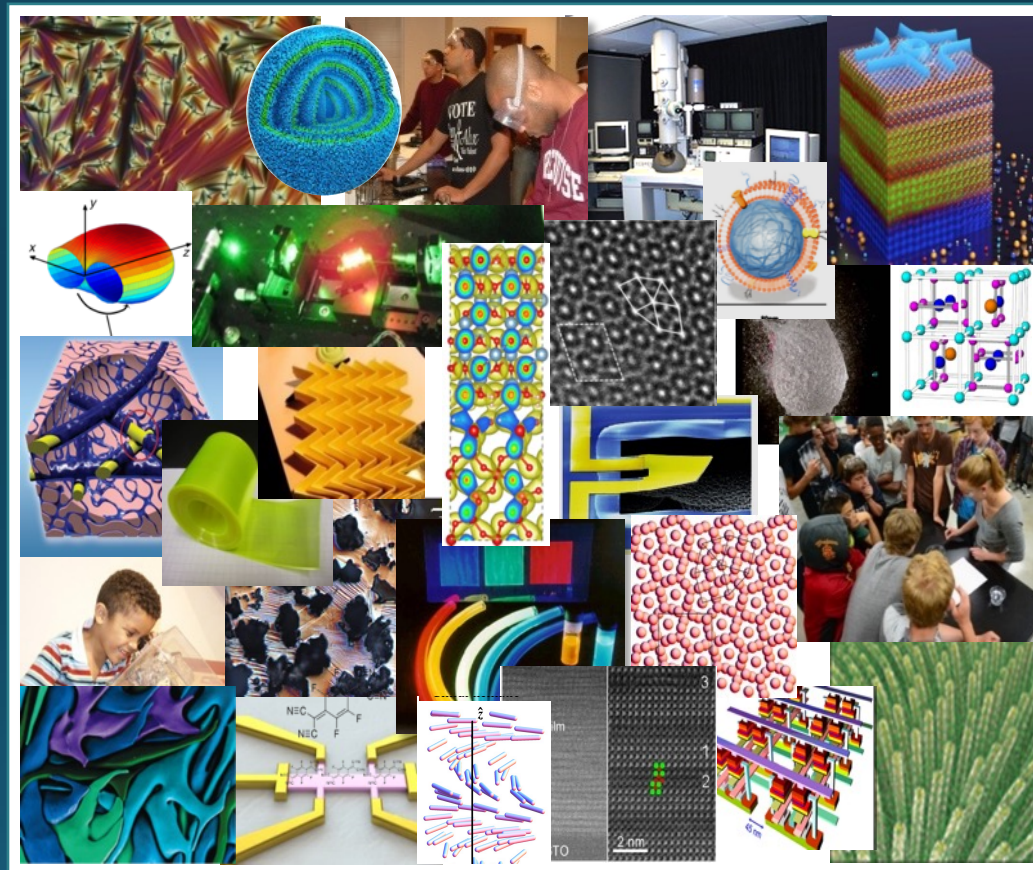




Chris Finta
Program Specialist



Where Materials Begin & Society Benefits!

Introductions and Acknowledgements

Welcome:

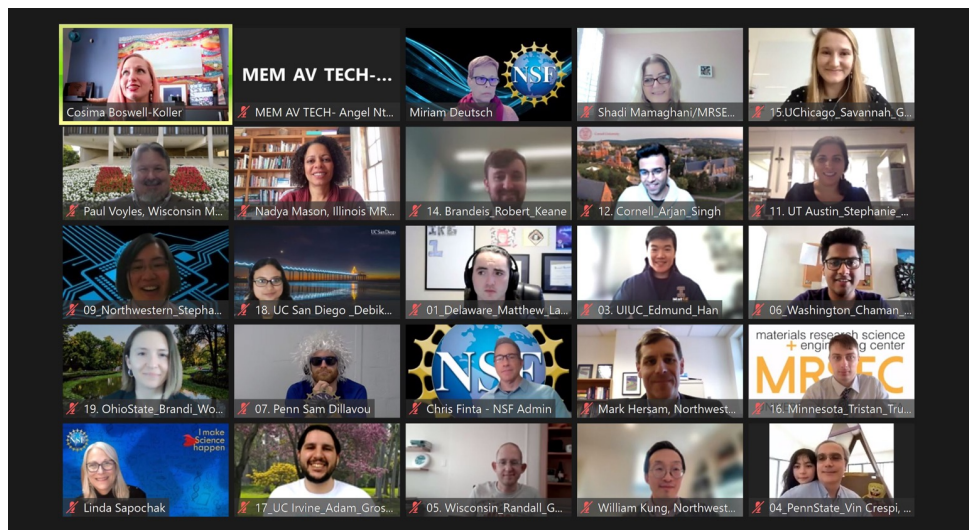
- Germano Iannacchione – Division Director, DMR
- Chris Leighton – Minnesota MRSEC
- Chris Finta – MRSEC Program Specialist, DMR

