

Cambio

Transforming Our Capacity
for Inclusive and Authentic
STEM Experiences for
Latinx Audiences

ACM 2023

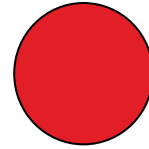




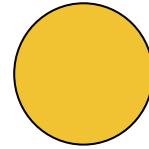


Geography and Identities

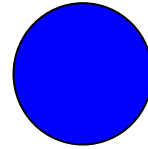
Birth Location



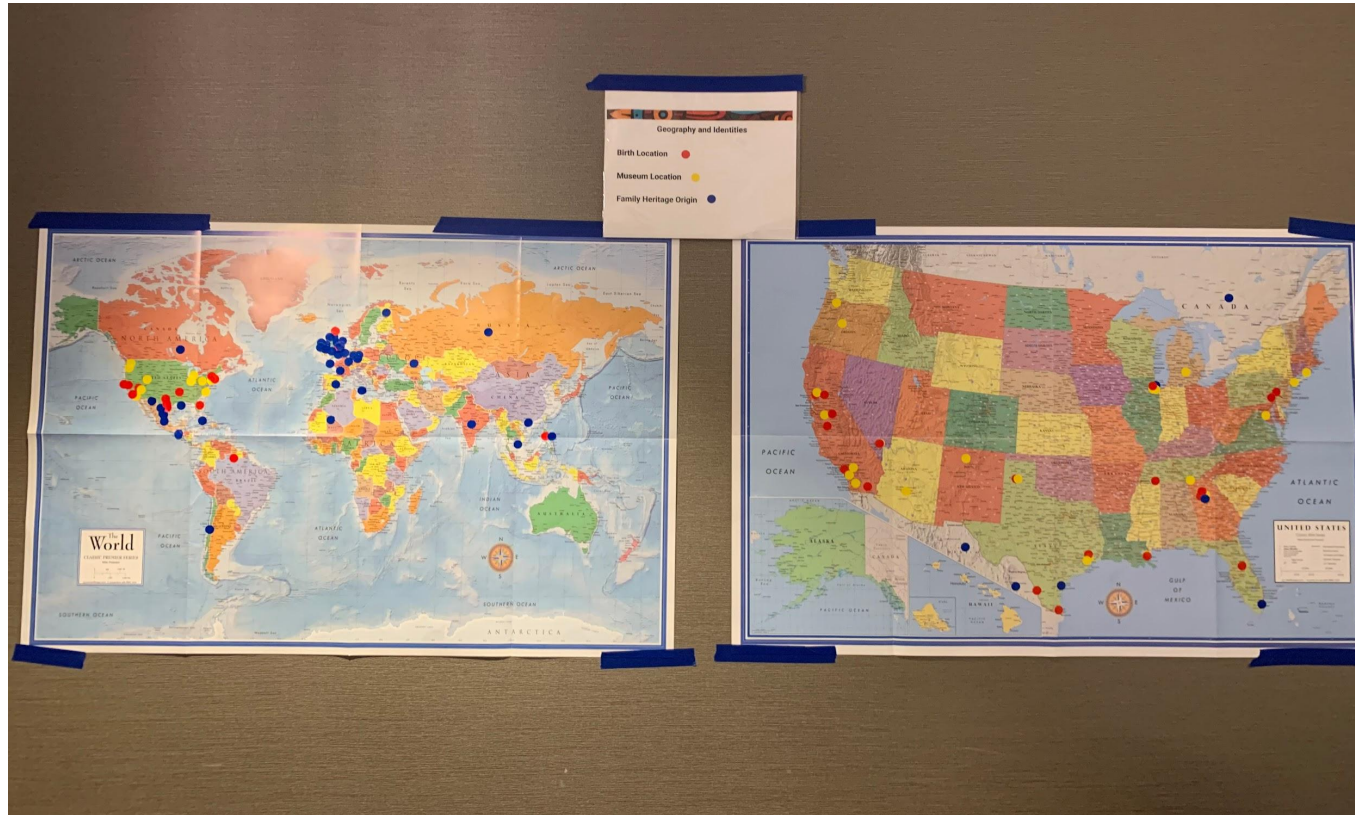
