EDIA for Leaders in Planetary Science: An Innovative Workshop



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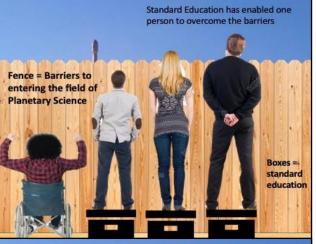
Why is this workshop needed?

Inclusion is one of <u>NASA's 5 core values</u> and NASA recognizes "<u>the critical importance and value of DEIA for our</u> <u>entire workforce</u>"



Several NASA programs ask for Inclusion Plans.

The goal of this workshop is to give participants the tools they need to enact positive change



New programs are aimed at members of underrepresented groups to help them rise above existing barriers



Our workshop gives leaders the tools to take down the barriers so that everyone can succeed in science.

What is the goal?

This workshop is NOT designed to instruct members of underrepresented groups on how to succeed

 There are already several NASA programs to do this.

> This workshop IS designed to instruct members of majority groups on the basics of EDIA including Ethics and Compassion

- Seeking to reach individuals with the power to make change (leaders), which are overwhelmingly members of majority groups
- Making sure the attendees of the other programs find the field as a whole more equitable.

Who are the facilitators?

- PhD and >20 experience in Planetary Science
- Extensive experience in EDIA and pedagogy
- Julie A. Rathbun (she/her/hers)
 - Diversity in Planetary Spacecraft missions (Rathbun, 2017)
 - Co-chair Cross-AG EDIA Working group (2023-present)
 - Chair DPS PCCS (2018-2020)
 - Organized the 2020 Planetary Science Workforce Survey
 - Professor of Physics at a SLAC (2001-2018)
- JA Grier (ee/em/eir)
 - Lead of NASA SSERVI EDIA Focus Group (2021-present)
 - AAS Fellow 2024 for two decades of commitment to EDIA
 - Addressed UN Office of Outer Space Affairs regarding Ethics
 - Director of Education, AAS (2007-2008)
 - Education Officer, DPS (2002-2005)





When have the workshops taken place?

November 30 – December 2, 2022

18 participants

October 23-25, 2023

12 participants

23 participants





Who are the attendees?

All career stages in Planetary Science	 From graduate students to postdocs to senior scientists
Varied positions	 Include several instrument and mission PIs, leaders of professional societies, etc.
All backgrounds in EDIA	 From folks with little experience to professionals who lead their own EDIA-related workshops
Varied Institutions	 JPL, APL, HQ, Goddard, U Arizona, U Maryland, PSI, SWRI, etc.

How is the workshop designed?

Model an inclusive, accessible and equitable environment

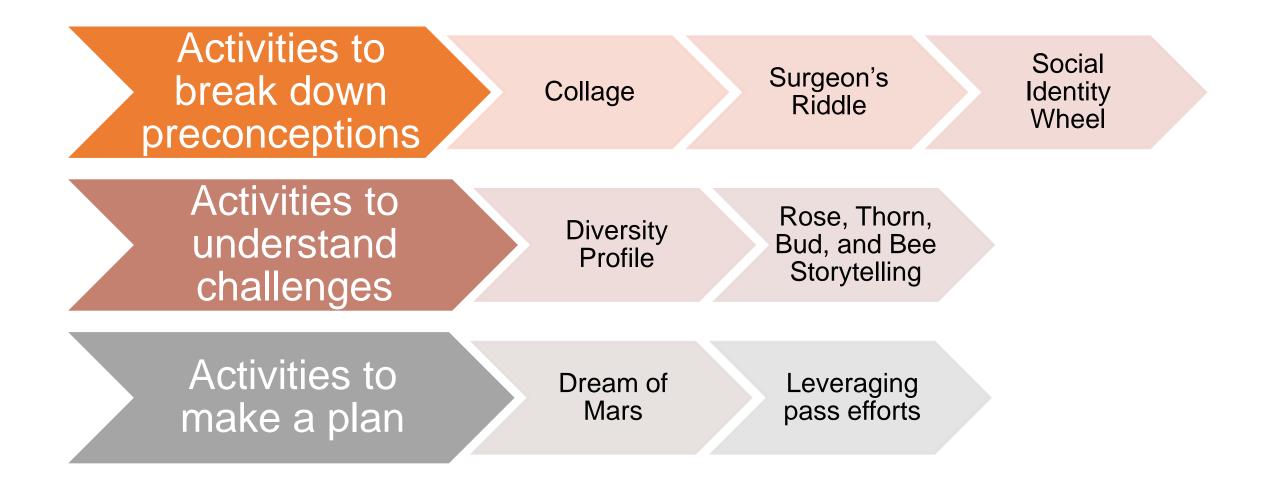
Interactive design with latest pedagogical techniques

Remote: times chosen to work for most of US (11 am – 4 pm Eastern) Respect breaks (1 1hour and 2 10-minute breaks per day)

What is the workshop like?

Day 1	Day 2	Day 3
Group bonding, Breaking down preconceived notions	Understanding what and why there are challenges in EDIA and some ways to address them.	Making a plan and leaving with a tangible goal

Examples of activities



Collage Activity

Practice an Open, Active, and Creative Mindset

Develop an expanded sense of human diversity

See themselves in context of that diversity



Let's do this!

