retain and grow global digital audience
- Return to in-person on a local level through EFX
- Integrate incentives for membership conversion
- Consolidate onto a single events platform

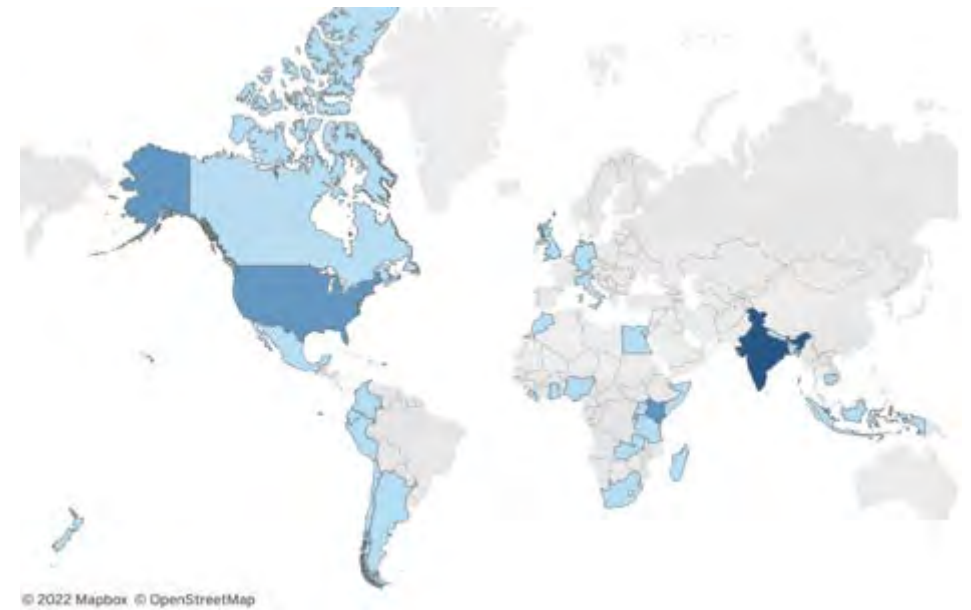


*Ideas that Innovate*

# ASME ISHOW ASME IDEA Lab



- **Providing technical expertise, seed capital, and business insight** to early-stage social entrepreneurs
- Realizing the vision of **high-potential new products**, bringing them from concept to prototype (Idea Lab) and from prototype to product launch (ISHOW)
- Resulting in innovations that have benefited **31 countries and counting**



# Camino de Agua (ASME ISHOW Winner)

**Problem:** Arsenic and other contaminants common in communities' water supplies all over the world, causing a massive global public health challenge

**Goal:** Improve human health and community well-being through adequate and affordable access to clean water

**Solution:** Developed Aguadapt, a low-cost ceramic drinking water filter that removes organic chemicals and 99.9999% of pathogens

- Family-sized system is robust, deploys rapidly, and can be quickly installed in all common containers – providing safe drinking water for over three years
- Can be adapted with universal hardware to treat regionally-relevant contaminants -- arsenic, lead, and others





ALLIE REILING  
Director of Technology

*“As I got older, I was introduced to various engineers and saw the impact they can have on communities.”*



# Thank you.

The Philanthropy Committee and Philanthropy & Programs Departments staff thank the Board of Governors for ASME's generous \$5 million commitment to the *Campaign for Next Generation Engineers Who Transform The World*.

ASME's contribution is profoundly meaningful to us as an expression of confidence in our programs, for the impetus it provides prospective donors to invest in the Campaign, and for the impact it will have on people all over the world whose lives the Society helps improve through these programs.



**ASME Board of Governors**  
**Agenda Item Cover**  
**Memo**

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**Date Submitted:** May 25, 2022  
**BOG Meeting Date:** June 19, 2022  
**To:** Board of Governors  
**From:** Committee on Honors (COH)  
**Presented by:** David Bogy, COH Chair  
**Agenda Title:** Approved Society Awards Listing

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The Board of Governors delegates to COH the authority to approve candidates for all Society Level Awards other than Honorary Members and ASME Medalist.

Attached for information is the listing of COH approved awards for 2022.

**Proposed motion for BOG Action:** None

**Attachment:** Yes

**RECIPIENTS OF ASME HONORS AND AWARDS - 2022**

**ACHIEVEMENT AWARDS**

**ADAPTIVE STRUCTURES AND MATERIAL SYSTEMS AWARD**

|   |  |
|---|--|
| <p><u>James E. Hubbard Jr.</u>, Ph.D.<br/>Texas A&amp;M University<br/>Room 410<br/>3123 TAMU<br/>College Station, TX 77843</p> | <p>For outstanding contributions to the development of field adaptive structures, specifically in large spacecraft structures, such as telescopes and satellites, where mechanical vibrations can affect their precision and performance</p> |
|---|--|

**ARTHUR L. WILLISTON MEDAL**

**Winner**

|   |  |
|---|--|
| <p><u>Radhika Dharmadhikari</u>, Member<br/>P-6, Suyog Heights<br/>Sneh Paradise, Paud Road<br/>Kothrud, Pune-411038<br/>Maharashtra, India</p> | <p>For involvement as a student leader in ASME committees and initiatives, and as a community and social service volunteer</p> |
|---|--|

**Second Place**

|   |   |
|---|---|
| <p><u>Michel Khoueiry</u>, Member<br/>601 24th Street NW<br/>Apt 706<br/>Washington DC, 20037</p> | <p>For outstanding leadership as the chair of ASME's Notre Dame University section, making it one of the most active sections, and spearheading events such as EFX NDU and two leadership conferences</p> |
|---|---|

**BERGLES-ROHSENOW YOUNG INVESTIGATOR AWARD IN HEAT TRANSFER**

|  |  |
|--|--|
| <p><u>Ashutosh Giri</u>, Ph.D.<br/>Department of Mechanical, Industrial and Systems Engineering<br/>University of Rhode Island<br/>302 Fascitelli Building<br/>2 East Alumni Avenue<br/>Kingston, RI 02881</p> | <p>For significant research contributions to heat transfer consisting of experimental and computational advancements in areas including interfacial thermal transport, electron-phonon coupling, and thermal conductivity engineering in nanomaterials</p> |
|--|--|

**EDWIN F. CHURCH MEDAL**

|   |   |
|---|---|
| <p><u>Suvranu De</u>, Fellow<br/>Rensselaer Polytechnic Institute<br/>Department of Mechanical &amp; Aerospace And Nuclear Engineering<br/>JEC 2052<br/>110 8TH Street<br/>Troy, NY 12180</p> | <p>For sustained and innovative mechanical engineering academic leadership with an emphasis on industry and academic collaboration, as well as technological innovation leading to entrepreneurship</p> |
|---|---|

**THOMAS K. CAUGHEY DYNAMICS MEDAL**

|  |  |
|--|--|
| <p><u>Earl Dowell</u>, Ph.D., Fellow<br/>Department of Mechanical Engineering and Material Science<br/>Duke University<br/>P.O. Box 90300<br/>Durham, NC 27708</p> | <p>For contributions through research, teaching, and leadership of nonlinear dynamics in fluid-structure interactions, aeroelasticity, and structural vibrations</p> |
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**DANIEL C. DRUCKER MEDAL**

|   |  |  |
|---|--|--|
| <p><u>Horacio D. Espinosa</u>, Ph.D., Fellow<br/>Mechanical Engineering Department<br/>Northwestern University<br/>2145 Sheridan Road<br/>Evanston, IL 60208-3111</p> |  | <p>For seminal contributions to in-situ characterization and modeling of nano and meta materials, and the creation of robust nanoelectromechanical systems</p> |
|---|--|--|

**THOMAS A. EDISON PATENT AWARD**

|  |  |   |
|--|--|---|
| <p><u>Robert Ambrose</u>, Ph.D., Member<br/>Department Mechanical Engineering<br/>Texas A&amp;M University<br/>College Station, Texas 77843-3133</p> |  | <p>For the invention of the rotary series elastic actuator, which enabled the first robot in space to work safely with astronauts and is now applied to robots in automobile manufacturing, vehicle suspension, prosthetics, and other applications</p> |
|--|--|---|

**WILLIAM T. ENNOR MANUFACTURING TECHNOLOGY AWARD**

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| <p><u>Xiaochun Li</u>, Ph.D., Fellow<br/>University of California, Los Angeles<br/>Department of Mechanical and<br/>Aerospace Engineering<br/>48-121G Engineering IV<br/>420 Westwood Plaza<br/>Los Angeles, CA 90095-1597</p> |  | <p>For significant contributions to solidification processing, scalable manufacturing, and successful commercialization of nanoparticle-reinforced metal matrix composites</p> |
|--|--|--|

**FLUIDS ENGINEERING AWARD**

|   |  |   |
|---|--|---|
| <p><u>Yassin A. Hassan</u>, Ph.D., P.E., Fellow<br/>Texas A&amp;M University<br/>Department of Nuclear Engineering<br/>and Mechanical Engineering<br/>College Station, Texas 77843-3133</p> |  | <p>For exceptional and sustained contributions to the fluids engineering profession through education and ground-breaking experimental and numerical work, especially as applied to nuclear systems</p> |
|---|--|---|