Museum Location



Family Heritage Origin



Geography and Identities

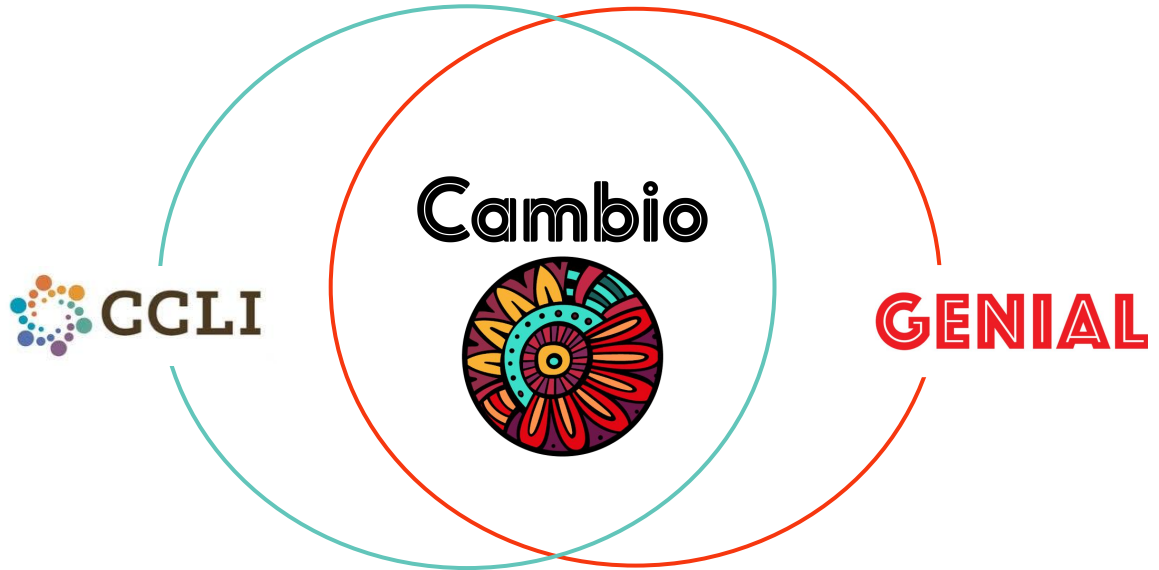


Geography and Identities





Helping museums shift internal organizational practice to better create STEM experiences that are culturally relevant, responsive, and sustaining to Latinx communities.





