



National Aeronautics and  
Space Administration

# State of the Profession - SMD Initiatives

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# Nasa Core Values



Inclusion – NASA is committed to a culture of diversity, inclusion, and equity, where all employees feel welcome, respected, and engaged.

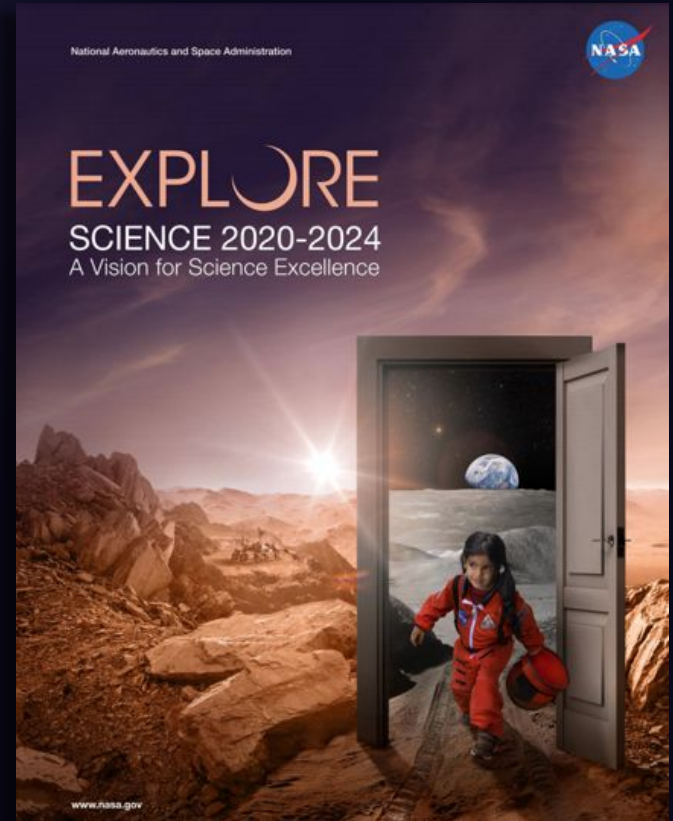
To achieve the greatest mission success, NASA embraces hiring, developing, and growing a diverse and inclusive workforce in a positive and safe work environment where individuals can be authentic.

This value will enable NASA to attract the best talent, grow the capabilities of the entire workforce, and empower everyone to fully contribute.

# Science Vision 2020-2024

## Excellence Through Inclusive, Diverse Teams

- Strategy 4.1 Increase the diversity of thought and backgrounds represented across the entire SMD portfolio through a more inclusive and accessible environment.
- In alignment with the NASA core value of Inclusion and SMD Science Plan, we seek to foster a community where everyone feels welcome, included and valued.
- SMD's goals are to develop a workforce and scientific community that reflects the diversity of the country and to instill a culture of inclusion across its entire portfolio.



# SMD Anti-Racism Action Group (ARAG)

- **Vision:** Address lack of equity and inclusion of the Black, Indigenous and People of Color (BIPOC) community in SMD and within SMD stakeholders
- **Purpose:** Propose, collect & implement new and innovative ideas with well-defined and measurable outcomes
- **Outcome:** Actionable ideas in 1-3 months

*Short term group while a longer term IDEA Working group was established.*

Thomas Zurbuchen, Co-Chair, SMD AA  
Laura Delgado Lopez, Exec Secy, Policy  
Peg Luce, Heliophysics  
Benjamin Phillips, Earth Science

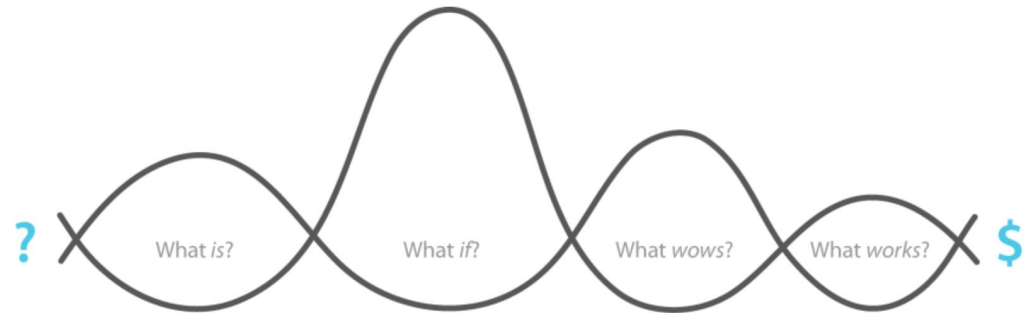
Kartik Sheth, Co-Chair, Astrophysics  
Gregory L. Robinson, Webb  
Meagan Thompson, Planetary Science  
Paula Evans, Logistics Management Institute