**Y.C. FUNG EARLY CAREER AWARD**

|  |  |  |
|--|--|--|
| <p><u>Zhenpeng Qin</u>, Ph.D.<br/>University of Texas at Dallas<br/>Department of Mechanical Engineering<br/>800 West Campbell Road<br/>Richardson, TX 75080</p> |  | <p>For outstanding contributions to advance the understanding of biotransport issues and the development of transformative nanotechnologies to better understand the brain, and for revolutionizing point-of-care infectious disease diagnosis</p> |
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**KATE GLEASON AWARD**

|  |  |   |
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| <p><u>Daisie Boettner</u>, Ph.D., P.E., Fellow<br/>1582 Wenonah Drive<br/>Okemos, MI 48864</p> |  | <p>For outstanding contributions as a mechanical engineer, military officer, role model, and mentor, and for the educational development of students pursuing military and mechanical engineering careers</p> |
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**MELVIN R. GREEN CODES AND STANDARDS MEDAL**

|   |  |  |
|---|--|--|
| <p><u>Richard W. Swayne</u>, Member<br/>Reedy Engineering<br/>3425 S. Bascom Ave, Suite E<br/>Campbell, CA 95008-7300</p> |  | <p>For more than 40 years of dedicated leadership and professionalism in the advancement of ASME codes and standards; and for outstanding contributions to the promotion and global acceptance of ASME codes, standards and certification programs</p> |
|---|--|--|

**HEAT TRANSFER MEMORIAL AWARD**

**ART**

|  |  |   |
|--|--|---|
| <p><u>Karen A. Thole</u>, Ph.D., Fellow<br/>Department Head and Professor of Mechanical Engineering<br/>The Pennsylvania State University<br/>137 Reber Building<br/>University Park, PA 16802</p> |  | <p>For exemplary contributions in developing innovative cooling designs for various gas turbine components using metal additive manufacturing</p> |
|--|--|---|

**GENERAL**

|   |  |   |
|---|--|---|
| <p><u>Srinath V. Ekkad</u>, Ph.D., Fellow<br/>Department of Mechanical and Aerospace Engineering<br/>North Carolina State University<br/>Engineering Building III (EB3) 3114<br/>Raleigh, NC 27695-7910</p> |  | <p>For outstanding contributions to the field of heat transfer, particularly for promotion of community education and engagement through the co-authoring of a textbook, conference organization, and journal editing, and for pioneering applications of experimental methods in gas turbine heat transfer</p> |
|---|--|---|

**SCIENCE**

|  |  |   |
|--|--|---|
| <p><u>Ravi Shankar Prasher</u>, Ph.D., Fellow<br/>Associate Lab Director &amp; Sr. Scientist<br/>Lawrence Berkeley National Laboratory<br/>1 Cyclotron Road<br/>Berkeley, CA 94720</p> |  | <p>For fundamental contributions to the science of heat transfer, phase transitions, and chemical reactions, and for engineering novel technologies for thermal management of electronic systems and decarbonize energy systems</p> |
|--|--|---|

**MAYO D. HERSEY AWARD**

|  |  |  |
|--|--|--|
| <p><u>Christopher DellaCorte</u>, Ph.D., Fellow<br/>The University of Akron<br/>Timken Endowed Chair and Professor of Mechanical Engineering<br/>264 Wolf Ledges Parkway<br/>Akron, Ohio 44325</p> |  | <p>For significant contributions to space tribology, solid lubrication, and rotating turbomachinery, including pioneering research on longstanding tribology and lubrication challenges in extreme temperatures and conditions in spacecraft and aircraft mechanisms</p> |
|--|--|--|

**PATRICK J. HIGGINS MEDAL**

|   |  |  |
|---|--|--|
| <p><u>Ken Burkhardt</u>, P.E., Member<br/>153 E Doe Run Road<br/>Kennett Square, PA 19348</p> |  | <p>For outstanding leadership in the development of high-quality ASME B73 chemical pump standards, and for working above and beyond with pump hardware and software suppliers to improve data communications across the industry</p> |
|---|--|--|

**SOICHIRO HONDA MEDAL**

|   |  |   |
|---|--|---|
| <p><u>Subir Chowdhury</u>, Ph.D., Member<br/>Chairman and CEO<br/>ASI Consulting Group, LLC<br/>30200 Telegraph Road, Suite 100<br/>Bingham Farms, MI 48025</p> |  | <p>For outstanding contributions to the improvement of processes and product quality in the automotive industry through pioneering works on quality engineering, which has helped to save OEMs and suppliers around the world billions of dollars</p> |
|---|--|---|

**INTERNAL COMBUSTION ENGINE AWARD**

|   |  |  |
|---|--|--|
| <p><u>Mr. Roy J. Primus</u><br/>142 John Pott Drive<br/>Williamsburg VA 23188</p> |  | <p>For outstanding leadership in advancing the state-of-the-art of internal combustion engines for more than 40 years, including the development of engines, industry-leading analysis techniques, and educating and mentoring engineers</p> |
|---|--|--|

**JOHNSON & JOHNSON CONSUMER COMPANIES, INC. MEDAL**

|  |  |   |
|--|--|---|
| <p><u>Sheryl A. Sorby</u>, Ph.D.<br/>University of Cincinnati<br/>2600 Clifton Avenue<br/>Cincinnati, OH 45221</p> |  | <p>For innovative and sustained work in developing and implementing spatial skills practices that foster a greater participation of marginalized students in engineering, and for modernizing engineering education and increasing diversity in engineering faculty</p> |
|--|--|---|

**WARNER T. KOITER MEDAL**

|   |  |   |
|---|--|---|
| <p><u>Vikam Deshpande</u>, Ph.D.<br/>Department of Engineering<br/>University of Cambridge<br/>CB2 1PZ Cambridge<br/>United Kingdom</p> |  | <p>For fundamental contributions in the mechanics of materials, ranging from the design of micro-architected materials to the development of blast-resistant structures, which have had a profound impact in engineering science and related technologies</p> |
|---|--|---|

**ROBERT E. KOSKI MEDAL**

|   |  |   |
|---|--|---|
| <p><u>Rudolf Scheidl</u>, Dipl.-Ing, Dr.<br/>Institute of Machine Design and<br/>Hydraulic Drives<br/>Johannes Kepler University Linz<br/>Altenberger Straße 69<br/>A-4040 Linz<br/>Austria</p> |  | <p>For contributions to fluid power research, education, and commercialization, especially in establishing digital fluid power as a vibrant research area</p> |
|---|--|---|

**ALLAN KRAUS THERMAL MANAGEMENT MEDAL**

|   |  |  |
|---|--|--|
| <p><u>Samuel Graham, Jr.</u> Ph.D.<br/>Department of Mechanical Engineering<br/>University of Maryland<br/>8228 Paint Branch Drive<br/>College Park, MD 20742</p> |  | <p>For expertise in the thermal engineering of wide bandgap semiconductor devices and interfaces, including heterogeneous integration methods for thermal management</p> |
|---|--|--|

**FRANK KREITH ENERGY AWARD**

|   |  |   |
|---|--|---|
| <p><u>Ranga Pitchumanj</u>, Ph.D., Fellow<br/>Department of Mechanical Engineering<br/>Virginia Tech<br/>7054 Haycock Road<br/>Falls Church, VA 22043</p> |  | <p>For pioneering scientific contributions in the fields of solar engineering, energy conversion and energy storage technologies, his visionary stewardship as Chief Scientist of the SunShot Program at the U.S. Department of Energy that has contributed to a pervasive impact on the nation's renewable energy future, as well as leadership in mechanical engineering administration and education</p> |
|---|--|---|

**BERNARD F. LANGER NUCLEAR CODES AND STANDARDS AWARD**

|   |  |   |
|---|--|---|
| <p><u>Robert I. Jetter</u>, Fellow<br/>3417 Streamside Circle #E-418<br/>Pleasanton, CA 94588</p> |  | <p>For more than 50 years of dedicated service to ASME's BPVC Section III codes related to elevated temperature design for nuclear power, chairing the subgroup on elevated temperature design, and significantly contributing to the development of Division 5 for high temperature reactors</p> |
|---|--|---|

**WILFRED C. LAROCHELLE CONFORMITY ASSESSMENT AWARD**

|  |  |   |
|--|--|---|
| <p><u>Kwok Tai Lau</u>, Ph.D., Fellow<br/>24 Canterbury Lane<br/>Sherwood Park<br/>Alberta, T8H 1E7<br/>Canada</p> |  | <p>For exceptional leadership in ASME Standards and Certification, particularly the development, enforcement, and advancement of the society's conformity assessment programs and implementation of key initiatives that continue to enhance ASME's Global position</p> |
|--|--|---|

**GUSTUS L. LARSON MEMORIAL AWARD**

|  |  |  |
|--|--|--|
| <p><u>Yihui Zhang</u>, Ph.D., Member<br/>Tsinghua University<br/>Room N629<br/>Mong Man-wei Science &amp; Technology Building<br/>Beijing 100084<br/>China</p> |  | <p>For outstanding achievements in mechanical engineering within 10 to 20 years following graduation</p> |
|--|--|--|

**H.R. LISSNER MEDAL**

|   |  |   |
|---|--|---|
| <p><u>Lori A. Setton</u>, Ph.D., P.E., Fellow<br/>Washington University in St. Louis<br/>Department of Biomedical Engineering<br/>1 Brookings Drive<br/>190 Whitaker Hall<br/>St. Louis, MO 63130</p> |  | <p>For outstanding mechanobiology research related to degenerative cartilage diseases; and significant contributions leading to a better understanding of osteoarthritis and intervertebral disc disorders; and for internationally recognized leadership in the bioengineering community</p> |
|---|--|---|

**MACHINE DESIGN AWARD**

|   |  |   |
|---|--|---|
| <p><u>Diann Brej</u>, Ph.D., Fellow<br/>University of Michigan<br/>1320 George G. Brown Laboratory<br/>2350 Hayward Street<br/>Ann Arbor, MI 48109-2125</p> |  | <p>For outstanding contributions in novel device design and for supporting engineering science, as well as for mentoring and building communities in the field of smart materials and structures.</p> |
|---|--|---|

**CHARLES T. MAIN STUDENT LEADERSHIP AWARD**

**GOLD**

|   |  |  |
|---|--|--|
| <p><u>Marcus Lannie</u>, Member<br/>235 S. Leonard Lane<br/>Arlington Heights, IL 60005</p> |  | <p>For outstanding leadership as an ASME student chapter president, increasing the number and diversity of student membership, developing successful internship programs, and mentoring dozens of students</p> |
|---|--|--|

