



MGCC

Maize Genetics Cooperation, Inc.

2024 Maize Genetics Meeting
Community Session

Raleigh, NC
March 2, 2024

Community Session

- Welcome!
- Messages from our stakeholders
 - NSF
 - USDA
- (Brief) MGC Committee Updates
 - Board of Directors and Treasurer's Report
 - Awards & Nominations Committee (ANC)
 - Committee for Outreach, Diversity, Inclusion and Education (CODIE)
 - Membership Committee
 - Maize Genetics Advocacy Committee (MGAC)
 - Maize Genetics Meeting Steering Committee (MGMSC)

Community Discussion

- Please use the microphones
- Share space for conversation and discussion
- We encourage all to participate

Updates from our Stakeholders

- NSF (Karen Cone, Cliff Weil, Diane Okamuro, Kan Wang)
- USDA (Jack Okamuro)



66th Annual Maize Genetics Meeting

February 29 – March 3, 2024

Diane J. Okamuro, Kan Wang, Cliff Weil, Karen C. Cone
Directorate for Biological Sciences (BIO)
U.S. National Science Foundation (NSF)

NSF Alignment with National Priorities

Bioeconomy *(incl. Exec. Order)*

Bioeconomy Industry of the Future

Data for the Bioeconomy Initiative

CASA-Bio Activities

Workforce Development

Artificial Intelligence

National AI Research Resource (NAIRR) Pilot

Accelerating Computing-Enabled Scientific Discovery (ACED)

CHIPS + Science

Increased Investment in EPSCoR Jurisdictions



NSF's Long-standing Support for Plant Genetics and Crop Science

IOS Core Programs

Developmental Systems
(Incl. plant, fungal, microbial)

Physiological and Structural Systems

Plant Genome Research Program

Research-PGR Track

TRTech-PGR Track

NPGI Postdoc Fellowships

MCB Core Programs

Genetic Mechanisms

Cellular Dynamics and Function

Systems and Synthetic Biology

Other Complex Trait Programs

Enabling Discovery through Genetics (EDGE)

Plant-Biotic Interactions Program



New Efforts that Support Plant Genetics and Crop Science



DCL: Advancing Plant Transformation – Invites proposals focused on plant genetic transformation to certain existing programs at NSF and USDA



DCL: Biodesign – Encourages early-stage collaborations across the biological and engineering sciences and the translation of findings into use-inspired projects



DCL: Leveraging Innovations from Evolution (LIFE) – Encourages research using comparative approaches to identify evolutionary convergent adaptations and the mechanisms that underlie them



Ideas Lab: Use-Inspired Acceleration of Protein Design – Aims to accelerate the translation of novel approaches to protein design and enable new applications of importance to the U.S. bioeconomy



International Opportunities



- **Global Centers FY24 focus on Bioeconomy** – Anticipated priority goals are, but are not limited to, Leveraging Biodiversity Across the Tree of Life to Power the Bioeconomy, and Biofoundries
- **DCL: Future Proofing Plants to a Changing Climate** – Supports collaborations involving scientists from the U.S., Germany and the U.K. in multi-scale crop physiology or programmable plants
- **Partnership with Department of Biotechnology (DBT) of India** – Encourages U.S. –India proposals to support knowledge, technologies and innovation that advance biotechnology and promote the bioeconomy



Other Funding Opportunities



Organismal Response to Climate Change (ORCC) – Supports efforts that integrate ecological and evolutionary approaches with genomic, physiological, structural, developmental, neural or behavioral understanding



DCL: Plant Synthetic Biology – Supports basic research, tool development and applications through ongoing programs in BIO and ENG



Integrative Research in Biology (IntBIO) track across BIO core programs – Requires integrative tools and approaches across biological subdisciplines and across scales of organization