Cambio Partners



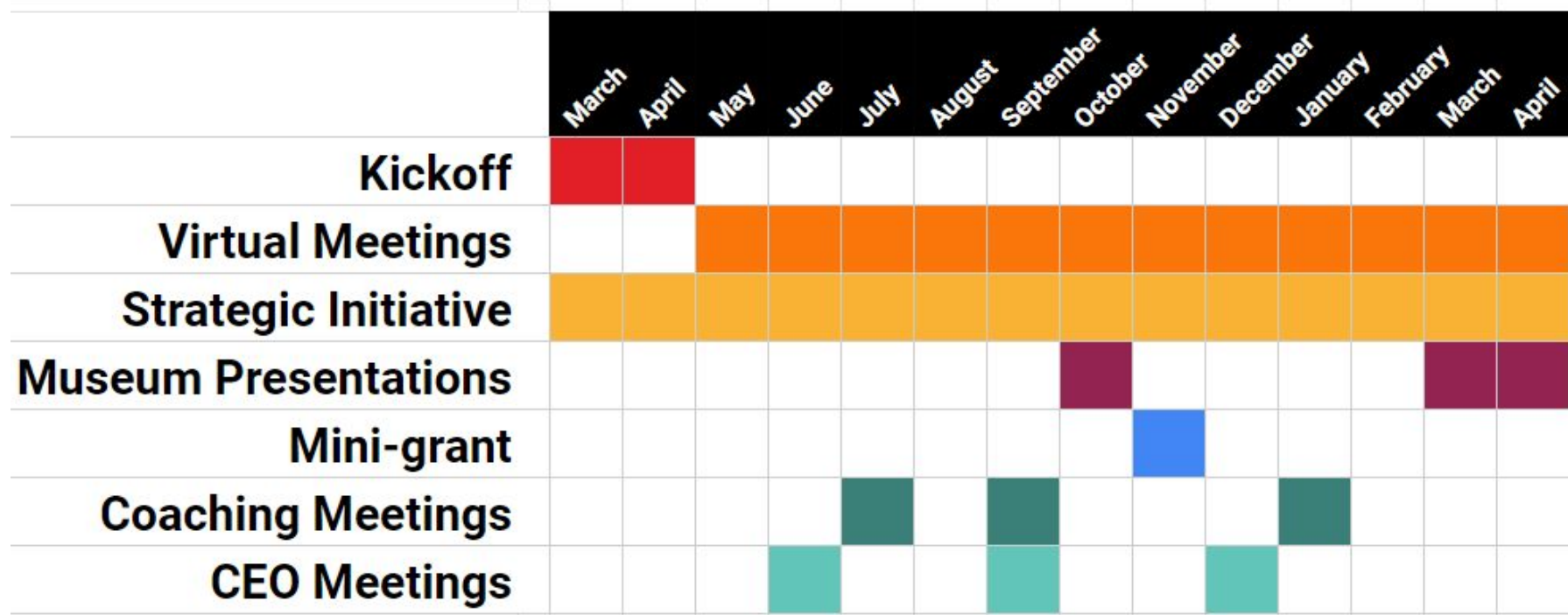


Cambio Program Components

- Cohort Teams of 3-5 members including Senior Leadership
- 3-day kick-off workshop
- Monthly interactive virtual meetings
- Strategic Initiative/Action Plan
- Mini-grant support
- Professional peer networking
- Coaching to support a yearlong strategic initiative
- Resources and tools, including frameworks, models, and topical articles
- Alumni Culminating Summit, Spring 2025



Cambio Year at A Glance





Cambio's Vision

Museums pursuing ambitious goals through incremental change.

Cambio's vision centers on encouraging organizations to shift their practices at all levels by examining the cultural dimensions and intersections of Latinx communities, STEM, and organizational change.

The Cambio experience focuses on incremental change in organizational practice, building on strengths, and improving what they do well, with a goal of long-term transformational change that includes questioning assumptions, examining systems, and changing structures toward more equitable institution-wide change.

Three Strands Woven Together

- Latinx Communities
- Cultural Expressions of STEM
- Organizational Shifts



Cambio supports practitioners as we:

develop awareness, skills, and practices to understand our local Latinx communities.