**SILVER**

|   |  |  |
|---|--|--|
| <p><u>Toukir Ahmed Chowdhury</u>, Member<br/>Al Arabi Hossain Tower, Mirzarpul<br/>Muradpur, Chattogram-4000<br/>Bangladesh</p> |  | <p>For outstanding service as public relations secretary of the ASME CUET Student Chapter and for increasing activities, membership, and sponsorships as a member of the ASME Student Regional Team, Asia Pacific Region</p> |
|---|--|--|

**MCDONALD MENTORING AWARD**

|   |  |  |
|---|--|--|
| <p><u>Daniel R. Cooper</u>, Ph.D., Member<br/>Department of Mechanical Engineering<br/>University of Michigan<br/>2458 George G. Brown Laboratory<br/>2350 Hayward Street<br/>Ann Arbor, Michigan, 48109-2125</p> |  | <p>For pioneering leadership in sustainable manufacturing research and for initiating multiple programs and practices for mentoring University of Michigan students and underrepresented minorities in the community</p> |
|---|--|--|

**M. EUGENE MERCHANT MANUFACTURING MEDAL OF ASME/SME**

|  |  |
|--|--|
| <p><u>Brian J. Papke</u><br/>Mazak Corporation<br/>8025 Production Drive<br/>P.O. Box 970<br/>Florence, KY 41042</p> | <p>For leadership and investment in research that led to advances in machine tool and factory technologies that set the stage for digital manufacturing, drove standardization for manufacturing interconnectivity, and improved the competitiveness of U.S. manufacturers</p> |
|--|--|

**VAN C. MOW MEDAL**

|  |  |
|--|--|
| <p><u>Robert L. Mauck, Ph.D., Member</u><br/>University of Pennsylvania<br/>Bioengineering Department<br/>308A Stemmler Hall<br/>3450 Hamilton Walk<br/>Philadelphia, PA 19104</p> | <p>For contributions to bioengineering, musculoskeletal tissue engineering, and mechanobiology, as well as contributions to the education, mentorship, and professional development of young</p> |
|--|--|

**NADAI MEDAL**

|   |  |
|---|--|
| <p><u>George Z. Voyiadjis, Ph.D., Fellow</u><br/>Department of Civil and Environmental<br/>Engineering<br/>Louisiana State University<br/>Baton Rouge, LA 70803</p> | <p>For outstanding achievements in micro-mechanical characterization of plasticity and damage in materials, and for pioneering contributions to multiscale modeling and localization problems.</p> |
|---|--|

**SIA NEMAT-NASSER EARLY CAREER AWARD**

|   |  |
|---|--|
| <p><u>Ankit Srivastava, Ph.D., Member</u><br/>Department of Materials Science and<br/>Engineering<br/>Texas A&amp;M University<br/>3003 TAMU<br/>211 Reed McDonald Building<br/>College Station, Texas 77843-3003</p> | <p>For innovative research on micro-mechanisms of deformation and failure of advanced structural materials, as well as enabling material design by combining fundamental theories, small-scale experiments and microstructural mechanics</p> |
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**BURT L. NEWKIRK WARD**

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| <p><u>Filippo Mangolini, Ph.D., Member</u><br/>Walker Department of Mechanical Engineering<br/>The University of Texas at Austin<br/>204 E. Dean Keeton, Stop C2200<br/>Austin, TX 78712</p> | <p>For outstanding contributions in advancing the understanding of tribological behavior of liquid and solid lubricants through the development of novel surface-analytical and in-situ approaches</p> |
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**RUFUS OLDENBURGER MEDAL**

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| <p><u>Wayne J. Book, Ph.D., Fellow</u><br/>1373 Emory Road, NE<br/>Atlanta, GA 30306</p> | <p>For pioneering and fundamental contributions to the analysis, control, and deployment of lightweight, flexible manipulators in space, defense, and industry, as well as contributions to control and robotics education</p> |
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**OLD GUARD EARLY CAREER AWARD**

**Winner**

|  |  |
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| <p><u>Bryan Maldonado, Ph.D., Member</u><br/>R&amp;D Associate Staff<br/>Oak Ridge National Laboratory<br/>2360 Cherahala Blvd.<br/>Knoxville, TN 37932-1563</p> | <p>For leadership in bridging ASME's Internal Combustion Engine and Dynamic Systems &amp; Control divisions, mentoring STEM students, and improving science communication and outreach</p> |
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**Runner-Up**

|  |  |  |
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| <p><u>Omar Kheir</u>, Member<br/>Chief Operating Officer &amp; Chief Engineer<br/>EPCOM<br/>1630 E Paisano Drive<br/>El Paso, TX 79901</p> |  | <p>For outstanding leadership at ASME, including the development of content and platforms for student leadership, and diversity, equity and inclusion initiatives, as well as the Early Career Engineer Programming Committee and the Career Engagement Center</p> |
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**PERFORMANCE TEST CODES MEDAL**

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| <p><u>Ms. Tina Toburen</u>, P.E., Member<br/>President<br/>T2E3, Inc. - Energy Efficiency Enterprises<br/>14260 120th PI NE<br/>Kirkland, WA 98034</p> |  | <p>For outstanding leadership and contributions in ASME Performance Test Codes, notably in the testing of combined cycle power plants, as well as performance monitoring and testing of gas turbine inlet air and combustion turbine inlet air conditioning equipment</p> |
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**PI TAU SIGMA GOLD MEDAL**

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| <p><u>R. Renee Zhao</u>, Ph.D., Member<br/>Department of Mechanical Engineering<br/>Stanford University<br/>452 Escondido Mall, Bldg. 2-520<br/>Stanford, CA 94305</p> |  | <p>For outstanding achievements in mechanical engineering within 10 years of graduation</p> |
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**JAMES HARRY POTTER GOLD MEDAL**

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| <p><u>Kai Hong Luo</u>, Ph.D., Fellow<br/>Department of Mechanical Engineering<br/>University College London<br/>Torrington Place<br/>London WC1E 7JE<br/>United Kingdom</p> |  | <p>For exceptional achievements in advancing the science of nonequilibrium thermodynamics across nanoscales, mesoscales, and macroscales, as well as the development of cutting-edge and widely used physical and numerical models embodying thermodynamic principles that have transformed energy system prediction, design, and optimization</p> |
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**DIXY LEE RAY AWARD**

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| <p><u>Haroon Kheshgi</u>, Ph.D.<br/>6 Cottage Place<br/>Branchburg, NJ 08876</p> |  | <p>For significant achievements and contributions to the science, technology and policies of global climate change</p> |
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**CHARLES RUSS RICHARDS MEMORIAL AWARD**

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| <p><u>Norman A. Fleck</u>, Ph.D.<br/>Department of Engineering<br/>Cambridge University<br/>Trumpington Street<br/>Cambridge, CB2 1PZ<br/>United Kingdom</p> |  | <p>For outstanding achievements in mechanical engineering for 20 years or more following graduation</p> |
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**RALPH COATS ROE MEDAL**

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| <p><u>Aprille J. Ericsson</u>, Ph.D.<br/>New Business Lead, Instrument Systems and<br/>Technology Division<br/>NASA Goddard Space Flight Center<br/>Greenbelt, MD 20771</p> |  | <p>For diligent efforts in explaining the nature, challenges and personal satisfaction of engineering to encourage young people, women, and other underrepresented groups to pursue STEM careers</p> |
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**ROBERT M. NEREM EDUCATION AND MENTORSHIP MEDAL**

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| <p><u>Michele J. Grimm</u>, Ph.D., Fellow<br/>Department of Mechanical Engineering<br/>Michigan State University<br/>428 S. Shaw Lane<br/>Room 2450<br/>E. Lansing, MI 48824</p> |  | <p>For leadership in mentoring hundreds of faculty members through stewardship at the National Science Foundation, establishing a cutting-edge biomedical engineering department, including undergraduate and graduate programs, and supporting high-quality biomedical engineering across the United States</p> |
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**SAFETY CODES AND STANDARDS MEDAL**

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| <p><u>Mr. Davis L. Turner</u><br/>President<br/>Davis L Turner &amp; Associates, LLC<br/>95466 Amelia National Pkwy<br/>Fernandina Beach, FL 32034-8804</p> |  | <p>For more than 25 years of service in providing excellent leadership, support, and technical expertise in the A17 Code development process, including helping to expand the stopping safety requirements and performance-based codes to include escalators and moving walks</p> |
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**R. TOM SAWYER AWARD**

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| <p><u>Timothy C. Lieuwen</u>, Ph.D.<br/>Regents Professor<br/>Georgia Institute of Technology<br/>495 Tech Way NW<br/>MC0362/Room 210<br/>Atlanta, GA 30332-03</p> |  | <p>For outstanding contributions to the development of gas turbine combustion systems and service to the gas turbine community</p> |
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**MILTON C. SHAW MANUFACTURING RESEARCH MEDAL**

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| <p><u>Gary J. Cheng</u>, Ph.D.<br/>School of Industrial Engineering<br/>Purdue University<br/>315 N. Grant Street<br/>West Lafayette, IN 47906</p> |  | <p>For significant contributions to manufacturing science in laser-based scalable nanomanufacturing processes, publishing high-quality journal papers and patents, and advancing the understanding of laser-matter interactions, including laser-induced shock deformation, additive processing, and phase transformation</p> |
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**BEN C. SPARKS MEDAL**

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| <p><u>Arun R. Srinivasa</u>, Ph.D.<br/>Texas A&amp;M University<br/>Department of Mechanical Engineering<br/>505 Mechanical Engineering Office Building<br/>Spencer Street<br/>College Station, TX 77843</p> |  | <p>For contributions to integrating technology to enhance the classroom learning experience and efforts to propagate design-thinking and decision-making as an integral part of an inclusive mechanical engineering curriculum</p> |
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**RUTH & JOEL SPIRA OUTSTANDING DESIGN EDUCATOR AWARD**

