



63rd Annual Maize Genetics Meeting Summary and Report

Overview:

Conference: 63rd Annual Maize Genetics Meeting

Dates: March 8-12, 2021

Location: Virtual

Website: <https://maizegdb.org/mgc/maizemeeting/>

Conference Chair: Marna Yandea-Nelson, Iowa State University

Conference Co-Chair: Erin Sparks, University of Delaware

Attendance: 721 registered attendees (#1 highest attendance) from 23 countries. 188 self-identified first-time attendees.

Invited talks:

- 2020 McClintock Prize for Plant Genetics and Genome Studies Awardee
 - Dr. Jim Birchler (University of Missouri)
- 2021 McClintock Prize for Plant Genetics and Genome Studies Awardee
 - Dr. John Doebley (University of Wisconsin-Madison)
- Fostering Diversity in the Maize Research Community (inaugural talk)
 - Dr. Beronda Montgomery (Michigan State University)

Plenary talks:

- Dr. Frank Hochholdinger (University of Bonn)
- Dr. Sarah Hake (USDA-ARS and University of California - Berkeley)
- Dr. Bin Han (Chinese Academy of Sciences)
- Dr. Giles Oldroyd (University of Cambridge)

Short Talks: 32 virtual talks

Posters: 193 virtual posters, 109 of which were accompanied by 5-min pre-recorded lightning talks that described the research in the poster)

Steering committee:

Marna Yandea-Nelson (Chair) - Iowa State University (2022); Erin Sparks (co-Chair) - University of Delaware (2022); Madelaine Bartlett - University of Massachusetts Amherst (2023); Mei Guo - KenFeng Seed Co (2023); Matthew Hufford - Iowa State University (2024); Todd Jones - Corteva (2021); Hilde Nelissen - Ghent University (2021); Jeff Ross-Ibarra - University of California - Davis (2021); Maud Tenaillon - INRA Génétique Quantitative Évolution - Le Moulo (2022); Clint Whipple - Brigham Young University (2021); Yongrui Wu - Shanghai Institutes for Biological Sciences (2021)

Ex-officio members:

Carson Andorf (MaizeGDB) - USDA-ARS; David Braun (Treasurer) - University of Missouri; Darwin Campbell (Conference Coordinator) - Iowa State University; John Portwood (Conference Coordinator) - USDA-ARS; Marty Sachs (Conference Advisor) - USDA-ARS

Maize Genetics Cooperation Board of Directors:

Ruth Wagner, 2020 Chair (2022); Natalia de Leon, 2019 Past Chair (2021); Candy Hirsch 2021 Incoming Chair (2023); Sherry Flint-Garcia, Secretary (2022); David Braun, Treasurer, (2023); David Jackson, Communications, (2021); Ed Buckler, At large (2022); James Schnable, At large (2023); Marilyn Warburton, At large (2021)

Conference Summary:

The 63rd annual Maize Genetics Meeting (MGM2021) took place virtually from March 8-12, 2021. The conference was organized by the Maize Genetics Meeting Steering Committee and the Maize Genetics Cooperation Board of Directors with support of the National Science Foundation, six industry partners, and in-kind support from the USDA-ARS. This was the second virtual conference, instigated by the ongoing global Covid-19 pandemic, and the first virtual conference that charged registration fees (Professionals- \$125, Postdocs- \$50, Students- \$25). The conference took place over five days and consisted of 14 talk sessions, four poster sessions, a Community Meeting and a Career Networking session. Each day the meeting used Gather.town for virtual networking and socializing.

