

2023

Crediting Collaboration Equitably

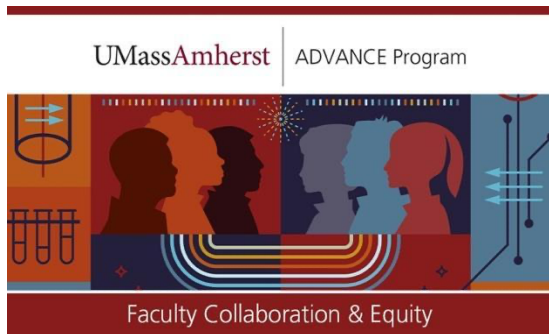
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CREDITING COLLABORATION EQUITABLY



This tool—**Crediting** collaboration equitably—is part 3 of a three-tool series for embedding equity into all phases of research collaboration. See also **Creating** equitable research collaborations (part 1) and **Continuing** equitable collaboration relationships (part 2).

Even as team science has increased, the process of evaluating faculty for tenure and promotion still tends to rely on metrics of individual performance; this can yield gendered and racialized results. The UMass ADVANCE program works to ensure greater equity among faculty members through the power of collaboration. This tool is for **faculty members serving on personnel committees**, or anyone engaged in **evaluating peers**, to inform evaluation processes to credit research collaboration equitably. There are also tips for **faculty engaging in research collaboration** to develop practices for sharing credit.

HOW IS CREDITING COLLABORATION INEQUITABLE?

All faculty experience challenges in research collaboration, including issues of time, logistics, and interpersonal dynamics. Race and gender intersect to shape the ways in which collaboration is evaluated to disproportionately inhibit the careers of white women and women of color as compared to men.

Women, especially those who are untenured, receive less credit for their work both informally and formally: women are more likely than men to be viewed as **riding on their collaborators' coattails**, **systematically denied credit for their ideas**, and **subsumed under the reputation of men** collaborators. Women faculty from underrepresented minority groups, as well as those who are not U.S. born, may be even **less**

credited for their collaborations, including having their **ideas stolen with no credit**, due to biases in collaboration and recognition practices by gender, race, and nationality.

Key barriers that arise for women faculty in earning credit for their research collaborations have been identified from our research. For case studies, we have incorporated research findings into the cases to highlight difficult situations. In Case Study 1, personnel committee members and other faculty should engage collectively with the discussion questions, to brainstorm how to evaluate colleagues equitably.

Case Study 1: Where Credit is Due

Shelley is a Black woman assistant professor. She is going up for tenure and promotion with a competitive research portfolio, including a coauthored publication in her discipline's flagship journal that recently received a prestigious research award. Most of Shelley's scholarship stems from her being a Co-PI on a collaborative project funded by a major grant, except for one sole-authored article based on her dissertation. Shelley is the corresponding author on more than half of her publications, and has published more than peers previously awarded tenure in her department.

How might Shelley's case be evaluated, given her collaborations? How would you speak on her behalf in a personnel committee meeting?

CREDITING COLLABORATION EQUITABLY

Many faculty members strike a balance between independent and collaborative work to earn tenure and promotion, though this differs by field and method. Women, particularly women of color, are much more likely than men to describe needing to prove their specific contribution to colleagues evaluating their cases.

Research has shown that reviewers may assume the senior person on a collaboration is always the intellectual leader. Race and gender may bias how collaborative work is read, as well as rank. When personnel committees and department leaders develop practices that more fairly credit collaborative work, it is especially helpful for recognizing the contributions of women and faculty of color, but these practices are also helpful for all faculty who engage in research collaboration.

HOW CAN FACULTY DEVELOP EQUITABLE CREDIT FOR COLLABORATIONS?

Credit is not a one-time negotiation at publication, contributions need to be acknowledged all along.

There are steps collaborators can take to ensure a fair and equitable distribution of workload and credit that will make evaluations of collaborative research smoother down the road. Research teams might consider the following:

- Read the UMass ADVANCE tools on Creating Equitable Collaborations, Continuing Equitable Collaborative Relationships, [Resources for Equitable Research Collaborations](#), and [Equitable Research Collaboration Between Faculty and Grad Students](#).
- Discuss with collaborators how to center equity throughout the research process, including pre-proposal, proposal, start-up, during the project, and project closure.
- Have periodic conversations about team roles and expectations, including publication and authorship plans.
- When it is time to publish, revisit Memorandums of Understanding (MOUs) and other formal documents the team has developed to articulate roles, responsibilities, and authorship agreements. If you have an MOU, it should be updated regularly.
- Strive to make every individual's role in the collaboration clear, identifying particular expertise or the through-line across their research agenda.
 - Senior collaborators should highlight and promote the expertise that junior colleagues bring to research teams.
 - All authors could identify their specific contributions as a member of the research team as part of personnel cases. Use the [CREDIT taxonomy](#) for a model.
- Be an ally to collaborators who have less power than you do. Notice how they are treated in team meetings and speak up on their behalf if their inputs are being miscredited or unheard.