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| <p><u>Kamran Behdinan</u>, Ph.D., Fellow<br/>Department of Mechanical &amp; Industrial Engr.<br/>University of Toronto<br/>5 King's College Road<br/>Toronto, Ontario, M5S 3G8<br/>Canada</p> |  | <p>For developing world-class multidisciplinary engineering design programs and courses, in conjunction with industries and international institutes, for students around the world</p> |
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**SPIRIT OF ST. LOUIS MEDAL**

|   |   |
|---|---|
| <p><u>George A. Kardomateas</u>, Ph.D.<br/>Georgia Institute of Technology<br/>Department of Aerospace Engineering<br/>270 Ferst Drive<br/>Atlanta, GA 30332-0150</p> | <p>For significant contributions to damage tolerance of aircraft structures through the development of a novel nonlinear sandwich structural theory, fatigue crack growth experiments and prediction approaches, and efficient computational approaches</p> |
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**J. HALL TAYLOR MEDAL**

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|--|---|
| <p><u>Richard D. Campbell</u>, Ph.D., Fellow<br/>19975 Riverglen Lane<br/>Monument, CO 80132</p> | <p>For distinguished service and leadership to ASME's Bioprocess Equipment Standard Committee and various subcommittees, as well as contributions to welding technology</p> |
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**ROBERT HENRY THURSTON LECTURE AWARD**

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| <p><u>Robert O. Ritchie</u>, Ph.D., Fellow<br/>Department of Materials Science &amp; Engineering<br/>University of California, Berkeley<br/>324 Hearst Memorial Mining Bldg., MC 1760<br/>Berkeley, CA 94720</p> | <p>For seminal contributions to the understanding of the mechanics and mechanisms of the deformation and fracture properties of biological and engineering materials, and how those can be used to enhance the damage tolerance of structural materials</p> |
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**TIMOSHENKO MEDAL**

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| <p><u>Michael A. Sutton</u>, Ph.D., Fellow<br/>Department of Mechanical Engineering<br/>University of South Carolina<br/>300 S. Main Street<br/>Columbia, SC 29201</p> | <p>For contributions in the creation and development of fundamental theory, dissemination, and application of digital image correlation methods in solid mechanics, providing unprecedented measurement capabilities to the field of applied mechanics</p> |
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**SAVIO L-Y. WOO TRANSLATIONAL BIOMECHANICS MEDAL**

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| <p><u>Zong-Ming Li</u>, Ph.D., Member<br/>University of Arizona Arthritis Center<br/>Department of Orthopaedic Surgery<br/>1501 North Campbell Avenue<br/>P.O. Box 245064<br/>Tucson, AZ 85724</p> | <p>For the seminal discovery of sensorimotor control function and biomechanics of the human hand, and for translating knowledge into innovative clinical solutions, including relieving the symptoms of carpal tunnel syndrome</p> |
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**HENRY R. WORTHINGTON MEDAL**

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| <p><u>Paul U. Thamsen</u>, Dr.-Ing., Member<br/>Technical University Berlin<br/>Foersterstrasse 24a<br/>14612 Falkensee, Germany</p> | <p>For leadership and teaching roles in the research, optimization and improvement of pumps and related systems, including the transport and management of supply and waste water</p> |
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**S.Y. ZAMRIK PRESSURE VESSEL AND PIPING MEDAL**

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|---|--|
| <p><u>Hardayal S. Mehta</u>, Ph.D.<br/>6926 Castlerock Drive<br/>San Jose, CA 95120</p> | <p>For expertise in flaw assessment and environmental fatigue of nuclear pressure vessels and piping, and for dedicated service to the ASME PVP Division, and the Codes and Standards and Materials and Fabrication Technical committees</p> |
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LITERATURE AWARDS

BLACKALL MACHINE TOOL & GAGE AWARD

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| <p><u>Pablo Hernández Becerro</u>, Ph.D.<br/>Senior R&amp;D Engineer<br/>Helbling USA<br/>750 Broadway<br/>Somerville, MA 02144</p> <p><u>Mr. Joel Purtschert</u><br/>Research Associate<br/>Inspire AG<br/>Hermann Suter-Strasse 4<br/>4053 Basel<br/>Switzerland</p> <p><u>Konrad Wegener</u>, Ph.D.<br/>ETH Zürich<br/>Departament of Mechanical and Process<br/>Engineering<br/>Leonhardstrasse 21<br/>8092 Zürich<br/>Switzerland</p> <p><u>Josef Mayr</u>, Ph.D.<br/>Group Leader of Thermal Error Research<br/>Inspire AG<br/>PFA E81<br/>Technoparkstrasse 1<br/>CH-8005 Zürich<br/>Switzerland</p> <p><u>Mr. Jan Konvicka</u><br/>Senior Development Engineer<br/>Georg Fischer Machining Solutions<br/>Karl-Neuhaus-Strasse 13<br/>2502 Biel<br/>Switzerland</p> <p><u>Christian Buesser</u><br/>Lab Engineer<br/>GF Machining Solutions<br/>Solothurnstrasse 75<br/>2504 Biel<br/>Switzerland</p> <p><u>David Schranz</u><br/>Senior Research Engineer<br/>GF Machining Solutions<br/>Schilfweg 7<br/>2503 Biel<br/>Switzerland</p> | <p>For the paper titled "Reduced-Order Model of the Environmental Variation Error of a Precision Five-Axis Machine Tool"</p> |
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FREEMAN SCHOLAR AWARD

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|---|--|
| <p><u>Timothy E. Colonius</u>, Ph.D.<br/>California Institute of Technology<br/>1200 E. California Blvd.<br/>Pasadena, CA 91024</p> | <p>For the paper titled "Simulations and Modeling of Cavitating Flows"</p> |
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**GAS TURBINE AWARD**

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|---|---|
| <p><u>Tom Hickling</u><br/>University of Oxford<br/>Oxford Thermofluids Institute<br/>Department of Engineering Science<br/>Oxford, OX1 3PJ<br/>United Kingdom</p> <p><u>Li He, Ph.D., Member</u><br/>University of Oxford<br/>Oxford Thermofluids Institute<br/>Department of Engineering Science<br/>Oxford, OX1 3PJ<br/>United Kingdom</p> | <p>For the paper titled "Some Observations on the Computational Sensitivity of Rotating Cavity Flows"</p> |
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**EDWARD F. OBERT AWARD**

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| <p><u>Mr. G. Rafael Domenikos</u><br/>National Technical University of Athens<br/>Heron Polytechniou 9, Zografou<br/>Campus15780<br/>Athens, Greece</p> <p><u>Emmanuel Rogdakis, Ph.D.</u><br/>National Technical University of Athens<br/>Heron Polytechniou 9, Zografou<br/>Campus15780<br/>Athens, Greece</p> <p><u>Irene Koronaki, Ph.D.</u><br/>National Technical University of Athens<br/>Heron Polytechniou 9, Zografou<br/>Campus15780<br/>Athens, Greece</p> | <p>For the paper titled "Studying the Superfluid Transformation in Helium 4 Through the Partition Function and Entropic Behavior"</p> |
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**HENRY HESS EARLY CAREER PUBLICATION AWARD**

|  |   |
|--|---|
| <p><u>R. Renee Zhao, Ph.D. Member</u><br/>Department of Mechanical Engineering<br/>Stanford University<br/>452 Escondido Mall, Bldg. 2-520<br/>Stanford, CA 94305</p> <p><u>Mr. Rundong Zhang</u><br/>The Ohio State University<br/>201 W 19th Avenue<br/>Columbus, OH 43210</p> <p><u>Mr. Shuai Wu</u><br/>Stanford University<br/>418 Panama Mall<br/>Stanford, CA 94035</p> <p><u>Qiji Ze, Ph.D.</u><br/>Stanford University<br/>418 Panama Mall<br/>Stanford, CA 94035</p> | <p>For the paper titled "Micromechanics Study on Actuation Efficiency of Hard-Magnetic Soft Active Materials"</p> |
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**MELVILLE MEDAL**

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| <p><u>Glaucio H. Paulino</u>, Ph.D. Fellow<br/>Department of Mechanical and Aerospace Engineering<br/>Princeton University<br/>E320 Engineering Quadrangle<br/>Princeton, New Jersey 08544</p> <p><u>Ke Liu</u>, Ph.D. Member<br/>Peking University<br/>Department of Advanced Manufacturing and Robotics<br/>No.60 Yannan Yuan<br/>Beijing, 100871<br/>China</p> <p><u>Tomohiro Tachi</u>, Ph.D., Member<br/>University of Tokyo<br/>Department of General Systems Studies<br/>Komaba 3-8-1, Meguro-ku<br/>Tokyo 153-8505<br/>Japan</p> |  | <p>For the paper titled "Bio-Inspired Origami Metamaterials With Metastable Phases Through Mechanical Phase Transitions"</p> |
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**WORCESTER REED WARNER MEDAL**

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|--|--|---|
| <p><u>Kumbakonam Rajagopal</u>, Member<br/>Department of Mechanical Engineering<br/>Texas A&amp;M University<br/>3123 TAMU<br/>College Station, TX 77843</p> |  | <p>For seminal contributions through a series of papers on continuum mechanics in the field of mixtures</p> |
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**ASME Board of Governors**  
**Agenda Item**  
**Cover Memo**

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**Date Submitted:** May 23, 2022  
**BOG Meeting Date:** June 19, 2022  
**To:** Board of Governors  
**From:** Committee of Past Presidents  
**Presented by:** Leila Persaud, Manager Honors & Fellows  
**Agenda Title:** CY 2021 Fellows Listing

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Attached for information is the listing of ASME Fellows elected in CY 2021.