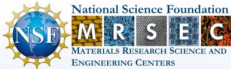
Thank you:

- Linda Sapochak – DMR
- Tim Lodge – Minnesota
- Sehrish Shah – formerly DMR
- PI Meeting Organizers: Mark Hersam and William Kung, Northwestern; Cosima Boswell-Koller, DMR
- Vin Crespi and all MRSEC attendees

Activities in 2022/2023

- Second Year Site Visits: MRSEC PDs held 11 remote site visits, between April 15 – May 27, 2022.
- MRSEC Education Dir. Annual Meeting – Nov. 2022.
- 2022/23 MRSEC Competition is ongoing.




National Science Foundation
MRSEC
 MATERIALS RESEARCH SCIENCE AND
 ENGINEERING CENTERS

The Division of Materials Research and the
 Materials Research Science and Engineering Center Program
 are proud to present the first ever
MRSEC Science Slam

LIVE, 5-min-long Slams + Q&A:
 Research highlight or unique
 Broader Impact
 accomplishment

Creativity is key:
 Slams featuring song,
 dance, poetry, etc. are
 anticipated

**Friday,
January 28th,
2022**

**10:30am –
3:30pm EST**

Participants from all
19 MRSECs:
 Directors, PIs,
 Postdocs, Students,
 and Administrators

Who conveyed their topic
 best?
 Non-NSF audience will vote
 for the winner - Bragging
 rights guaranteed!

To join us,
REGISTER NOW:
https://nsf.zoomgov.com/webinar/register/WN_LE7srULGQnKTz944IW6tqw

UC San Diego
MRSEC

cem
 Center for Complex
 and Active Materials
 UC MRSEC

Northwestern
 MRSEC

MRSEC

HARVARD
 UNIVERSITY

LRSML
 MRSEC

Center for Dynamics and
 Control of Materials
 an NSF MRSEC

I-MRSEC

UNIVERSITY OF
 WASHINGTON
 MRSEC

PAS
 Center for Polymer
 and Surface
 Science
 COLUMBIA-CCT

CCMR
 Center for
 Complex
 Materials
 RESEARCH
 UNIVERSITY OF
 CALIFORNIA, SANTA BARBARA

Brandeis
 MRSEC

MRSEC

THE UNIVERSITY OF
 CHICAGO
 MRSEC

Chicago Materials
 Research Center

PennState
 MRSEC

MRSEC



Upcoming Events, Deadlines and Reminders

- **Annual reports** are due **May 15, 2023**. Please follow **NEW** reporting guidelines. Non-compliant reports will be returned for revisions.
- **No Cost Extensions:** Let us know by **May 15, 2023** whether you are planning on submitting one. You **MUST** submit your NCE request **BEFORE** the Annual Report is approved.
- If planning on requesting NCE, **DO NOT** submit Project Outcomes Report.
- From PAPPG: NCEs “may not be exercised merely for the purpose of using the unliquidated balances.”
- **Reminder:** purchasing of equipment in the final year of an award is **NOT ALLOWED**. NSF may request funds be returned. Spending down an award on student/postdoc support is allowed and encouraged. **Requests to purchase equipment in Yr 7 (NCE year) will not be approved.**

The MRSEC Umbrella

MRSECs foster and enable:

- Fundamental, cutting-edge materials research, conducted in 2-3 **synergistic** Interdisciplinary Research Groups.
- Impactful **education and outreach programs**: K-12 to postdoctoral, to the general public, to URM groups, to people with disabilities.
- Systematic and strategic efforts for **broadening participation** at all levels.
- Active collaborations with **industry/national laboratories**, enabling training opportunities for all participants.
- Access to state-of-the-art **scientific research instrumentation** in a shared facilities setting.
- **Online presence** that helps increase visibility and impact.