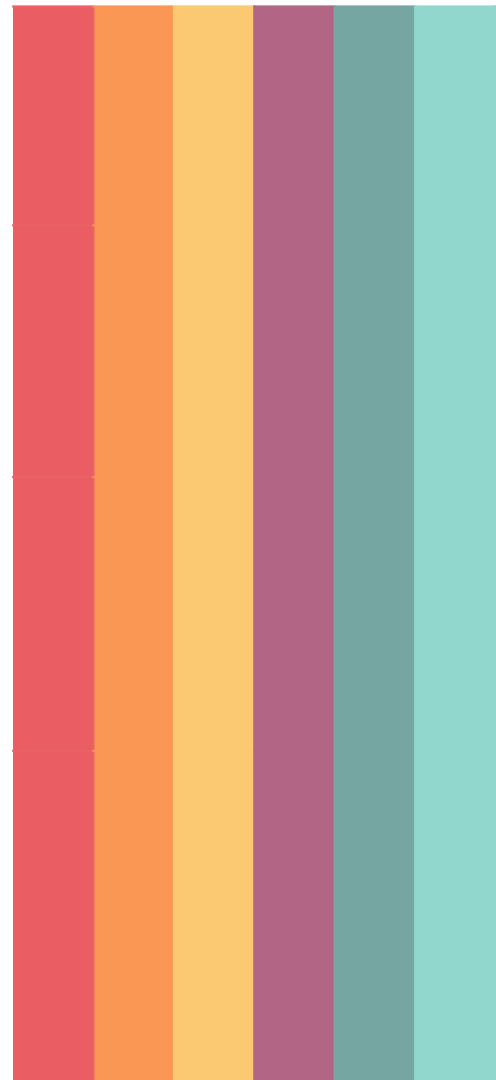
**Latinx
Communities**

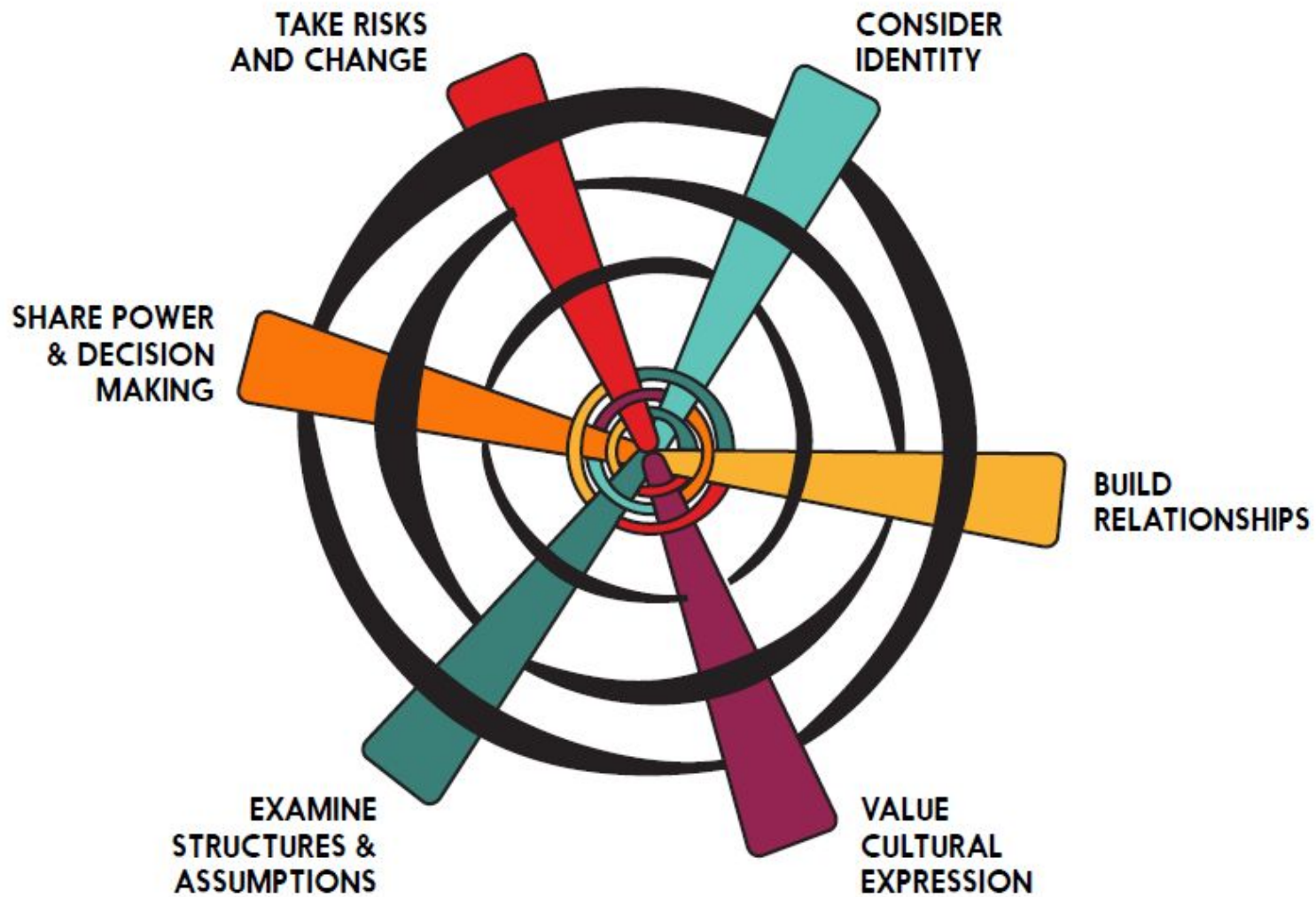
shift museum practice from dominant to non-dominant approaches of STEM that value people's lived experience.