The Maize Genetics Meeting is a forum to bring together researchers, scientists, students and other professionals to discuss innovative ideas, current scientific and technical advances, and diverse topics related to maize genetics. Over the last 10 years, over 3,000 individuals from academia, industry, and government have attended a Maize Genetics Meeting from 75 different countries. The 2021 conference was the second time the meeting was held virtually due to mitigation efforts to reduce the spread of Covid-19. There were 721 registered attendees who attended talks, poster sessions, and a community session. There were attendees from 40 U.S. states and 23 different countries: Argentina (2 attendees), Australia (2), Belgium (5), Benin (1), Brazil (4), Canada (4), China (53), Croatia (1), Denmark (1), France (37), Germany (36), Ghana

(1), India (3), Italy (14), Japan (3), Mexico (4), Netherlands (23), Romania (1), Switzerland (4), Taiwan (1), Thailand (1), United Kingdom (10), United States (531).

Conference Scope:

There were seven invited talks including 2 McClintock Prize awardee talks, 4 plenary talks (2 maize-centric, 2 non-maize) and the first 'Fostering Diversity in the Maize Research Community talk. MGM2021 had an additional 32 talks presented in five major topic areas:

- Cellular Processes
- Emerging Tools & Applied Research (2 sessions)
- Genome Biology (2 sessions)
- Maize & the Environment (2 sessions)
- Regulating Genes and Genomes

The community session hosted by the Maize Genetics Cooperation presented on these topics:

- Maize Genetics Cooperation (MGC) update and 2020-2021 highlights
- MGC financial report
- MGC subcommittee reports (Awards and Nomination Committee (ANC), Maize Genetics Advocacy Committee (MGAC), Committee on Outreach, Diversity, Inclusion, and Education (CODIE))
- 2021 community survey results
- Reports from funding agencies: NCGA (Robyn Allscheid), USDA-ARS (José Costa), USDA-NIFA (Ed Kaleikau), NSF (Gerald Schoenknecht)
- Community open forum and discussion

Community Awards:

Five maize community members were recognized with the following awards:

- Maize Genetics Cooperator Award (inaugural award)
 - Marty Sachs (USDA-ARS)
- Maize Genetics Leadership Award (inaugural award)
 - Natalia de Leon (University of Wisconsin-Madison)
- M. Rhoades Early-Career Maize Genetics Award
 - Andrea Eveland (Donald Danforth Plant Science Center)
- L. Stadler Mid-Career Maize Genetics Award
 - Nathan Springer (University of Minnesota)
- R. Emerson Lifetime Maize Genetics Award
 - Don Auger (South Dakota State University)

Acknowledgments:

- The meeting was co-organized by the Maize Genetics Meeting Steering Committee and the Maize Genetics Cooperation Board of Directors.
- The meeting was facilitated in partnership with ConferenceDirect, and utilized the SwapCard virtual platform
- The meeting was partially supported by the National Science Foundation (NSF) - Research Coordination Networks (RCN) Award Abstract #1748978: Broadening and Energizing the Maize Genetics Research Community.
- The USDA-ARS provided in-kind support for hosting the conference website, managing abstract, poster and lightning video collection, and providing technical assistance during the conference.
- Industry sponsors of MGM2021 are BASF, Bayer, Corteva Agriscience (Agriculture Division of DowDuPont), National Corn Growers Association, KWS SAAT AG, Syngenta.

Ten-year summary:

Dates	Location	Chair	Attendance	Talks	Posters
March 8-12, 2021	Virtual	Marna Yandea-Nelson	721	32	193
June 25-26, 2020	Virtual	Clint Whipple	670	26	106
March 14-17, 2019	St. Louis, Missouri	Mike Muszynski	644	40	393
March 22-25, 2018	Saint-Malo, France	Alain Charcosset	456	33	268
March 9-12, 2017	St. Louis, Missouri	Erich Grotewold	677	32	416
March 17-20, 2016	Jacksonville, Florida	David Braun	571	34	376
March 12-15, 2015	St. Charles, Illinois	Mark Settles	608	33	341
March 13-16, 2014	Beijing, China	Ann Stapleton	584	29	221
March 14-17, 2013	St. Charles, Illinois	Phil Becraft	613	35	354
March 15-18, 2012	Portland, Oregon	John Fowler	560	34	312