MRSEC Education and Outreach

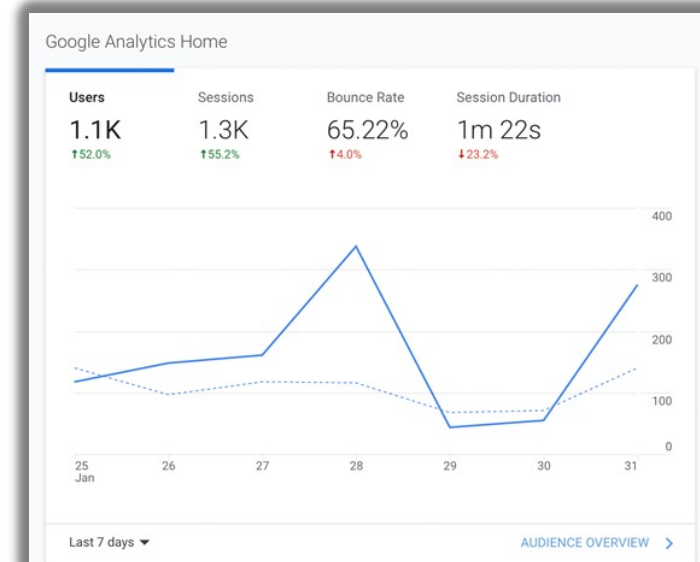
State of the Program

Number of Centers	19
Pre-College Teachers Impacted	> 650
Pre-College Students Impacted	> 70,000

MRSEC Science Slam, 1/28/2022

- 1783 registrants
- 1308 unique attendees
- Attendees from 26 states, plus DC, PR
- 28 attendees from 16 countries outside the US
- Attendees from 14 non-academic institutions (industry, Nat'l Labs)
- Visits to www.mrsec.org increased significantly

Our plan is to hold a MRSEC Science Slam every 3 years. Stay tuned for 2025!



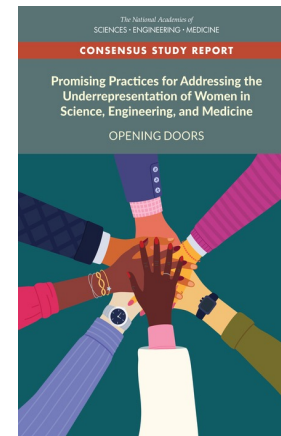
Broadening Participation

Current Representation

	Women	URM
Faculty	23%	6%
Post Docs	26%	5%
Grad Students	31%	7.5%
Undergrads (no REU)	40%	22%

Launching Early-Career Academic Pathways in the Mathematical and Physical Sciences ([LEAPS-MPS](#))

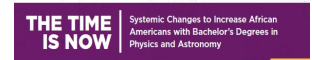
Mathematical and Physical Sciences Ascending Postdoctoral Research Fellowships ([MPS-Ascend](#))



<https://www.nationalacademies.org/our-work/increasing-the-number-of-women-in-stemm>