WHAT HAPPENS WHEN SAFEGUARDS FAIL?

Even when steps to support equitable research collaborations are taken, there are times when safeguards fail and conflicts regarding crediting collaboration arise. Discuss Case Study 2 below to help your team develop norms for addressing conflicting expectations.

Case Study 2: When Safeguards Fail

Your research team has been working together on a project for several months. At the outset of the project, you developed an MOU understanding that outlined an equitable division of labor and authorship agreements for each publication. However, one of the senior team members has been unresponsive to emails and failed to carry his weight on the publication due to administrative responsibilities. You stepped in to finish the analyses and write up sections originally assigned to him. The final draft of the paper has been circulated amongst the team, but he did not respond or provide input. It is time to submit the paper, and you feel like the authorship of the paper should change to accurately reflect everyone's contributions.

What happens next? How would you broach the subject of authorship to your team? To your senior colleague?

ADDITIONAL RESOURCES

- [UMass ADVANCE Seed Funding Best Practices](#) and [Seed Funding Checklist](#)
- UMass Amherst Graduate Council & Research Council [Policy Statement on Joint Authorship](#).

This resource is based on research, presentations, and suggestions made by Ethel Mickey, Ember Kanelee, Joya Misra, Laurel Smith-Doerr, Dessie Clark, and Jennifer Normanly. Thanks to the UMass ADVANCE team for input.

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ADVANCE-Institutional Transformation

2023

Continuing Research Collaboration Relationships

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CONTINUING EQUITABLE RESEARCH COLLABORATION RELATIONSHIPS

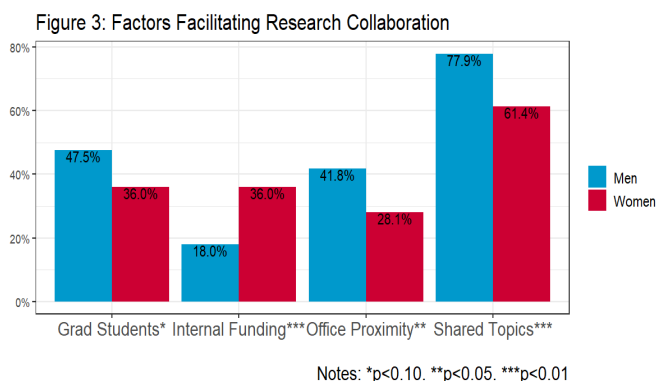
This tool—**Continuing** equitable research collaboration relationships—is part 2 of a three tool series for embedding equity into all phases of research collaboration. See also **Creating** equitable research collaborations (part 1) and **Crediting** collaboration equitably (part 3).

WHAT ARE SOME OF THE CHALLENGES TO CONTINUING EQUITABLE RESEARCH COLLABORATION RELATIONSHIPS?

New relationship energy, including in research collaboration relationships, can help to develop social bonds; but good relationships require a commitment to maintaining the tie. Many research collaborations begin with good intentions but fall apart when tensions arise. Having a plan for caring for the research collaboration relationship—including mending and repairs—can make a difference between a good and bad collaboration.

Good communication and trust characterize the most successful research teams. Teams that have developed and practice strategies for working together equitably are more effective. Meeting regularly helps to build trust. In interviews, faculty from marginalized groups report the critical importance of being able to trust that collaborators who are members of majority groups and/or senior to them will treat them with respect.

Equity in resources and support for collaboration matters throughout the life of a research project. Faculty needs may differ; equity in collaborative resources is not necessarily the same as equality. The figure below from the 2022 UMass ADVANCE survey data imply that campus support through internal grants and seed funding may also support women faculty’s feelings of inclusion.



Time is a critical resource necessary to maintaining collaborations. Faculty members need opportunities to interact, informally as well as formally, to continue to develop ideas, and work well together. Processes for repairing relationships when tensions or conflicts arise often involves time to sit down together both for one-on-ones and for larger team meetings. Allow for timeline adjustments, recognizing that work and life commitments may require team flexibility, especially in long-term projects.

Inclusion matters in collaborators treating each other’s insights with respect, identifying the contributions diverse collaborators can make, and in budgetary equity that continues when adjustments need to be made during a collaboration. Community partners or faculty from different institutions may have different budgetary needs or requirements.