# How we approached the problem

- Pursuing and implementing actions recognized as a non-linear problem,
- Adopted design theory to inform development of evaluation criteria

## { Design as problem-solving approach

Better reflecting the reality of what growth leaders actually do



# ARAG attributes of a solution

- Solutions should focus on what NASA SMD can do uniquely or do best, or best enable.
- **Solutions cannot repeat doing the same things we have been doing for the past 3-5 decades and expect different results.**
- Solutions must be developed cooperatively between the BIPOC community and the non-BIPOC community, with BIPOCs involved fully in building an anti-racist solution, policy or structure.
- **Solutions must begin by first questioning the underlying assumptions that lead to that solution, and explore the assumptions and possible solutions by engaging with the BIPOC community.**
- **Solutions should urgently focus on putting BIPOC members in positions of leadership in organizations so that they can be fully involved in day to day decisions of the organization.**
- Solutions should strive to modify/create anti-racist reward systems in institutions/ organizations that will lead to both BIPOC and non-BIPOCs to center and prioritize this work of anti-racism.

# Initiatives to solicit input



~40 responses



~35 participants  
in **incubator  
workshops**



Individual emails,  
discussions



Quick-wins

Implement now

Long-term  
Actions

Formulate and implement  
with IDEA WG

End-State  
Themes

Shared vision championed  
by SMD leadership

**Generated over 200 ideas!**

# Examples of Longer-Term Ideas for IDEA WG to tackle

- Formal leadership development program in SMD
- Prestigious fellowships /details w/ residency opportunities at MSIs
- Meaningful partnerships w/ MSIs to increase inclusion in NASA activities
- Establish DCASTARs (regional undergrad STEM cohort model) program
- Two-way rotations between MSIs and SMD / SMD stakeholders
- Revamp SMD hiring, retention, promotion processes for better inclusion/equity/accessibility



# Staff-Desired End-State Themes for SMD

SMD today

SMD tomorrow

- “Open and honest two-way communication is the norm”
- “SMD recognizes, values & nurtures potential - across all axes of diversity”
- “SMD (and its pool of talent) includes colleagues beyond the 3rd floor”
- “SMD’s population reflects the nation”
- “We don’t start with ‘Nothing is wrong here; everything works’ but with ‘How can we innovate and improve?’”
- “SMD understands and values non-traditional leadership styles”
- ...

# Status of ARAG Actions

1. Update all supervisor performance plans with examples for how to make meaningful progress in IDEA-relevant performance goals



**LEAD:** Thomas Zurbuchen (+G. Robinson, P. Luce, Paula Evans)

**STATUS:** Supervisor workshop to craft additional language for Performance Evaluation Plans (PEPs)

**MEL:** Performance evaluated annually.

2. Expand short-term virtual rotations and assign leadership tasks to staff on a regular basis



**LEAD:** Laura Delgado López (+P. Luce, K. Sheth, J. Wolf, J. Gagosian, L. Lorenzoni)

**STATUS:** SMD Leadership Program Framework developed

**MEL:** Performance evaluated annually by IDEA WG.

**MEL:** Measurement, Evaluation, Learning

# Status of ARAG Actions (2)

## 3. Establish an engagement committee to build relationships with under-represented groups.



**LEAD:** Kartik Sheth / K. Petree (L. Delgado Lopez, P. Evans, E. Gertsen)

**STATUS:** Strategy developed → Front Office leading implementation (Petree, Gertsen, Evans)

**MEL:** Feedback at events, every 3 or 6 month review of how we are doing.

1

Intentionally and thoughtfully engage underserved and under-represented communities from academia, associations, and businesses to join us in SMD activities