<https://www.aip.org/diversity-initiatives/team-up-task-force>

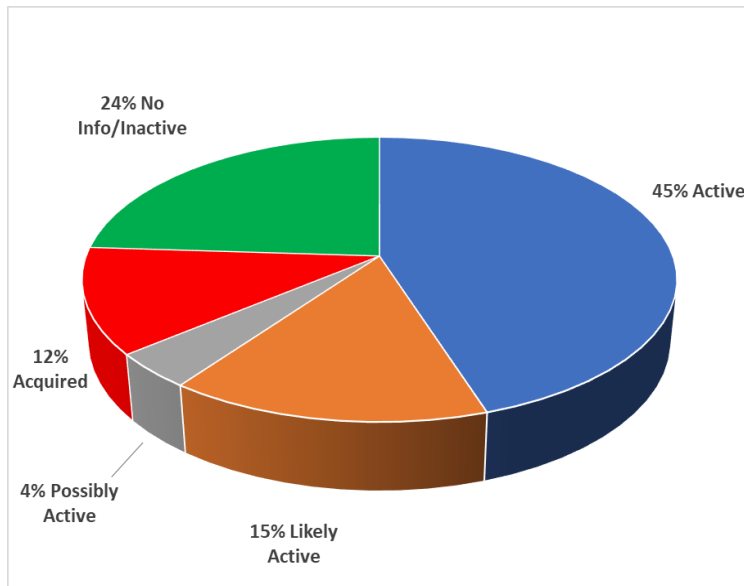


Disciplinary Breakdown

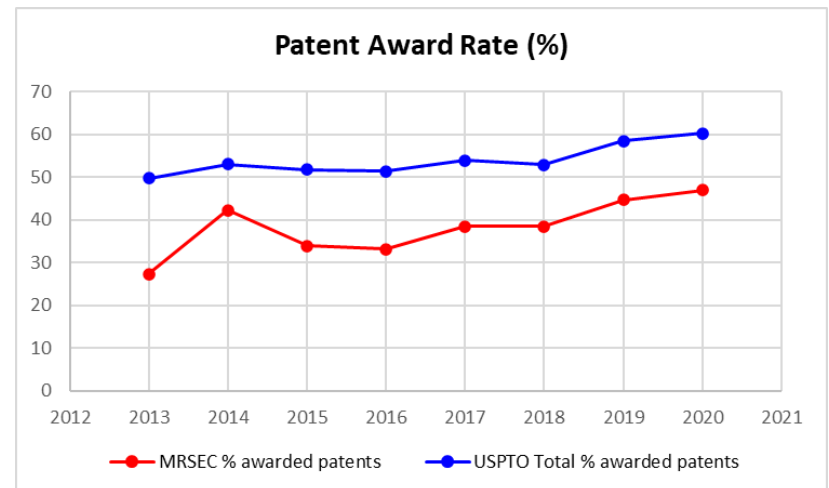
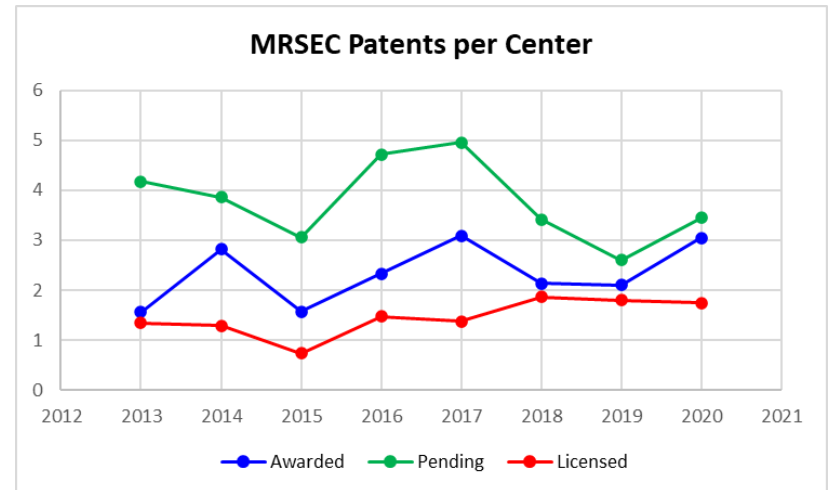
	Women	URM
Physics	21%	2%
Chemistry	27%	5%
Materials Science	25%	4%
EE + Chem Eng.	22%	8%

Economic Impact of MRSECs – IP Portfolio Analysis

A total of **198 companies** have been launched by MRSECs since 1985. The status of these companies as of August 2021:



MRSEC awarded IP is tracking the total awards rate in the USA



MRSEC Facilities

DMR recently made an award to a team which intends to create a national tool of **federated data infrastructure** for DMR-funded materials research instrumentation – the **Facilities and Instrumentation for materials Research Search Tool (FIRST)**. Piloting of the tool will involve MRFN instrumentation at various MRSECs. We anticipate the MRFN.org site to be overhauled (but not retired) within 1-2 years.

Communications and Reporting

- MRSEC.org is being refreshed, updated, and is also migrating to a new and improved platform. Stay tuned.
- If you are planning on making changes to the website/MRSEC brochure – please coordinate with Divya.
- MRSEC demographic survey just launched. **WE NEED ACCURATE DATA.**
- MRSEC annual report format is cumbersome, slowing down processing of reports. Expect (hopefully) some simplifications for the 2023 report (tables in Appendices will be machine readable!)



Revised Reporting Guidelines

Revisions have been made to the following:

- Annual reporting guidelines
- Data reporting format
- Highlights slide format

Annual Reporting Guidelines

Main revisions to reporting guidelines:

- New page limits on subsections of each narrative section. Overall page limits of each narrative section remained the same. Reports may end up being shorter than previously, if there is nothing to report on in certain subsections. **Example:** Executive Summary (p.4)
- If it didn't change – leave blank. **Example:** Post-doc Mentoring (p.7)
- **Data Management Plan:** Describe the data-related activities and actions taken to execute the Data Management Plan (DMP). **DO NOT COPY AND PASTE THE ORIGINAL DMP FROM THE PROPOSAL.**
- Graduated Trainees: **Please do not state information such as gender, race, ethnicity, or any other protected personal information.**
- New Budget Reporting Table (p.14)
- Data Appendices are no longer included as tables in the report, but instead are separated into an Excel Workbook.

Annual Reporting Guidelines

Main revisions to data tables:

- Data tables have been replaced by an Excel Workbook. ***Please read and follow all instructions***
- **Do not modify any of the data tables**. Data are automatically imported into MRSEC's Master Data Workbook.
- Convert workbook to PDF when complete and append to annual report, submit as usual through Research.gov
- Send completed Excel Workbook by email to mrsec@nsf.gov

Main revisions to Highlights slide:

- New format for reporting on highlight.
- Include highlights in report as PDFs, and send.pptx slides by email to mrsec@nsf.gov, as previously.