HOW CAN FACULTY MEMBERS MAINTAIN FAIR AND EQUITABLE COLLABORATIONS?

All faculty experience challenges in research collaboration, including issues of time, logistics, and interpersonal dynamics. Women are more likely than men to recount interpersonal challenges while engaging in collaboration. Foreign-born women voice concern that their intellectual contributions are not always heard. Black women often experience a lack of respect, including having their competence questioned. The lack of respect can have material consequences, such as when a project moves in the wrong direction or takes longer to complete. Efforts to continue good collaborations benefit all faculty and may especially help women faculty of color feel their collaborations are productive.

Some collaborators develop Memorandums of Understanding, written documents laying out expectations for contributions to writing proposals or papers, carrying out research, access to instruments, and other details. These MOUs must be living documents and adjust as the relationship changes over time.

CONTINUING EQUITABLE RESEARCH COLLABORATION RELATIONSHIPS

Regular team meetings can be a place where equity is put into practice. Some ways that team meetings can be more equitable include:

1. Rotate who leads team meetings - giving voice to different people regularly.
2. Continue to discuss authorship of papers and be transparent about workloads on other projects at regular meetings. Keep updating your Memorandums of Understanding (MOUs) and other formal safeguards to serve as the foundation for research relationships, including articulating roles, responsibilities, and authorship agreements.
3. Keep a shared document in the cloud open, viewed by all, for meeting minutes to record who says what in real time. This practice can help provide reminders of tasks and to credit everyone for their ideas.
4. Faculty from minoritized groups might consider locating an ally on the team who will speak up on their behalf if they are being silenced. Priming allies in private, before the meetings.

WHAT SHOULD FACULTY MEMBERS DO TO SUSTAIN GOOD COLLABORATIVE RELATIONSHIPS?

Collaborations can increase opportunities and productivity, but they require care and feeding to remain good relationships. Qualities of equitable collaboration that need sustaining include:

- Commitment to stated **shared research goals and values** for the project and collaboration
- Respectful and equitable environment in which **each person's voice**, intellectual input, and direction of the project, or specific components of the project **is valued**
- Trust, physical and psychological **safety, and mutual respect** among all members
- Openness and **transparency** about team member participation and the project's progress, challenges that may occur, financial issues, etc.
- Agreed upon **processes for professional communication** in person, via email, and in virtual environments
- Clarity about **disciplinary frameworks and terminology**
- Clear and precise **plans for communication and interaction**

Case studies can often be helpful for engaging in the challenging conversations that need to be a regular part

of checking in for a healthy team. See the case study below as one entry point for these conversations.

Case Study: Collaboration Communication Challenges

Mayumi has been collaborating with her team for almost a year, but she has concerns that her intellectual contributions are not always heard. She finds it hard to interject into the team conversations when everybody is talking loudly over each other. She does not want to interrupt, but she also wants her voice to be heard. Last month, she proposed an idea but her colleagues just shrugged. When someone more senior proposed the same idea more recently, everyone thought it was a direction worth pursuing. She suspects her gender, race, and nationality as a foreign-born Asian woman contribute to her being silenced.

How would you deal with this collaboration challenge if you were Mayumi? If you were Mayumi's team member and peer mentor?

Also see other relevant UMass ADVANCE tools:

[Resources for Equitable Research Collaborations](#), and [Equitable Research Collaboration Between Faculty and Grad Students](#).

This tool is based on suggestions made by participants at the 2022 ARC/ADVANCE PI meetings, as well as Ember Skye Kanelee, Dessie Clark, and the ADVANCE team at the University of Massachusetts, Amherst. Thanks to Shuyin Liu for the figure.

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2023

Creating Equitable Research Collaborations

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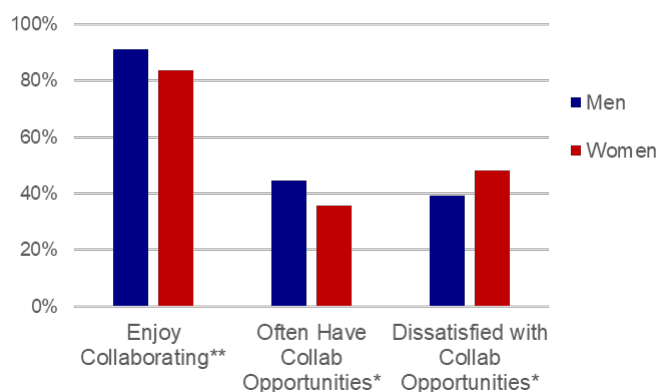
CREATING EQUITABLE RESEARCH COLLABORATIONS

This tool—**Creating equitable research collaborations**—is part 1 of a three tool series for embedding equity into all phases of research collaboration. See also **Continuing equitable collaborative relationships (part 2)** and **Crediting collaboration equitably (part 3)**.