**Proposed motion for BOG Action:** None

**Attachment:** Yes

**2021 ASME Fellows**

Daryush Aidun  
Prasad Akella  
Paul Allison  
Senthil Anantharajan  
Jose Andrade  
Arindam Banerjee  
Pinhas Ben-Tzvi  
Jeffrey E. Bischoff  
Jonathan Butcher  
Mark Campbell  
Richard Campbell  
Jiangtao Cheng  
Heejin Cho  
Stephen Clay  
Edmundo Corona  
Brittany Coats  
Kristin Cody  
James Cotton  
John P. Coulter  
Samantha Daly  
Cassandra De La Garza  
Robert Dell  
Eduardo Divo  
William Emblom  
Benjamin Fregly  
Bhupendra Ghandi  
Ali Gordon  
Leonard Grillo  
Eckhard Groll  
George Haller  
Roy Hartfield  
Nurul Hasan  
Jill S. Higginson

Jonathan Hopkins  
Tetsuya Iwasaki  
Robert Jackson  
Paramsothy Jayakumar  
James Jordon  
Suhas S. Joshi  
Jeyhoon M. Khodadadi  
Zhenyu J. Kong  
Katsuo Kurabayashi  
Spencer Lake  
Thomas Lavertu  
Bong Jae Lee  
Poh Seng Lee  
Jingjing Li  
Chunlei Liang  
Wojciech Lipinski  
Ronald Lippy  
Elizabeth Loba  
Scott Mao  
Rajiv Manchanda  
Steven P. Marra  
Konstantin Matveev  
Randall Mathison  
Elia Merzari  
Nenad Miljkovic  
S.O. Reza Moheimani  
Veerendra Mulay  
Roger Narayan  
Carl Nelson  
Jin Oh Hahn  
Karen Ohland  
Brian Olson  
Seungbae Park

Radu Pavel  
Heidi-Lynn Ploeg  
Mohammad Pourgol-  
Mohamad  
Dong Qian  
Sivakumar Rathinam  
Carl-Ernst Rousseau  
Taylor Shie  
Stephen Sarles  
Tony L. Schmitz  
Peter K. Senecal  
Gurpreet Singh  
Babak Shotorban  
Nabil Simaan  
Kiran Solanki  
Stephen M. Spottswood  
Kalyan Srinivasan  
Li Shu  
Richard Stevenson  
Francesco Travascio  
Pablo A. Tarazaga  
Lorenzo Valdevit  
Kenneth Van Treuren  
Jonathan Vande Geest  
Xianqiao Wang  
Yan Wang  
Pak Kin Wong  
Lesley Wright  
Qingsong Xu  
Sheng Quan Xie  
Yao-Joe Yang  
Kejie Zhao

**ASME Board of Governors  
Agenda Item  
Cover Memo**

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**Date Submitted: May 23, 2022**  
**BOG Meeting Date: June 19, 2022**

**To: Board of Governors**  
**From: Various Units/Sectors**  
**Agenda Title: Unit/Committee Reports to the Board**

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**Agenda Item Executive Summary:**

Attached are the following reports to the Board, highlighting the top three accomplishments, challenges, and other information:

- Auxiliary
- Committee on Honors (COH)
- Committee on Organization and Rules (COR)
- Committee of Past President's (CPP)
- Diversity, Equity and Inclusion Strategy Committee (DEISC)
- History & Heritage Committee (H&H)
- Industry Advisory Board (IAB)
- Member Development and Engagement Sector (MDE)
- Philanthropy Committee
- Public Affairs and Outreach Sector (PA&O)
- Scholarship Committee
- Standards and Engineering Services (SES) – Engineering Operations
- Standards and Engineering Services (SES) – Standards Operations
- Student and Early Career Development Sector (SECD)
- Technical and Engineering Communities Sector (TEC)
- VOLT Academy

**Proposed motion for BOG Action:** For information only.

**Attachments:** Reports attached.

**Report to the Board**  
Auxiliary  
November 2021– June 2022

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**Top Key Accomplishments:**

1.

|   |  |   |  |
|---|--|---|--|
| High School Scholarships - awarded 12 Scholarships @ \$7,000 = \$84,000 | Undergraduate Scholarship - awarded 17 Scholarships @ \$3,000 = \$51,000 | Graduate Scholarships Awarded 6 scholarships @ \$3,000 = \$18,000 | International Scholarships- Awarded 2 Scholarships @ \$3,000 = \$6,000 |
| 30 total applications   | 27 total applications  | 12 total applications   | 3 total applications   |
| 8 Females   | 11 Females   | 5 Females   | 1 female   |
| 6 underrepresented Group  | 10 Underrepresented Group  | 6 Underrepresented Group  |  |

2. Discussions will continue at the Auxiliary’s meeting on June 8, 2022, regarding the 100<sup>th</sup> Anniversary of the ASME Auxiliary in 2023. Suggestions for the celebration will be provided after the meeting.

3. The Auxiliary has voted on their National Officers for 2022-2023, see below.

**Challenges:**

The Auxiliary has a difficult time engaging new members to join their group and read scholarship applications. Will review outreach at their next meeting.

**Other information:**

National Officers for 2022-2023

|                          |                      |
|--------------------------|----------------------|
| President                | Ella Baldwin-Viereck |
| Executive Vice President | Ada Ezekoye          |
| Recording Secretary      | Vatsala Menon        |
| Corresponding Secretary  | Lynn Gerber          |
| Treasurer                | Stella Seiders       |
| Student Loan Treasurer   | Ed Seiders           |

**Report to the Board**  
Committee on Honors  
November 2021 – June 2022

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### Top Key Accomplishments

1. COH approved the establishment of two new Society Level Awards.
  - ASME Edward S. Grood Interdisciplinary Team Science Medal in Bioengineering  
This award seeks to recognize a team of researchers who have collaboratively carried out impactful interdisciplinary science and engineering research relevant to the ASME Bioengineering Division. The award would encourage and recognize diverse teams, acknowledging that diversity is key to innovation and often needed to achieve excellence.
  - ASME DeVor-Kapoor Manufacturing Award  
This award recognizes an individual or a team of researchers for a body of impactful achievements in the field of manufacturing. The impact must be clearly documented and supported by evidence of long-term contributions to one or more of the following exemplar areas: pioneering research, innovative technology development/transfer, inspirational mentorship, and ground-breaking scholarship/writings.
2. A campaign to increase awareness of the Awards Program was initiated using social media, ASME Journals and ASME MER. These efforts cumulated with nominations submitted for the Melville Medal, Henry Hess Early Publication Award and Thomas A. Edison Patent Award, which were not submitted in the last few years.
3. A new online platform, Airtable, was created to replace the current nominating process and is specific to each award. This new platform streamlines the nominating process and workflow by providing clear and comprehensive instructions. The airtable nomination form can be viewed at <https://airtable.com/shrkISRZhvuamf789>. The current process does not use a shared database, making it difficult to gather uniform relevant information.

With Airtable, we will be able to access more accurate demographic information (pending legal/HR approval) that can be compiled into meaningful statistics for DEI purposes. It will also make it easier to track and publicize awards' metrics as all the information will be in one location.
4. The Committee on Honors successfully conducted a DEI Honors & Awards training with the Special Award Committees and the Technical Divisions. As such, the Committee on Honors and the General Awards Committee added five women and under-represented minority members to its committees.

### Challenges

Increasing the pool of applicants from industry continues to be a challenge. The new on-line application provides resources on completing a nomination package which would help industry applicants.

### Other

COH continued its triennial review of the Rules of Award to ensure that the procedures reflected in the documents corresponded to those of the award committees. This ongoing activity helps to identify areas of concern that must be addressed, as well as to provide the Committee and Special Award Committees the opportunity to make suggestions relative to procedures.

Award recipients are used as pipeline for membership on Special Award Committees, General Award Committee and Committee on Honors.

**Report to the Board**  
Committee on Organization and Rules  
July 2021 – June 2022

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**Top Key Accomplishments:**

1. COR reviewed 44 By-Laws and recommended changes that the Board of Governors adopted. This included updating DEI-related language.
2. COR reviewed proposed changes to 18 Society Policies and recommended changes that the Board of Governors adopted. This included DEI-related language.
3. The Committee reviewed nine internal appointments or reappointments and ten external appointments or reappointments and made recommendations that the Board of Governors approved. COR continued to strictly enforce the examination process of appointments and re-appointments to make sure they followed Society Policies. It paid particular interest to ensure diversity in the appointments.
4. The Committee performed the required annual review of the Nominating Committee Manual and made suggestions for the Scholarship Committee Operation Guide.

**Challenges:**

As ASME continues to evolve, the COR must remain agile to make necessary changes to its governance documents quickly and efficiently. COR is responsive to these needs and brings a corporate history and continuity to the process. Society units must keep in mind, however, that the Committee must do a thorough review of the changes the units propose because they may have implications for other units that the proposing unit may not be aware of. COR helps to ensure this given that its members have experience in all five ASME Sectors and the Board of Governors.

**Other information:**

Emily Boyd will serve another term as the Chair for 2022-23.

Parisa Saboori joined the Committee in October 2021 to fill a vacancy caused by the resignation of Nael Barakat.

The Committee will review all Operation Guides in FY23 with respect to DEI-related language.



**Report to the Board**  
Committee of Past Presidents (CPP)  
November 2021 – June 2022

**Top Key Accomplishments:**

1. The Committee of Past Presidents supported to advance the Fellows Review Committee’s (FRC) ASME’s Diversity, Equity, and Inclusion Initiative by targeting the District Leaders and Technical Divisions Members to actively seek nominations of women and underrepresented members. Madiha Kotb, Chair of the FRC, recently did a podcast and spoke on the importance of having diversity among those members with the Fellow Grade of Membership.
2. CPP is working with the FRC on creating a DEI Category to encourage a more diverse pool of Fellow nominees.
3. Terry Shoup has been nominated as the next chair of the COH and will begin serving in the coming program year subject to the approval of the BOG.