NSF Support Across Career Stages

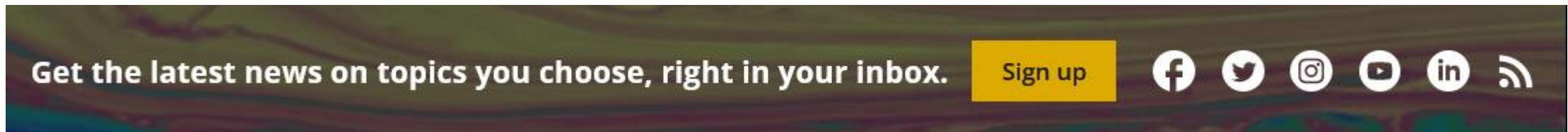
K-12	Directorate-specific Opportunities		
Undergrad	Research Experiences for Undergraduates Sites (REU Sites) and Supplemental Awards	Research in Undergraduate Institutions (RUI) and Research Opportunity Awards (ROA)	Historically Black Colleges and Universities - Undergraduate Program (HBCU-UP)
Postbacc	Directorate-specific Opportunities		
Grad	Graduate Research Fellowship Program (GRFP)		
Postdoc	Directorate-specific Opportunities		
Early Career Faculty	Faculty Early Career Development Program (CAREER)	Directorate-specific Opportunities	
Mid-Career Faculty	Mid-Career Advancement (MCA) Program		



News and Updates

Sign-up for emails on new solicitations; events; due date reminders; quarterly newsletters, including information on new priorities and solicitations, highlights from the community, and more!

Visit www.nsf.gov and scroll down until you see the Sign up and social media banner, click on the yellow box, and follow the prompts.



Reminders for NSF Awardees



Visit the NSF
Brand Identity
Portal

- Publications supported by NSF funds
 - Acknowledge NSF funding, including using your grant number
 - Alert your Program Director prior to publication; NSF may help promote your work
 - Upload all papers to PARS
- Lab/facility websites, outreach materials, and equipment supported by NSF funds:
 - Acknowledge NSF support, especially if you're majority NSF-funded
 - Include the NSF logo

Visit the NSF Brand Identity Portal for resources to help in acknowledging NSF support and always feel free to contact your Program Director



Contact Information



- Diane J. Okamuro (dokamuro@nsf.gov)
- Kan Wang (kawang@nsf.gov)
- Cliff Weil (cweil@nsf.gov)
- Karen C. Cone (kcccone@nsf.gov)



USDA
SCIENCE
AND
RESEARCH
STRATEGY,
2023 - 2026:
Cultivating
Scientific Innovation

The image features a green background with a close-up of a leaf covered in water droplets. The text is overlaid on the left side of the image.

USDA Research Priorities

Priority 1: Accelerating Innovative Technologies & Practices

Priority 2: Driving Climate-Smart Solutions

Priority 3: Bolstering Nutrition Security & Health

Priority 4: Cultivating Resilient Ecosystems

Priority 5: Translating Research Into Action

Strategic Investments

ARS SCIENTIST/STAKEHOLDER-DRIVEN INVESTMENTS

- HPC and support
- Workforce
- Breeding
- GHG monitoring
- GHG mitigation
- Germplasm resources
- Personnel

CRITICAL NEEDS?

- White House Eos – Bioeconomy
 - CASA-Bio (NSF, USDA, DOE, NIH, Commerce)
- National Security Commission on Emerging Biotechnology
- ARS/NIFA



MGC Committee Updates

MGC Community Meeting 2024



MGC Board of Directors

Purpose: To advance the goals of the maize community in conducting maize research through collaboration and open sharing of ideas and resources.

- Carries out the business, fiscal and legal responsibilities of the cooperation
- Coordinates with committees to foster a rich and interactive community and to anticipate and plan for future needs of the MGC

Highlights (2023-2024):

- Worked with CODIE and the MGMSC to update Code of Conduct and Code of Conduct response policy at the Maize Genetics Meeting
- Enhanced communications
 - The Kernel community dispatch, led by Mike Muszynski
 - Public board meetings on topics of interest to our community
 - Ways the MGC is working to foster a community with a sense of belonging (e.g. partnering with ROOT & SHOOT, Bystander Intervention trainings)

2023-2024 Board of Directors



Marna
Yandea-
Nelson
(Chair)



Wojtek
Pawlowski
(Incoming
Chair)



Jay
Hollick
(Outgoing
Chair)



Erin
Sparks
(Treasurer)



Laurie
Smith
(Secretary)



Mike
Muszynski
(Communic)



Andrea
Eveland
(At-Large)



Thelma
Madzima
(At-Large)



Jeff
Ross-Ibarra
(At-Large)

2024-2025 Board of Directors



Wojtek
Pawlowski
(Chair)



Matt
Hufford
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John
Fowler
(At-Large)



Jeff
Ross-Ibarra
(At-Large)

MGC: 2024-2025 (Chair, Wojtek Pawlowski)