2

Be transparent and purposefully inclusive so that the future end state for SMD reflects true inclusion and is representative of national demographics

3

Model and engage stakeholders with diverse and inclusive teams at all levels

4

Demonstrate leadership commitment and accountability through policy, messaging, and behavior that advances diversity and inclusion goals and objectives

**OUTCOME:** Long-term relationships with new, diverse partners leading to a SMD and SMD partners that are more representative of the diversity of the nation

# Status of ARAG Actions (3)

4. Initiate series of internal culture surveys to baseline and measure progress in diversity and inclusion across SMD



**LEAD:** P. Evans

**STATUS:** Questionnaire developed, PRA permission being sought (implement ~ Spring '21)

**MEL:** Regular surveys and analysis of culture by P. Evans and LMI group.

5. Collect and publicize current and historic aggregate demographic data of ROSES awardees



**LEAD:** M. Thompson

**STATUS:** Done at SMD level. Next steps to allow division-level analysis

**MEL:** Annually evaluate changes to track improvement.

# Quick-Win Actions for ARAG Implementation (4)

6. Require that all panel reviews adopt code of conduct that reflects commitment to a diverse and inclusive working environment



**LEAD:** K. Sheth (B. Phillips, S. Immler)

**STATUS:** **CoC developed.** Adopted across SMD.

**MEL:** Discuss feedback annually. Expand to other teams?



## R&A Code of Conduct for Panelists

NASA strives for an inclusive and professional environment for all participants in its activities. As a panel member, **we expect you to:**

1. Be prepared and contribute to the panel review
2. Evaluate the merit of the proposals and the strength of the proposing team not the people as individuals.
3. Evaluate expertise and not “experience”
4. Be an active participant in the discussions
5. Not interrupt others or talk over others
6. Keep comments succinct and to the point and thus give everyone the opportunity to contribute to the discussion.
7. Be mindful of bias in all contexts
8. Step in to address abusive or bullying behavior
9. Be respectful of all regardless of differences (professional or otherwise)
10. Actively help create an environment free of harassment

**At any time, feel free to talk to a NASA panel monitor if you have any concerns.**



## R&A Code of Conduct for Chairs

In addition to the code of conduct for panelists, **as chair we expect you to:**

1. Lead the panel by example in creating an environment for free and professional discussion.
2. Lead the panel in an inclusive and welcoming way and step in to address any abusive, bullying or unprofessional behavior
3. Proactively solicit input from each panel member in the discussion of each proposal; ensure that the discussion is not dominated by a few reviewers
4. Proactively encourage participation of reviewers who may be less experienced at reviews
5. Keep the discussion moving and end on time to allow for sufficient time and discussion for all the proposals in the panel
6. Keep the discussion focused on the strengths and weaknesses of the proposal, and not on the individuals or other tangential topics

**At any time, feel free to talk to a NASA panel monitor if you have any concerns.**

# Quick-Win Actions for ARAG Implementation (5)

7. Set a goal for each SMD division to increase the aggregate demographic diversity of its reviewers in ROSES panels by the end of 2022



**LEAD:** Ben Phillips (+K. Sheth, K. Reath, A. Pina, A. Leidner, J. Kaye, L. Friedl, M. New)  
**STATUS:** Text submitted for modification of SMD Policy-8  
**MEL:** Annual retrospective analysis of panels at division level to ensure progress

8. Create a monthly continuing conversation series to foster improved communication across SMD



**LEAD:** P. Evans (+B. Phillips)  
**STATUS:** Schedule and first set of talks being planned  
**MEL:** Culture surveys should show improvement in comfort and ease for discussions about inclusion and diversity. Culture should become more inclusive.