**Challenges:**

It continues to be a challenge to get female members nominated to Fellow grade. By targeting eligible females in ASME’s membership data base and identifying past nominators, CPP hopes this will increase the number of female Fellows. In 2021, 98 members were elevated to Fellow grad and 11 were female.

**Other information:**

Individual CPP members have encouraged their ASME peers to nominate deserving ASME members as Fellow nominees. The CPP refrains from making direct nominations due to their involvement in the review process.

CPP responsibilities for Fiscal Year 2023

|                | <u>CPP Officers</u> |            | <u>Nominating Committee Advisors</u> | <u>Ethics Chair - 3 year term</u> |            | <u>Fellows Review</u> |         |
|----------------|---------------------|------------|--------------------------------------|-----------------------------------|------------|-----------------------|---------|
| July 2022-2023 | Charla Wise         | Chair      | Per invitation**                     | Sue Skemp(3) (3yr)                | Chair      | Bob Sims              | Chair   |
|                | Said Jahanmir       | Vice Chair | Per invitation**                     | Charla Wise                       | Vice Chair | Keith Roe             |         |
|                | Rich Laudenat       | Secretary  | Per invitation**                     |                                   |            | TBD                   |         |
|                |                     |            |                                      |                                   |            | Madiha Kotb           | Advisor |
|                |                     |            |                                      |                                   |            | Charla Wise           |         |

\*\* Appointment of Nominating Committee Advisors is by invitation of the NC according to the rules of engagement in the NC manual and the CPP Operations Guide. The upcoming appointments will be made in July 2022.

## **Report to the Board**

Diversity, Equity, and Inclusion Strategy Committee  
November 2021 – June 2022

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### **Top Key Accomplishments:**

1. The DEI Strategy Committee has identified key diversity indicators in several areas, including members, volunteers, honors and award recipients, conference presenters, among others. The committee is identifying strategies to effect positive change in the indicators it has identified. The Committee expects to have its final list of recommended strategies ready by the beginning of FY23.
2. The DEI Strategy Committee provided a new training on unconscious bias for members of the Nominating Committee to help them prepare for their evaluation of BOG candidate packets and the selection meeting. The Committee also provided support for a DEI training for members of all ASME Honors and Award committees.
3. Rollout of the DEI Toolkit has continued through the year, with volunteers from the DEI Strategy Committee presenting on the Toolkit to several Sector Councils, committees, and other groups.

### **Challenges:**

- As the DEI Toolkit roll-out continues, gathering information on if, when, and how the Toolkit is being used by volunteers is still a challenge. We have anecdotal information, but no formal way of tracking usage.

### **Other information:**

- Looking ahead, in early FY23 the committee will be reviewing the DEI Toolkit materials for any needed updates or expansion, as well as soliciting feedback on the Toolkit from ASME groups that have used it.
- The American Welding Society requested permission to share ASME's DEI Toolkit with its members. The Committee is pleased to share the value of the Toolkit to the broader community.

**Report to the Board**  
History & Heritage Committee  
November 2021 – June 2022

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**Top Key Accomplishments:**

1. A newly approved Historic Mechanical Engineering Landmark--The Ottawa, Kansas Combined Cycle Turbo Generator--is one of the world's first pre-engineered gas turbine cycle power plants that went into operation in North American and Europe in the 1960s, gaining world prominence in the 1990s. The date of designation is to be determined.

Designated virtually in December 2021 was the Standardized Steam Property Tables and Carnot's Reflection on the Motive Power of Fire. Vital and invaluable compilations of data on Thermodynamics, Standardized Steam Property Tables have been universally adopted internationally. Carnot's Motive Power of Fire was among the earliest significant attempts to understand and explain the theory of heat engines.

2. Dr. Hong-Sen Yan was named the 2021 winner of the ASME Engineer-Historian Award for his numerous works on the history of mechanical engineering, published in English and Chinese including: *Reconstruction Design of Lost ancient Chinese Machinery*. No in-person presentation due to pandemic restrictions.
3. As of March 2022, the gross revenue for soft and hardcover volumes and eBooks totaled \$5452.00 from the Committee's recently published book, *Chronicles of Mechanical Engineering in the United States*. It is a collection of historic articles on mechanical engineering, published in ME Magazine over the last 50 years.

**Challenges:**

- The Committee is searching for a Chair for H&H for FY 2022-23, due to the resignation of current Chair Terry Reynolds.
- Based on ASME's encouragement of a more diverse presence in our membership, the History & Heritage Committee has engaged in ongoing discussions to adjust their roster of volunteers and is actively working to make additions/alterations.

**Other information:**

- The Committee is broadening its engagement with membership in the MDE and SECD Sectors to promote their activities. An action plan will be presented to the Executive Committee.
- Production has begun on the ASME History & Heritage Program's 50<sup>th</sup> Anniversary informative video, for promotion on social media, and to be distributed in June 2022.
- A series of promotional videos have been developed in support of virtual landmarks including the Finite Element Analysis, John Smeaton's Water Wheels, and Computational Fluid Mechanics/Navier Stokes Equations.
- The History & Heritage Committee continues to actively contribute to the Engineering Technology History Wiki consortium site (ETHW), which garnered 470,000 users in Q4 2021 and Q1 2022. Site views are buoyed by an annual Google Ad Grant, which provides \$100,000 of ad placement support to non-profit organizations. IEEE estimates that half of our traffic is due to Google Ad Grants.

**Report to the Board**  
Industry Advisory Board  
November 2021 – June 2022

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**Top Key Accomplishments:**

1. The Industry Advisory Board (IAB) virtual meeting was held on April 12, 2022. The Strategy department utilized this meeting to get feedback from the IAB on the updated ASME strategy. The topics of hydrogen and small modular nuclear reactors (SMR) were discussed by meeting participants in breakouts.
2. IBM Research and GM Research have recently re-joined the IAB. Dr. Anna Topol and Dr. Jeff Abell are the respective company representatives.

**Challenges:**

1. The IAB meeting format has not translated exactly to the virtual meeting environment because of the reduced time for meetings and the conflicting strains on people's attention. With the return to in-person meetings planned for FY23, we anticipate more discussion time for IAB meetings, helping to increase meeting effectiveness.
2. The IAB has had some member retirements during COVID, so the Executive Committee is seeking memberships from 3-4 other companies over the next year.

**Other information:**

1. At the meeting, Dr. Alex Hoffs of Power Systems Mfg. was approved as the next IAB Chair, succeeding Scott Stallard of Black & Veatch. Joseph Budzinski of Johnson and Johnson MedTech and Michelle Blaise of ComEd have agreed to serve on the IAB Executive Committee beginning in FY23.
2. Johnson and Johnson MedTech has offered to host the IAB fall meeting at its Vision Care facility in Jacksonville, Florida. The date is still to be determined.

**Report to the Board**  
Member Development and Engagement  
November 2021 – June 2022

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**Top Key Accomplishments:**

1. The MDE is launching new funding programs for Professional and Student Sections to replace section activity funding. The **Grants for Local Outreach and Engagement (GLOE)** for professional sections and the **Student Community Grant Program** for student sections have been established to provide resources for ASME sections to increase local engagement and are designed to create more flexibility for volunteers to engage locally. GLOE grant amounts available range from \$100.00 to \$2,500.00 per year. Both programs have **Start Up Grants** available to members who wish to explore establishing a new professional or student section or interest group. The goal of these funds is to provide a “kick-off” event for local members and engineers to gather and/or recruit volunteers for a new group. Both programs also offer **Local Outreach and Engagement Grants** for established section leadership teams to conduct local events and activities. The GLOE program offers **Early Career Grants** to early career members to organize events focused on student and early career engineers. The student program offers **Junior and Senior Grants** which are available to upper-class ASME members in their Junior or Senior year to organize events focused on advancing soft skills that assist in transitioning from a student to professional member. Student grants amount range from \$100.00 to \$500.00.
2. The focus on student sections remains a high priority. In November, the sector received a financial commitment from a donor through the ASME Foundation for \$80,000 over 10 years to launch the SMART program. The donation funds memberships for students to introduce them to the program and to ASME’s benefits of membership. As part of this program, students are encouraged to connect and interact with each other and with SMART mentors through the private LinkedIn group established and personal connections made. Staff post articles, messages, and links weekly related to careers, funding for college and other relevant information. Currently, there are 66 participants in the program. It is expected that the program will expand for the 2022 fall semester.
3. The energy of the international market continues to strengthen. The current formation of a new sub section in Sri Lanka demonstrates the interest and the effect of the local collective ASME offers engineers. At the time of formation, 28 of the 38 total members in the country signed the petition to start the process. Membership has now grown to 50, with a majority of the members being students (32 of 48), and the new growth is likely a result of the active outreach and promotion during and after the formation process. Currently, section formation is in process in Germany, Indonesia, Bangladesh, New Zealand, and Colombia is reactivating post Covid. As well, there is an organization-wide effort underway in India that may see an increase in the number of Professional Sections there.

**Challenges:**

Direct communication with members continues to be a challenge. While we face challenges with the GMEC system and volunteers not receiving emails via the system, we also face the reality that email is a stale mode of communication. Many students tell us they simply do not read their emails. They tell us they use internal university communications channels like Slack and Teams but rarely check the “old” email accounts. One good news story is that several student leaders have told us that now that they have a staff point person at ASME, they do look for her emails and know that they are important messages. As we move into the new fiscal year and the new possibilities of the DX project, we need consider ever changing communications, especially with students and early career volunteers.