WHAT ARE SOME OF THE CHALLENGES TO CREATING EQUITABLE RESEARCH COLLABORATIONS?

Finding collaborators is a challenge to many faculty members. Research collaboration is increasingly important to successful bids for external grant support needed for scholarly pursuits. Figure 1 below shows that there are gender disparities in how satisfied faculty are with opportunities to collaborate on our campus. Creating more diverse and inclusive research collaboration teams will support faculty equity.

FIG. 1: Gender & Research Collaboration Experiences



WHY EQUITY IN RESEARCH COLLABORATION?

Universities and research centers actively promote collaboration among faculty, and federal policy also supports team science. However, faculty experiences with research collaboration vary by race and gender. The majority of faculty enjoy collaboration; however, women report having fewer collaboration opportunities than men, and women, particularly women of color, are more likely to report being dissatisfied with those opportunities.

The UMass ADVANCE program works to ensure greater equity among faculty members through the power of collaboration. This tool is for faculty members, to guide discussions among members of research teams about how to consider equity and inclusion from the start of collaborations. Mentoring around equitable collaboration is critical.

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Research shows that more diverse teams—when resources and decisions are distributed equitably—are more innovative. Creating equitable teams boosts creativity.

Time is a critical resource necessary to creating new collaborations. Faculty members need opportunities to interact, informally as well as formally, to develop ideas, and work well together. Developing shared language is especially necessary for interdisciplinary collaborations. Institutional seed funding or microgrants support this process. Discuss timelines for the research, even if those timelines may need to be adjusted later.

Inclusion matters in collaborators treating each other's insights with respect, identifying the contributions diverse collaborators can make, and in budgetary equity. Interdisciplinary grant reviewers often notice when budgetary commitments do not match statements about inclusive teams.

Good communication and trust characterize the most successful research teams. While funding opportunities sometimes require developing new collaborations quickly, teams that have already developed strategies for working together effectively, and can specifically outline their collaborative approaches and successes, are more likely to win funding.

MENTORING JUNIOR FACULTY IN RESEARCH COLLABORATION

Research collaboration should be included in [faculty mentoring plans](#). As a mentor, colleague, or chair/head, consider having conversations with junior colleagues about collaboration opportunities on campus.

- Discuss potential collaborators and collaborative research opportunities (including those outside of the department) with mentees and junior faculty members. The [ADVANCE program](#), the [Office of Research and Engagement](#), and the [Office of Faculty Development](#) can help faculty develop connections leading to research collaboration, often through [mutual mentoring groups](#).

CREATING EQUITABLE RESEARCH COLLABORATIONS

- Provide new faculty with information about [interdisciplinary scholar programs](#) to connect them with the broader university research community. Discuss [internal seed grant funding](#) opportunities. Seed funding helps newly developed collaborations get off the ground, building proposals for external funding.

We outline key barriers that arise in developing collaborations, using evidence-based case studies to highlight difficult situations. Peer Mentors and Chairs can read and discuss Case Study 1 below to think through some issues in supporting junior faculty in collaboration decisions.

CASE STUDY 1: THE MENTOR'S ROLE?

Gabriella is untenured, having been recently hired as part of the university's Latinx Cluster initiative; she is the only person hired through this initiative in her college. Her department chair has encouraged her to collaborate with colleagues to expand her publications, but Gabriella is the only faculty member in the department specializing in her subfield, and it is not clear that the department plans to hire additional scholars in her area. It takes time for Gabriella to build the trust needed to initiate collaborations with colleagues. In the past, she has relied on her advisors vouching for people as collaborators, but she has no mutual connections in her department.

How would you mentor Gabriella on this topic of research collaboration if you were her peer mentor? If you were her department chair? How might Gabriella build opportunities for collaboration given the paucity of close colleagues in her department and college?

HOW CAN FACULTY MEMBERS DEVELOP FAIR AND EQUITABLE COLLABORATIONS?

Have clear conversations about expectations, roles, and responsibilities up front. Teams must articulate a fair and equitable distribution of resources, workload, and credit. Senior team members should ensure that junior scholars' work is recognized, based on their expertise or the collaboration's structure.

Collaborators should discuss whose skills are needed at different stages of the project, who from the team might be the PI or co-PI on any grant proposals, and strategies

for authorship on the papers that emanate from the project. While these conversations can be awkward, aligning expectations early in the collaboration ensures that there are no misunderstandings.