# Reflections and lessons-learned from ARAG

<b>Anti-racism focus (WHY? WHAT?)</b>	<ul style="list-style-type: none"><li>❑ ARAG as unambiguous consequence of national dialogue on race</li><li>❑ Forcing function to routinely question impact of proposed actions on BIPOC community</li><li>❑ Efforts not tied to anti-racism still came up / demanded attention</li></ul>
<b>ARAG membership (HOW?)</b>	<ul style="list-style-type: none"><li>❑ Small size (8 members) supported positive, inclusive group dynamics</li><li>❑ Small size promoted accountability, but also meant absences were felt</li><li>❑ Set membership (no alternates) helped build trust, identity, led to open discussion and learning</li><li>❑ Diversity of employees (seniority) helped carry discussions meaningfully outside of ARAG</li></ul>
<b>ARAG leadership (HOW?)</b>	<ul style="list-style-type: none"><li>❑ AA lead as ARAG champion, internally and externally</li><li>❑ Leadership treated ARAG work as mission-critical, not incidental</li><li>❑ Value of executive champion: reduced noise, removed hurdles to making decisions</li><li>❑ Model of executive champion + active co-chair + executive secretary helped sustain action</li></ul>
<b>Integration with IDEA WG</b>	<ul style="list-style-type: none"><li>❑ Early inclusion of Paula/LMI was essential to foster continuity of effort, bring outside expertise</li><li>❑ ARAG and IDEA WG have necessarily different approaches so transition is not seamless</li><li>❑ Continuity retains challenges as some “quick wins” involve transfer to long-term group still getting defined/coalescing on priorities</li></ul>
<b>Sustaining engagement across SMD</b>	<ul style="list-style-type: none"><li>❑ ARAG helped inspire/ augment, provide <b>top cover to bottom-up action</b> elsewhere in SMD</li><li>❑ Lack of integration &amp; communication with disparate efforts remains but sustained momentum is positive</li><li>❑ Balance between achieving/ demonstrating results and adopting inclusive process through to implementation is not easy - persistence, executive leadership support, communication</li></ul>

# Other SMD Activities

- Public statements by NASA and SMD leaders on identification of existing exclusion and lack of participation by all communities at NASA and commitment to better inclusion going forwards.
- Held one “*Understanding Systemic Racism: A Framework for Positive Action Workshop*” by Steve Robbins - incredibly powerful workshop. Expect all 4 will be completed. Supervisors required to attend.
- Working group modifying requirements for AOs to align with NASA’s new core value of Inclusion.
- NASEM study: *Increasing Diversity and Inclusion in the Leadership of Competed Space Missions*
- Astrophysics R&A task force - to make the R&A process more inclusive and diverse
- Earth Science Division has multiple groups examining all aspects of its portfolio and work from the ROSES solicitations to data initiatives to a “*Speak Up*” email / discussion series.
- Advisory committees are discussing the state of the profession in nearly every discipline emphasizing the importance of an inclusive environment and diversity of thought.
- IDEA WG formed (see Isat two slides).



# Concluding Reflections

Two key ideas we rely on:

- **You can't be what you can't see**
- **You don't know what you don't know.**

Some takeaways from the work:

- Critical to have leadership acknowledge the problem, take responsibility, pledge actions and ask to be held accountable.
- Put people in positions of real leadership (don't focus solely on the pipeline)
- Work hard to create inclusive and welcoming environment for all
- Ensure one has attributes for solutions before jumping to solutions
- Avoid making assumptions
- Ensure actions are impactful, measurable, sustainable
- Evaluate and be ready to change tactics when necessary.
- Focus on changing actions / behaviours

# Long-Term IDEA Working Group

**40+ CS and contractor VOLUNTEERS (& counting!)**



- Smaller groups will explore actions in the following categories:
  - IDEA Programming, Outreach and Engagement
  - Missions/Projects/Programs
  - Leadership Development & Growth
  - Inclusion/Culture
  - Recruitment/Hiring/Promotion/Retention
  - Research & Analysis
- Focus: SMD, SMD partners/stakeholders, general public
- Goal: Align outcomes and activities with NASA core value of inclusion and our Science Strategy 4.1

# IDEA Working Group

- The large interest from across SMD is encouraging!
  - High level charter for IDEA WG developed
  - K. Flynn is the senior leadership champion.
  - IDEA WG Leadership will meet with Thomas regularly.
  - Dedicated contractor support with subject matter expertise will be critical for sustainability
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- **IDEA will explore all the axes of diversity building on the work done by ARAG**
  - **IDEA will expand beyond SMD and cover SMD stakeholders and the general public.**