**Other information:**

The Group Leader Development Conference (GLDC) will be rebranded as the **Section Leader Networking and Idea Exchange**. The SLNE will provide an opportunity for professional section leaders to network, discuss successes and challenges, and share ideas and best practices. SLNE will take place Friday evening, June 10th and Saturday morning, June 11, 2022. This virtual event is planned by volunteers for volunteers.

**Report to the Board**  
Philanthropy Committee  
November 2021 – June 2022

**Top Key Accomplishment:** Continued to transform ASME’s business model for Philanthropy and the Foundation to help ensure a substantial increase in funds raised to support ASME programs and launch select new ones, an important milestone for the long-term sustainability of the Society’s core mission:

1. **Completing second year of Capital Campaign (“Campaign for Next Generation Engineers”) fundraising outreach to a mix of IAB member companies; individual ASME leaders, Divisions, Sections, and Committees; as well as an array of prospective donors who are “new” to ASME. Aggregate two-year revenue generated for Campaign at end of FY22 will be in \$9 million range.**
  - Developing a pipeline of repeat donors, with several individuals, companies and foundations making 2<sup>nd</sup> and 3<sup>rd</sup> annual contributions. Some corporate donors that joined early in the Capital Campaign are considering additional funding that would extend their support to other program areas—for example, funders of our K-12 STEM education program also donating to the community college initiative, or scholarships donors extending support to the HBCUs program.
  - Deepening outreach within ASME community:
    - o Building on Ken Balkey’s work to raise funds for scholarships from Standards & Certification community, staff had a significant presence at Code Week for first time, making brief presentations about scholarships as well as “legacy” (planned) giving to 11 committees, with approval secured from two to actively fundraise among their members and volunteers
    - o Initiated dialog with prospects suggested by engaged volunteers, including:
      - Enbridge, resulting from an introduction by a BoG member
      - Rockefeller Foundation Board Chair, the result of a collaboration between two Philanthropy Committee members
      - Current and former GE executives, as result of outreach by a Campaign Cabinet member/longtime Volunteer
      - Top five wind energy producers in U.S., the result of an introduction by Foundation Board Chair
    - o Competed in “Medtronic Consulting Sprint.” One of 36 non-profits selected—from a larger field of applicants—to receive a pro-bono employee engagement grant. Worked with (IAB member) Medtronic volunteer employees to further develop an element of ASME’s K-12 programming; deepening relationship with potential for significant long-term funding
  - Fostering Campaign Cabinet momentum by encouraging engagement in campaign, input regarding initiatives, and participation in relevant events, such as *Increasing Women in Mechanical Engineering 2022 Conference*
  - Continuing to cultivate relationships with select industry leaders -- extending invitations to participate in events/sourcing key contacts within professional networks. C-suite engagement underway with top corporate prospects (e.g., Boeing and Siemens)
  - Community College and HBCU Pilot Programs enabled team to approach prospective donors from beyond the traditional engineering community, reaching a variety of leading companies in technology, professional services, banking, and insurance. Currently finalizing agreement with Tata Consultancy Services for a pilot program with an HBCU, and discussions are underway with other professional services organizations (e.g., Accenture and Deloitte). Also conducting interviews with industry leaders about their companies’ involvement and interest in apprenticeships
2. **Made noteworthy progress building Capital Campaign infrastructure**
  - Continuing to sharpen campaign messaging to reinforce objective of enhancing equity in engineering; also, currently implementing messaging about ASME’s leadership in sustainability across all materials
  - Building awareness of ASME’s philanthropic programs among internal/external audiences, primarily through assertive promotion of goals, events, and achievements on ASME digital communications platforms (ASME.org, ASME’s social media channels, YouTube, ASME Foundation website and newsletter, as well as in print and digitally via a monthly column in ME Magazine.) Working with external vendor to substantially upgrade direct mail/email solicitations
  - Recruiting two new Foundation Board members, who enhance leadership diversity (often a requirement of grant-making entities)

**Challenges:**

1. Balancing the varying workstreams and sometimes competing priorities involved in building major new effort can impede reaching velocity/volume of outreach needed to ensure success
2. Identifying/engaging appropriate ASME “champions” among prospective corporate donors
3. Attracting and securing suitable candidates for two key positions on staff team amid the “great resignation”

**Other Information:** All of us on the Philanthropy Committee and Philanthropy & Programs Departments’ staff remain profoundly grateful to the Board of Governors for the generous \$5 million commitment to the Capital Campaign. That expression of your confidence in the programs’ effectiveness and the campaign itself has an enormous impact—in many different ways.

**Report to the Board**  
Public Affairs & Outreach (PAO) Sector  
November 2021 – June 2022

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**Top Key Accomplishments:**

1. **Expanding ASME’s policy influence:** The Global Public Affairs (GPA) team, which includes Government Relations (GR), continued to host virtual technical/policy discussions, including a March 2022 congressional briefing on “Advanced gas turbine research and development” and an April town hall with the International Space Station (ISS) National Lab. Building on its inaugural success last year, the GR team also launched ASME Policy Impact 2022; this virtual and recorded event (May 17-19) included timely policy discussions for over 130 live attendees, with a keynote address from U.S. Under Secretary of Commerce/NIST Director Laurie Locascio, panels with Department of Energy and ISS National Lab officials, and remarks by U.S. Representatives Sean Casten (D-IL-06) and Young Kim (R-CA-39). ASME also convened virtual congressional visits for 65 members in 88 meetings—a membership benefit that allows for grassroots interaction with policymakers and the showcasing of ASME’s reach on Capitol Hill and the technical expertise of ASME’s members thereon.
2. **Increasing ASME’s engineering education footprint:** ASME convened the Mechanical Engineering Education (MEED) Leadership Conference virtually (March 10-11, 2022), with over 800 registrants and an India-focused track with four sessions on the first day. Topics included extending ME/MET degrees, global collaboration, advancing DEI, and revolutionizing ME departments. The Committee on Eng. Education, partnering with the ASME Foundation, is also revitalizing ASME’s Graduate Teaching Fellowship that awards \$5,000 scholarships to 3-4 PhD students per year. In terms of K-12 STEM education, ASME also kicked off its grant-supported collaboration with Amazon Web Services (AWS).
3. **Strengthening ASME’s global development investment:** Engineering for Global Development (EGD) was active in FY2022 in furthering ASME/Engineering for Change (E4C)’s thought leadership. In January, the group convened a stakeholder summit of leaders from industry, academia, government, and nongovernmental organizations (NGOs)—contributing to a forthcoming whitepaper on the “engineering workforce driving sustainable development.” In the same vein, 55 E4C Fellows were selected (1,846 applicants from 78 countries) and inaugurated on May 2. Additionally, Innovation Showcase (ISHOW) winners were awarded in mid-May (India cohort) and mid-June (U.S. cohort).

**Challenges:**

The uncertain nature of pandemic-related restrictions and in-person travel again pushed PAO events and activities to rely on virtual platforms. Despite general “Zoom fatigue,” the ASME Programs and GPA teams continued to bolster value-added content for ASME’s membership and external stakeholders, while reimagining ways to innovate and pivot virtually with a global mindset, encompassing the Sector’s units beyond EGD initiatives.

**Other information:**

The ASME Federal Fellows program is placing three Congressional Fellows on Capitol Hill: Julien Caubel (clean energy), Elisabeth Deeb (manufacturing), and Aditi Gupta (bioengineering); as well as two Federal Fellows in the White House Office of Science and Technology Policy (OSTP) and NIST’s Advanced Manufacturing National Program Office (AMNPO). Also, in April, ASME onboarded a new Senior Director of GR, Chris Connelly, who previously served as Chief of Staff to three Members of Congress.



**Report to the Board**  
ASME Scholarship Committee  
November 2021 – June 2022

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**Top Key Accomplishments:**

1. Created strategic initiatives that will expand ASME's reach and impact with (a) more diverse student populations and (b) community/technical college students. Engaged MAL volunteers to support a more strategic approach to ASME Scholarships.
2. Developed Alumni Engagement Roadmap - Engaged past ASME Scholarship Alumni to assist in furthering the engagement, awareness, reach and impact of the ASME Scholarships program.
3. Increased the number of scholarship evaluators by 60% to 38 volunteers to allow for a more appropriate evaluation workload and to set-up the program for future scholarship expansion.

**Challenges:**

1. According to our platform partner (ISTS), Scholarship applications were down across the board for this academic year, likely driven by an extended pandemic impact
2. Marketing & Outreach
  - Lack of awareness about available scholarships globally
  - Expanded to community and technical colleges – Many Community College and HBCU students feel intimidated by the ASME brand and were hesitant to apply because they felt their odds of securing a scholarship were low
3. Affiliations with other targeted engineering and community and technical college related organizations.

**Other information: Social Media**

Spotlighting past scholarship recipients on our Scholarship Alumni LinkedIn page and surveying past scholarship winners to self-identify their scholarship alumni status while collecting data to find out the role ASME can play to meet their needs.

**Report to the Board**  
Engineering Operations (SES)  
November 2021 – June 2022

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**Top Key Accomplishments:**

1. Program: *Quality Program for Suppliers: General Industry* -QPS program deployment in CA Connect. The new certificate program will support customers' application, financial, and certification processes.
  - a. Incorporated QPS as an acceptable alternative for establishing a quality management system in B31 series of standards. Working with other standards to also get QPS incorporated as an acceptable alternative to ISO9001.
2. Engagement & Outreach Team proactively reached out to certificate holders that were coming up for renewal in 2022. The response has been very positive with most of them submitting their renewal application ahead of schedule or just in time before certain financial fees may be necessary to avoid a lapse in certification.
3. Successfully completed committee required ASME Headquarters Internal Audit of Engineering Operations quality program in December 2021.