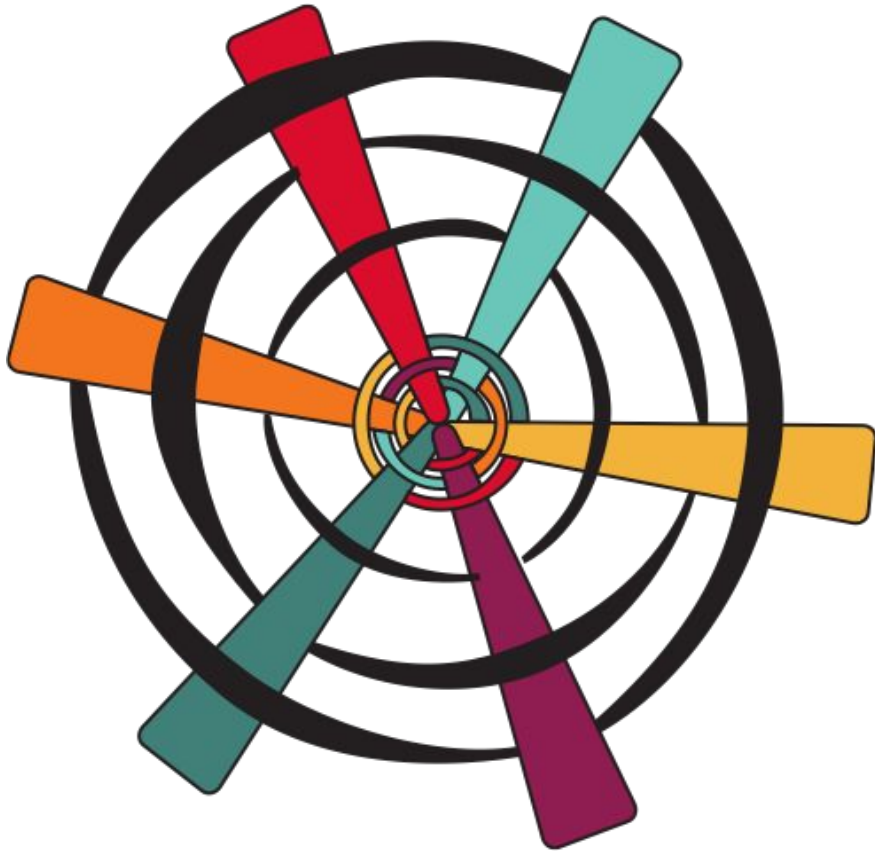
**Cultural Expressions
of STEM**

examine the role of systemic oppression as part of shifting organizational practices, systems and structures towards equity.

**Organizational
Shifts**







- Consider Identity
- Build Relationships
- Value Cultural Expressions
- Examine Structures
- Share Power & Decision Making
- Take Risks and Change



Cambio Panelists

Aylaia Sifuentes, Development and
Membership Coordinator
International Museum of Art and Science

Hilary Van Alsborg, Executive Director
Children's Museum of Tucson & Oro Valley

Priya Mohabir, SVP, Youth Development
and Museum Culture
New York Hall of Science

Veronica Garcia-Luis, Director of Diversity,
Equity & Inclusion
Exploratorium



Children's Museum Tucson

- **Mission**
 - **To provide fun, play-based, interactive, hands-on learning experiences for children and their families**
- **Midsized museum**
 - **175,000 average annual attendance**
- **Tucson's population is 42% Latino/x/Hispanic**



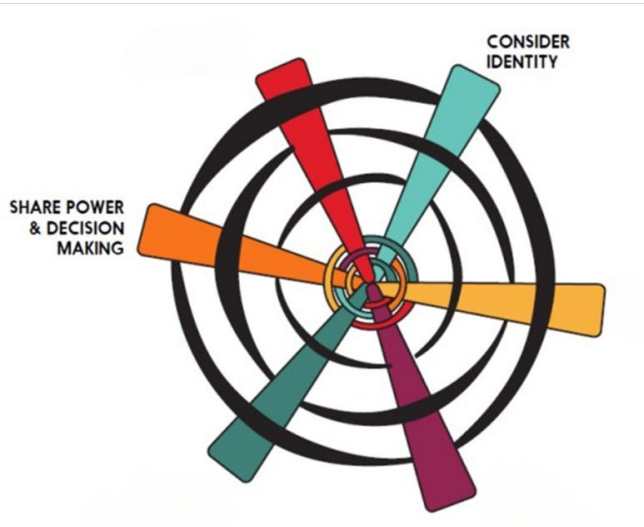
Transforming Capacity



- **Educational Content**
- **Staff expertise**
- **Collaboration**
- **Sustainability**



Stretches...