Figure out the norms your team will have for regular communication. Some collaborators develop Memorandums of Understanding, written documents laying out expectations for contributions to writing proposals or papers, carrying out research, access to instruments, and other details.

WHAT SHOULD FACULTY MEMBERS CONSIDER BEFORE JOINING COLLABORATIONS?

Collaborations can increase opportunities and productivity, but they can also be demanding. Faculty members should consider some key factors before committing to a collaboration.

1. How does this opportunity move their research agenda forward? How does it move them toward specific goals? This might be related to substantive content, methodological expertise, or connections to new research partners.
2. How does this project fit into their professional development goals and research narrative (for example, on a personal statement)? Pre-tenure faculty members should be selective, only engaging in collaborations that clearly fit into their research agenda and help establish their research strengths. Faculty may pursue some collaborations immediately, and others at a later stage or not at all.
3. What resources are necessary to engage in this collaboration effectively? If resources are not in place, the collaboration is less likely to be effective. Leading a large research team, for example, may require reducing other responsibilities or asking for administrative support.
4. What input will they have regarding intellectual direction and production for the team? When considering collaborating with a senior researcher, it can be useful to consider their record collaborating with others. These conversations should not replace conversations among the research team about how *this* collaboration will be structured.

INITIATING COLLABORATIONS with INTERSECTIONAL EQUITY

Some faculty, such as women faculty, foreign-born faculty, BIPOC faculty, first-generation faculty, or trans/nonbinary faculty are less likely than other groups

CREATING EQUITABLE RESEARCH COLLABORATIONS

of faculty to have developed collaborative relationships in graduate school. These groups are also more likely to report negative experiences in collaborations. Intersectionally, these statuses come together, so that, for example, foreign-born women of color are particularly vulnerable, and may learn to protect themselves by collaborating with people they know and trust, at times avoiding collaboration due to prior negative experiences – which further limits research networks, and thus, citations and broader reputation. If all PIs develop skills in how to create collaborations where everyone is treated with respect and all voices are heard, all collaborators will benefit, although faculty from underrepresented minority groups may particularly benefit.

Case studies can often be helpful for engaging in the difficult conversations that should be held before problems arise, when a team is creating the collaboration. Discussion questions and Case Study 2 are intended for collaborators to engage with collectively, to brainstorm how to best set up an equitable collaboration and outline conflict management procedures before beginning a project.

Case Study 2: The invitation

Arbor was recently hired into their department as an assistant professor and the only specialist in a subfield that connects to research themes studied in other departments and colleges. A prominent PI in another college, Distinguished Professor (DP) has never worked with anyone in Arbor's discipline but notices a promising call for federal funding that requires including CoPIs from fields like Arbor's, and invites Arbor to collaborate on a new project. DP likes the idea of learning about a new area of scholarship through leading a large, interdisciplinary project and expanding his network to Arbor's college, but he doesn't know much about budgeting for research needs in Arbor's subfield. Arbor asks their departmental mentor for advice about working with DP. The mentor is not able to find others who have worked with DP, and thus cannot provide good advice about what it might be like to collaborate with DP. The mentor talks to Arbor about the potential opportunities of a large interdisciplinary grant as well as the challenges of the collaboration, mentioning that she doesn't know whether or not this is likely to be a good collaboration for Arbor.

What other information does Arbor need to decide about collaborating with DP? What factors would need to be present for Arbor to agree to pursue the collaboration? How can DP approach the collaboration equitably?

STEPS TO SUPPORT EQUITABLE COLLABORATION FROM THE START

- Have all research team members read the UMass ADVANCE tools on [Resources for Equitable Research Collaborations](#), and [Equitable Research Collaboration Between Faculty and Grad Students](#). Then discuss with collaborators how to center equity throughout the research process, including pre-proposal, proposal, start-up, during the project, and project closure.
- Develop a Memorandum of Understanding (MOU) and other written documents to safeguard the foundation for research relationships, including articulating roles, responsibilities, and authorship agreements.
- Discuss where the project falls in line with priorities for each collaborator before collaborating. Be transparent about workloads.

This tool is based on presentations and suggestions made by Ember Skye Kanelee, Dessie Clark, and the ADVANCE team at the University of Massachusetts, Amherst.

Suggested Citation: Joya Misra, Ethel Mickey, Jennifer Normanly, Laurel Smith-Doerr. 2023. [Creating Equitable Research Collaborations](#). University of Massachusetts Amherst ADVANCE Program.

UMass ADVANCE is funded by the National Science Foundation. For more information go to <https://www.umass.edu/advance/>.