Aim your camera at the QR code or go to pollev.com/ edialps



Press skip when asked for your name Click on an image that resonates with you and think about why



Collage Activity

> Practice an Open, Active, and Creative Mindset

Develop an expanded sense of human diversity

See themselves in context of that diversity

responses articipant

Many images showed joyful people. I was particularly struck by images of what appeared to be men. Our culture doesn't encourage men to show 'soft' emotions like joy or sorrow, and it was refreshing to see.

The pictures that resonated with me were those showing people and nature together. I hadn't considered how diversity in people related to diversity in the environment, and peoples' relationship to that.

At first I thought "I don't see myself" in the images. Then I realized maybe that was the point. The facilitators pointed out that we have the option to "see ourselves" in anyone, as the common denominator in every image was humanity. That was very powerful.

I chose pictures of people in motion. Diversity isn't just how we look or our backgrounds, it's what we do and how we do it. That's important especially to appreciate the diversity of people who are disabled or who have 'limited mobility.'

Examples of tangible goals

Learn more about my team, specifically, how do team members see their personal identities, and what does this mean for who we are as a team?

Our organization is doing strategic planning - ensure that commitments to EDIA are reflected in that planning.

We have received funding for a new project - implement the inclusion plan for that project.

Send an early career member of our team to a targeted conference for an under-represented group in science with the aim to identify potential new local and regional partners.

Impacts in Progress

Used a mentimeter word cloud so team could input any words they considered part of their identity. Most responded in <24 hours. It gives a much better picture of who we are.

I am lucky that multiple people on the strategic planning committee share a commitment to EDIA. I'm confident that we'll get a high-level EDIA goal and measurable milestone included in the final plan.

We have identified a postdoc on our team will attend SACNAS with the goal to meet more folks from our region to partner with. Our accountability partner has also planned to attend SACNAS.

Feedback word clouds

List 3 favorite things you learned or experienced in this workshop.

 $what \hbox{-} order \hbox{-} do \hbox{-} de ia(j) \hbox{-} go \hbox{-} in more \hbox{-} like \hbox{-} minded \hbox{-} people \hbox{-} than \hbox{-} i \hbox{-} thought$ how-fast-people-can-make-great-slides the-action-plans exploration-vision-considerations useful-statistics self-care compassion-principle recognition-that-compassion-is-key need-to-visit-alaska servant-leadership comrades alaska activity-ideas colonialism paradox-of-meritocracy making activities useful a-new-spanish-language-sf-anthology-to-read shame-vs-guilt feeling-helpful Schemabrave-Space importance-of-listening team-building compassion chockers accountability how-others-think word-clouds forgiveness small-steps-on-a-long-path i-am-powerpoint-luddite reading-list humanity-first-mindset compassion-stories-rose breakout-discussions performative-ally e aspects-of-leadership reading-list exposure-to-new-ideas camaraderie cis-vs-trans julie-and-ja scopophobia guilt versus shame connecting-with-others new-people-to-work-with we-are-all-biased deep-dedication-and-committment training empathy edia-needs-to-include-equitable-access-to-data greater-appreciation-for-the-challenge we-want-to-be-better word-clouds-are-awesome others-in-the-same-mindset mars-vision-exercise feeling-safe healing openness space-to-think spoons mars-activity resources hearing-wisdom welcomeeducation holding-space beginners-mind gender-expression open-dialog rose-bud ompassion-fatigue time-to-think examination-of-emotions group-brainstorming surgeons-riddle

Assessment of Learning Objectives

I know what an inclusion plan should be and how to write one. I don't know where to look for additional resources in EDIA. I am unfamiliar with past initiatives regarding EDIA in planetary science. I am part of a network of scientists moving forward on EDIA. I know how to take action on input and feedback from people in my group... Planetary science has a culture and I understand how my own personal. I don't understand the basic issues around collecting and analyzing demogra... If I am white and disabled, I do not have unearned privilege. I understand what it means to be an ethical planetary scientist. I understand how compassion underlies the core concepts of EDIA. It is important to make explicit and follow expectations for team interacti... White women are the most underrepresented group in planetary science. I don't feel confident discussing EDIA issues with my team/group. I know the difference between the terms equity, diversity, inclusion, and a... It is important to process my own emotions before responding to feedback I... Feeling and expressing emotions is not appropriate in working environments.

2 3

average post

average pre

Future of our innovative workshop

- You too can attend our workshop!
- Last funded workshop October 2023
- Submitted TWSC early May 2023
- Will pick dates for next workshop as soon as funding is finalized
- Creating a community of practice
- Hire us to do a custom workshop for your team



Workshop on EDIA for Leaders in Planetary Science





https://edialps.psi.edu

Feedback: "As someone who has worked in the field of DEIA in sciences for more than a decade, this was one of the most valuable workshops I've had the pleasure of taking. I learned new things and new approaches to helping myself and others continue on the journey of helping create more justice-focused, inclusive and equitable communities."