**Challenges:**

- 1) With the implementation of Multi-Factor Authentication, a number of our CA customers have experienced difficulty logging into their accounts in CA Connect. This has caused delays in the submission of application renewals, download of certificates, and payments. Staff has created workarounds while addressing the backlog of customer care cases.
- 2) CA Connect system slowness. This has been an ongoing issue, but we are proactively working with our vendors and the ASME IT team for a resolution for the next fiscal year.
- 3) The mandatory lockdowns in certain parts of the world prohibit ASME from being able to execute some of our certification audits. Trying to complete some of the audits via videoconference is not feasible/possible.

**Other information:**

- 1) EO supports all three Strategy Office Project Team initiatives involving Small Modular Reactors (SMRs), Clean Hydrogen, and Engineers' Lifelong Journey.
- 2) We anticipate the publication of Qualifications for Authorized Inspection Agencies (QAI-1) and Conformity Assessment Requirements (CA-1) will be published later this calendar year.
- 3) Over the past year we have seen a slight decrease in the number of certificates per company being applied for.
- 4) The conflict in eastern Europe is also disrupting the supply chain enough to cause some companies to hold off renewing their ASME Certificates of Authorization.
- 5) As we are currently within the Implementation Phase of the C&S Connect Project, business SMEs & InfoBeans have been diligently working together to complete design session for all business modules. As Personnel Management & Standards Development modules have been developed and completed, business SMEs and InfoBeans are currently attending weekly design sessions for ANSI module while reviewing user stories pertaining to the design module.

**Report to the Board**  
Standards Operations (SES)  
November 2021 – June 2022

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**Top Key Accomplishments:**

1. New Publications
  - a. Standard: ASME B30.32-2021, Unmanned Aircraft Systems (UAS) Used in Inspection, Testing, Maintenance, and Load-Handling Operations
  - b. Standard: ASME Y14.45-2021, Measurement Data Reporting
  - c. Standard: ASME PTC 52-2020, Concentrating Solar Power Plants
  - d. Non-standard publication: STP-PT-095, Local Post Weld Heat Treatment: Thermal Gradient Study
  - e. Non-standard publication: NTB-5-2022, Guidance for Determination of Risk-Informed Safety Classification for Light Water Reactor Nuclear Facility Pressure Retaining Components
  - f. Non-standard publication: STP-PT-094, Determination of Stress Strain Curves of 304, 304L, 316, 316L for Strain-Based Design Criteria
  - g. On May 4, 2022, Tom Costabile signed the UNECE Declaration for Gender Responsive Standards & Standards Development on behalf of ASME. ASME's signing of the declaration aligns with ASME's DEI strategy and values and will strengthen our standards development. UNECE initiative info: <https://unece.org/gender-responsive-standards-initiative>. ASME SES has also drafted an "internal gender action plan" to outline staff support of the UNECE declaration and other initiatives to help ensure ASME remains at the forefront of best practices for gender responsive standards development.
2. May 2022 BPV Code Week was convened as a face-to-face event for the first time in over two years. The event was held at the Sheraton New Orleans from May 1 – 6, 2022, and featured approximately 125 individual meetings. Many committees that adapted to virtual meetings during the seven previous BPV Code Weeks chose to again meet virtually during the week prior to the in-person event.

**Challenges:**

1. Collaborative SES teams have advanced the proposed Rev. 19 of the ANSI-accredited "Procedures for ASME Codes and Standards Development Committees". Staff developed responses to the first-consideration ballot comments from members of the Board on Council Operations (BCO), and in several instances revised the draft proposal. The recirculation ballot of the proposal was distributed to BCO on 4/29/2022 with a closure date of 5/31/2022.
2. SES staff continues to contribute to the development of the C&S Connect replacement. ASME IT staff and "Digital Transformation" (Dx) teams are engaged in assessing projected compatibility with envisioned enterprise digital platforms.

**Other information:**

1. ASME Nuclear Codes and Standards Staff will speak at the 4th CORDEL Regional Workshop titled, "Harmonization to Support the Operation and New Build of NPPs including SMRs". The event is hosted by the World Nuclear Association.

## Report to the Board

Student and Early Career Development (SECD) Sector  
November 2021 – June 2022

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### Key Accomplishments:

- **Continued digital engagement with E-Fest and EFx programming** – SECD continued to host two marquis events (E-Fest Careers/Fall & E-Fest Digital/Spring) which collectively drew 9,000+ registrants representing 66 countries. Attendees totaled over 1,974 from 65 countries. We have seen some decline in digital event attendance which we note below in the challenges section. Additionally, we hosted five digital EFx events from schools in India, Colombia, Mexico, Peru, and Germany. The EFx events collectively drew just under 2,000 registrants representing 37 countries. Attendees totaled 806 from 20 countries.
- **FutureME** – SECD kicked off the build of the FutureME (formerly Career Engagement Center) application: a suite of tools geared toward early career engineers. An alpha version consisting of three features, Labor Market Intelligence, Opportunity Connector and Resource Center, through a IAM-integrated user experience will be released in June 2022.

### Challenges:

- There has been some drop off in digital attendance and in particular with E-Fest competitions. This has been due to digital event fatigue and the demand for the return of in-person events.
- We were not able to introduce tiered offerings or premium offerings available for ASME members at E-Fest Careers due to technical constraints. However, we anticipate that these technical constraints will be mitigated in the near future with ASME's continued rollout of DX. In the interim, we will be boosting membership based on the host school incentive model noted below.

### Other information:

- FY23 plans E-Fest and EFx
  - Host in-person EFx events, E-Fest events continue digitally to capture those students/early-career engineers that may not be able to travel to an in-person event. Additionally, we plan to enhance and expand fully digital competitions.
  - Include a financial and membership incentive/conversion model built into E-Fests and EFx events for host schools.
  - Partner with and align E-Fest Careers with ECEPC and the FutureME platform and content.
- The go-live of the FutureME application will take place in Fall of 2022 and will include additional features, such as the Opportunity Connector and Career Roadmaps.

**Report to the Board**  
TEC Sector  
November 2021 – June 2022

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**Top Key Accomplishments:**

1. All TEC Council positions appointed and confirmed. Established roles and responsibilities for Vice Chairs and MALs to include 1 vice chair responsible for Division and Research Committee welfare and one vice chair directly responsible for the Technology Groups. MALs initiatives include leading a task force for updating the conference share financial agreement and another task force to enhance industry engagement in TEC activities, among other activities. Additionally, we plan to have a revised draft of the TEC Operating Guide for review by the Committee on Organization and Rules, later this year.
2. Technology Groups – The Gas Turbine Technology Group (in collaboration with the Space Technology Group) conducted a Space Power & Propulsion workshop. As a result of information gathered in the workshop, the GTTG will begin planning an in-person Space P&P Conference. GTTG and Clean Energy TG have collaborated on a hydrogen storage plenary session being presented at Turbo Expo in June.

The Digitalization TG has made more progress in working with L&D to create a digitalization pilot course. They have also launched the DigETalk webinar series. This will be used as a springboard to amass an audience for a future digitalization conference (DigECon).

3. All 2022 conferences after May 2022 are planned to be held as in-person conferences. The first two conferences are OMAE and Turbo Expo happening in June.

**Challenges:**

As we return from virtual events under COVID rules, many of our constituents still are unable to travel, so we have budgeted an approximate 40% reduction in our overall numbers for conferences from 2019. Since then, we are experiencing even further reductions in physical attendance due to COVID restrictions in countries in Asia, and new sanctions against Russia and Belarus. However, we anticipate that some attendees who are unable to travel due to COVID restrictions, will register and participate in the on-demand offerings of our conferences.

**Other information:**

The TEC Sector strategy meeting was to be held in Rotterdam June 13-14, 2022. Due to COVID testing restrictions and to reduce risk to our volunteers, this meeting will be rescheduled to another date and location.

**Report to the Board**  
VOLT Executive Committee  
November 2021 – June 2022

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**Top Key Accomplishments:**

1. The second VOLT Cross-Sector Collaboration Accelerator took place in May 2022 with 22 participants from across ASME. This month-long program is blend of large group, small group, and asynchronous learning. The participants are existing and emerging volunteer leaders who are expected to move into leadership roles within the next 3 years. The focus is on increasing understanding of ASME at the enterprise level, building relationships among emerging leaders across sectors, and advancing collaboration.
2. VOLT has developed a strategy around its Leadership Workshops, which are open to all volunteers. With the move to virtual learning, VOLT has increased the number of workshops from two to three per year and instituted a regular schedule, with workshops offered every October, February, and June. VOLT is also soliciting input on topics that fit the needs and interests of ASME volunteers. The February workshop was “Effective Mentoring for All Generations,” presented by Dr. Tim Elmore, founder and CEO of Growing Leaders. 50 volunteers from across the Society participated and reviews were positive.
3. The ECLIPSE Alumni Group launched a new program to engage alumni called Engineering Stories with the ECLIPSE Alumni Group. These quarterly virtual events feature program alumni sharing their own engineering story and discussing how the leadership skills gained through ECLIPSE, MLP, or LDI contributed. The January 2022 event featured Stacey Swisher Harnetty as the speaker and the April 2022 event featured Michael Woodmansee, Ph.D., P.E. These events provide an opportunity to network and promote the ECLIPSE program.

**Challenges:**

- VOLT is working to identify new ways of marketing programs to target audiences, as our marketing emails are not as effective as we would like.
- Zoom fatigue and increased constraints on people’s time are also a challenge with online meetings and events.

**Other information:**

- There will be an ECLIPSE event on June 19-20 at the 2022 Annual Meeting for the ECLIPSE classes of 2021, 2022, and 2023.
- The next VOLT Leadership Workshop will be on June 22, 2022. The topic is “Balance: Carving Out Time for What’s Most Important to You.”
- The next Engineering Stories with the ECLIPSE Alumni Group will be on July 28, 2022.
- The VOLT Executive Committee will hold a planning meeting September 9-11, 2022.
- This summer VOLT will evaluate year one of the Volunteer Leadership Pathway pilot and identify needs for continuing and scaling up the program.