Consider Identity

- Gaps in our ability to see within ourselves and our ranks
- Are we truly this place?

Share Power and Decision Making

Impact might take time, and the steps to success might seem treacherous.

We need to work on considering who should and needs to have a voice at the table.

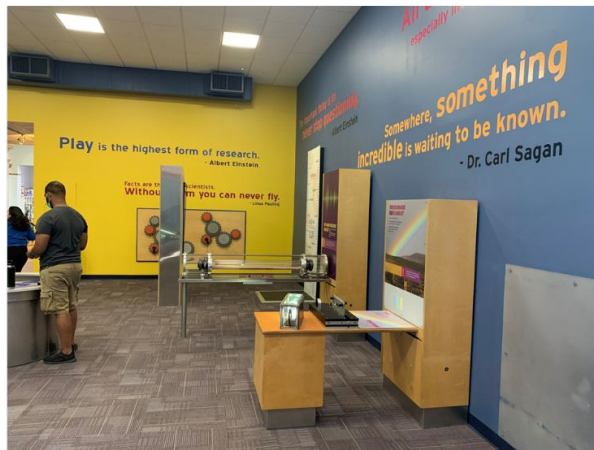
Intentional Shifts

Inclusive Programs

- Tohono Chul
- I Am A Scientist
- Discovery Night
- Art After Dark

Reflecting non-traditional STEM models

- Science in your Backyard
- Highlighting non-traditional STEAM applications



RUBEN MORENO

Director of Mariachi Luz de Luna

*When I was a kid,
I was inspired by music*

*Cuando era niño,
Tuve mucha influencia musical,*

so I became a

MARIACHI DIRECTOR

*Así que me
convertí en*

Director de mariachi



What Have We Learned

- **Honor the work, both inside and outside of our organization**

Acknowledge and celebrate the work being done

- **Confía en el proceso (Trust the process)**

Impact might take time, even when the steps to success might seem treacherous

- **It's okay, we got this!**

Trust in your and other's abilities, skills & knowledge to move toward improvement

- **Escucha, juega y aprende (Listen, play and learn)**





DESIGN MAKE PLAY • New York Hall of Science





NYSCI is New York's premier science center; a place where:

- Questions are important.
- Children are encouraged to explore, imagine and build things.
- It is safe to experiment and fail and try again.

Our mission is to nurture generations of passionate learners, critical thinkers, and active citizens through an approach we call Design, Make, Play.

Audience & Reach: General Audience

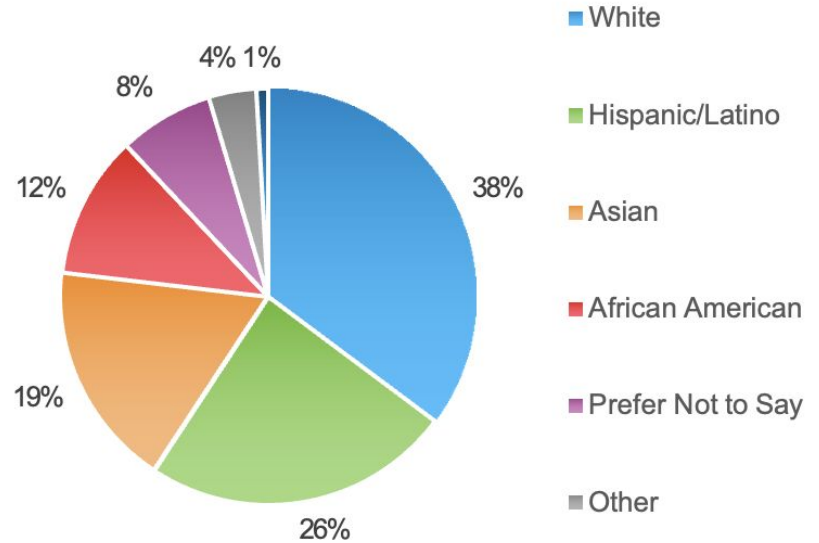
...400,000 visitors annually.

Geographic Profile



- NYC's Five Boroughs (83%)
- Tri-state Area (14%)
- International & Domestic Travel (3%)

Race/Ethnicity



NYSCI is fortunate to have one of the most diverse audiences of any science center in the country.