- Improving trainee experience
 - Finding new ways to engage at the annual meeting
 - Giving voice at BoD meetings
- Improving communication
 - MGC Kernel
- Increasing international participation in MGC and at the annual meetings

Treasurer's Report (Erin Sparks)

FY23 Status Report (MGC Fiscal Year is July 1 – June 30)

- Bank Balance: \$382,001.31
- Endowments:
 - MNL principal balance (not spendable): \$186,313
 - MNL interest account (spendable): \$43,305

 - Quasi Endowment principal (not spendable): \$129,136
 - Quasi-Endowment Interest account (spendable):\$20,767

- Total Liquid Assets: \$446,073.31

Treasurer's Report

FY24 Status Report (MGC Fiscal Year is July 1 – June 30)

MGM24 Projections

- Income: \$331,000
- Expenses: \$365,000

- **Net loss: \$34,000**
 - Non-reimbursable Taxes \$40,000

MGC Awards and Nominations Committee (ANC)

Andrea Eveland, ANC Chair, BoD liaison (2025)

Paula McSteen, ex-officio

Eli Borrego (2024)

Jim Birchler (2024)

Marja Timmermans (2024)

Graziana Taramino (2025)

Jianming Yu (2025)

John Fowler, CODIE liaison (2026)

Matt Hufford (2026)

Carolyn Rasmussen (2026)

ANC charge:

- *Conduct the nomination and selection process for awards.*
- *Coordinate nominations for elected Board of Directors and Advocacy Committee positions.*

Major accomplishments and activities (2023-2024):

- *Developed **rubrics documentation** to encourage standardization of nomination packages by providing guidelines to letter writers to minimize bias.*
- *Implemented **minor changes to award descriptions** to extend the nominations pool.*
- *Three new committee members rotated on (2024-2026).*

MGC Awards and Nominations Committee (ANC)

A record number of nominations this year – thanks to all of you!

Community award nominations

- *Cooperator and Leadership = 13*
- *Early and Mid Career = 15*
- *Lifetime and McClintock = 17*
- *Nomination demographics: **42%** women; **25%** outside US; **16%** non-academic*

BoD and MGAC nominations

- *BoD Incoming Chair: 12 nominated; 3 ran*
- *BoD Member-at-large: 15 nominated; 9 ran*
- *MGAC Member-at-large: 13 nominated; 3 ran*
- *Nomination demographics: **25%** women; **0%** outside US; **10%** non-academic*

MGC Awards and Nominations Committee (ANC)

Plans for 2024-2025:

- *Continue to **explore ways to expand and diversify** the nomination pool*
- *Continue to **revise and adapt the rubrics** based on feedback and ANC experiences this year – e.g., considering structural advantages/disadvantages; non-US and non-academic*
- *We value your input!!*

CODIE - Maize Genetics Committee for Outreach, Diversity, Inclusion, and Education

- **Purpose:** supporting diverse community and inclusive culture in Maize Genetics and other STEM spaces through education, recruitment, mentorship, fostering inclusive culture, and advocacy
- **2023-2024 Highlights**
 - Maize Genetics Meeting – Awards (MAGNET, DB, and EIA) and Networking Support
 - **Fostering Diversity Conversations**
 - Fostering Diversity Talk - Dr. Ricardo Salvador
 - Research of Interest highlights – through the year - Maize GDB
 - **ROOT & SHOOT project (NSF supported) - Inclusive Conferences Working Group**
 - Bystander Intervention Training
 - Culturally-responsive mentoring
 - Inclusive conferences

MGC Community Meeting 2024



CODIE - Maize Genetics Committee for Outreach, Diversity, Inclusion, and Education

- **Plans**

- Formalize the CODIE structure to ensure dynamic and diverse representation of MGC members as part of the committee
- Bring back DEI-centered training and reflection - 21 day challenge
- Support adopting the ICWG Community Agreement
- Develop a robust way of surveying the community re: ideas and challenges related to our charge

Membership Committee

- The mission of the committee is to provide recommendations on matters of membership recruitment, retention, enrollment, and engagement
- The committee provides services to expand membership, develop benefit services, and encourage communication and participation
- Major accomplishments and activities (2023-2024):
 - 2023-2024 Mentoring Program (35 participant pairs)
 - 2023 Career Development Workshop
 - Increased membership to 465 current members