NYSCI's Cambio Journey

Where we started	How we shifted	Where are we going
<ul style="list-style-type: none">• Focus on how NYSCI engaged with our local community• Shift institutional mindset from <i>doing</i> for our community to an approach that emphasizes <i>learning from and with</i> our community.	<ul style="list-style-type: none">• Embracing NYSCI's diverse audiences• How do we take Cambio lessons and apply them to the diverse and multicultural audiences that visit NYSCI?	<ul style="list-style-type: none">• Shifting from "Occasional to Always"• Building a universal design model for inclusive STEM
Building internal and external structures for collaboration	Embracing the diversity of our staff as a starting place	Shifts in the ways we recognize STEM in our experiences

Celebrating our Culture: From Roots to STEM



Designing and expressing myself externally in color; bold, bright, loud colors, all started with henna tattoos as a child.



My mother taught me how to knit when..I thought it would be interesting to experiment with non-traditional knitting materials so I started making yarn out of lots of different things.



During childhood visits to the Dominican Republic, I remember creating slingshots from local materials, with other kids and family members from the community.

What are we learning

Identified transcendent values that are important to everyone:

- **Belonging** — everyone feel welcome
- **Mirroring** — everyone sees themselves reflected in NYSCI experiences
- **Shifting Authority** — STEM is not a club for the elite

How do we translate and operationalize these values into practice within the organization?





Along the way...

- **Examine Structures and Assumptions**
 - How to bring staff along in our learning
- **Shifting Authority**
 - Shifting mindset and practices
- **Take Risks and Change**
 - Everyday practices

THE IMAS CAMBIO EXPERIENCE

Our Mission

The International Museum of Art & Science (IMAS) located in the Rio Grande Valley inspires audiences of all ages to explore art and science through its permanent collections, exhibits, programs, and partnerships by empowering learners to discover their interests and pursue their passions.

Our Vision

The International Museum of Art & Science will be a destination for accessible, innovative, awe-inspiring learning through diverse art and science experiences that prepare our community for the future.



CONSIDERING IDENTITY



Who are we to the community?

Strengthening community partnerships.

Challenges us to think in new ways about collaboration and content, especially science.

Access for the community to traditional and non traditional science.

CONSIDERING IDENTITY



Who are we to our staff?

Focusing on our internal practices.

Overhauling our employee handbook.

Reevaluating our hiring practices and how we will consider IMAS staff's Spanish speaking skills.

MUJERES SEMBRANDO CONCIENCIAS
Community Plática on Borderland Plants, Wellness and "WiSTEM"

COMMUNITY PLÁTICA

DR. DONA E. COOPER-DOCKERY

DR. SILVIA PATRICIA SOLIS

MODERATED BY:
MICKAELA CASAS
CRAFT CULTURA
TEAM MEMBER

SONYA CIRLOS

ANGELA ROJAS

QR CODE

LIMITED SEATING EVENT
Panel | Q&A | Workshop | Food | Coffee

Cambio FOODAMED Biolog CLUB CREO GRIND COFFEE

7

Partners

34

Women and Girl Participants

4

Panelists

6 - 83

Age Range

Cambio has helped us recognize and build on our strengths, build relationships, value cultural expressions while working together, often with community partners, share power and decision making, examine structures and assumptions, and consider identity.

Panel Discussion



Q+A

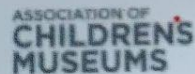
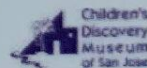
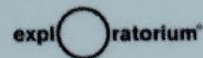




Cambio
means change



**For museums. For Latinx
communities. For STEM.**





¡Gracias!
www.CambioExperience.org

Applications Open: September 6th
Applications Due: November 1st

Cambio is a multi-year professional development initiative. Cambio is made possible through the generous support of the National Science Foundation and is a collaboration between the Exploratorium and the Cultural Competence Learning Institute. This material is based upon work supported by the National Science Foundation under grant [1906595](#). Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.



Cambio

Panelists Info

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International Museum of Art and Science
asifuentes@themasonline.com

Hilary Van Alsburg, Executive Director
Children's Museum of Tucson & Oro Valley
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Priya Mohabir, SVP, Youth Development and
Museum Culture
New York Hall of Science
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Veronica Garcia-Luis, Director of Diversity,
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