Membership Committee

- Plans for 2024-2025:
 - Continue managing the membership plan sign up and renewal process
 - Maintain the active membership database for 501(c)(3) reporting purposes
 - Provide member only perks
 - Trainee focused career development workshops
 - Mentorship program with expanded mentor career tracks
 - Host a job posting site
 - Membership swag (e.g. magnets)
 - Work with MGC treasurer to make any necessary adjustments to membership plan rates

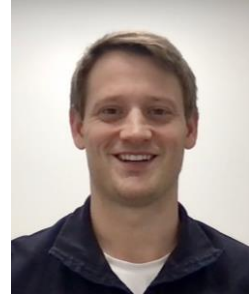
2023-2024 Committee



Natalie
Nannas
(Chair)



Paul
Scott
(Incoming
Chair)



Alex
Brohammer



Candy
Hirsch



Sara
Miller



Tony
Studer



Thu Tran
(postdoc rep)



Jason Lynn
(postdoc rep)

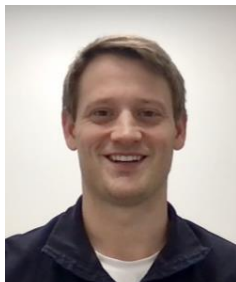


Manwinder
Singh Brar
(grad rep)

2024-2025 Committee



Paul
Scott
(Chair)



Alex
Brohammer



Liza
Conrad



Sara
Miller



Mateus
Mondin



Tony
Studer



Sumeet
Mankar
(postdoc rep)

Maize Genetics Advocacy Committee

- Advance the interests of the international Maize Genetics community and to support advocacy-related activities such as communications with national funding agencies and stakeholders.
- Major accomplishments and activities (2023-2024):
 - MGM Community Session
 - Restructuring of MGAC members and representatives
 - Developing a strategic research initiative
 - McClintock Prize award and announcements

MGC Community Meeting 2024



2024-2025 Committee



Marna
Yandea-Nelson
(Chair)



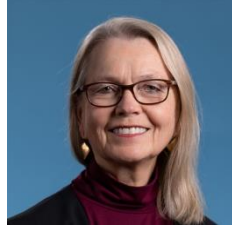
Wojtek
Pawlowski
(BoD)



Mike
Muszynski
(BoD)



Matt
Hufford
(BoD)



Anne
Sylvester
(At-Large)

Filling positions for appointed members:

Africa

Asia

Europe

South America

PUI (Primarily Undergrad Institution)

Industry

2023-2024 Committee



Jay
Hollick
(Chair)



Mark
Lubkowitz
(PUI)



Uta
Paszkowski
(Europe)



Marna
Yandea-
Nelson
(BoD)



Wojtek
Pawlowski
(BoD)



Erin
Sparks
(BoD)



Laurie
Smith
(BoD)



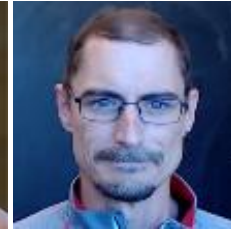
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(BoD)

Maize Genetics Advocacy Committee

- Plans for 2024-2025:
 - Community survey
 - Recruitment of new members
 - Workshops for developing strategic priorities
 - RCN Proposal
 - McClintock Prize

Maize Genetics Meeting Steering Committee

- Committee Mission/Purpose
- The Maize Genetics Meeting Steering Committee is responsible for the organization, content, and execution of the Annual Maize Genetics Meeting (MGM)
- Major accomplishments and activities (2023-2024):
 - Organize the 66th MGM Meeting at Raleigh with 520 attendees/315 abstracts
 - Continued MAGNET program and we worked with Roots & Shoots to support their new Travel Award program.
 - In collaboration with CODIE and BoD we updated the CoC and with support of Roots & Shoots we have an ombuds providing assistance on site

Maize Genetics Meeting Steering Committee

- In collaboration with the BoD we secured and signed contracts for the 2026 meeting to be hosted by Frank Hochholdinger in Cologne, Germany.
- Plans for 2024/2025
 - Organize the 67th Maize Meeting at Union Station in St. Louis
 - Promote the use of the Maize Circle forum: <https://maize.circle.so/home>
 - Continue to improve the ways we run the meeting to make everyone feel welcomed and promote sharing of maize genetics research

Open Community Discussion

- Please use microphones
- Please share space for all to participate

Thank you!

- We appreciate this conversation and welcome feedback
 - Bod.mgc@gmail.com
 - <https://www.maizegdb.org/mgc/>