



ROCHESTER INSTITUTE OF TECHNOLOGY ADVANCE IT GRANT Connect Grants Evaluation

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Findings from interviews and grantee reports of RIT Connect Grantees from 2014 and 2015, and summaries of program documents from 2014-2019 to understand the impacts of the grants individually, institutionally, and beyond.

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Table of Contents

<i>Connect</i> Grant Objectives and Strategic Approaches	3
Executive Summary.....	5
Human Resources Objective.....	5
Symbolic Objective	6
Structural Objective	7
Political Objective	7
<i>Connect</i> Grants over Time.....	7
Evaluation Methods	9
Human Resources Impacts of the Grants	10
Networking and Mentoring for Professional Development or Quality of Life Improvement	10
Internal Networks Were Bolstered	10
External Networks Developed	11
Mentoring Experiences with Official Mentors, Peers, and Students.....	12
Career Advancement through Networking	14
Career Advancement through Professional Development / Human Resource Development.....	15
Grantees built key skills for career advancement.....	15
The Benefits of Leadership Development.....	16
Grantees Experienced Increased Autonomy as Researchers.....	17
Visibility for Grantee Work Improved.....	17
Career Advancement Outcomes	19
Symbolic Impacts of the Grants.....	21
Leadership to Emphasize Organizational Issues of Meaning	21
Confidence Increased.....	21
Value and Influence.....	22
Research to Emphasize Organizational Issues of Meaning.....	23
Networking and Mentorship to Emphasize Organizational Issues of Meaning	23
Structural Impacts of the Grants.....	24
Institutional Transformation of the Environment.....	24
Institutional Transformation of Policies/Practices.....	25
Process Evaluation Themes	27
Proposed and Funded Projects Varied by Amount, College Affiliation, and Designation.....	27

<i>Connect</i> Grants were advertised broadly.	34
Everyone benefitted from writing the proposal.	34
The promise of career development motivated grantees to apply.	34
Consider offering more time for the projects.	35
Projects were focused on programming, dissemination, and/or research.	35
Next Steps.....	35
Leadership Training Ideas for RIT	37

Connect Grant Objectives and Strategic Approaches

The *Connect* Grants Program was created to support the leadership and career development of all tenured and tenure-track faculty at RIT. More specifically, these grants are meant to broaden faculty opportunities and enhance plans of work associated with tenure and promotion preparation and overall career advancement or assist in department level efforts to guide and manage faculty through various career stages and project oriented work to facilitate institutional transformation. Successful proposals in either the Faculty/Faculty group track or the Department track must support one or more of the AdvanceRIT objectives:

1. Improve the quality of women faculty work life, professional development, and incentive/reward structures.
2. Enhance the working environment and support career advancement of women faculty through empowerment, inclusion, and other symbolic aspects of women's professional quality of life.
3. Refine and strengthen institutional structures and install practices that promote representation and advancement of women faculty.
4. Align institutional, administrative, and informal systems of power and resources to support and sustain progress shaping the political frameworks that impact representation and advancement of women faculty.

Bolman and Deal Frames for Understanding Organizations

In their book on "Reframing Organizations," Bolman and Deal offer four frames or lenses through which individuals experience and view their organizations. The AdvanceRIT project is designed to make progress in all four frames in order to make systemic improvements in the organization. In the AdvanceRIT grant proposal, the *Connect* Grants were included under the Human Resources frame. The "department head grants program" which seems to have been incorporated into the *Connect* Grants, was listed under Political strategic approaches. None of the grantee reports included outcomes that could be considered political without additional context, so that frame is not included in the analysis in this report.

<p>HUMAN RESOURCES:</p> <p>Improve the quality of women faculty work life, professional development, and incentive/ reward structures.</p>	<p>SYMBOLIC:</p> <p>Enhance the working environment and support career development for women faculty using symbolic measures which emphasize issues of meaning within the organization.</p>
<p>STRUCTURAL:</p> <p>Refine and strengthen targeted institutional structures, and install practices promoting representation and advancement of women faculty.</p>	<p>POLITICAL:</p> <p>Align institutional, administrative, and informal systems of power and resources to support and sustain progress by shaping the political frameworks that impact representation and advancement of women.</p>

Overall, Grantees met the *Connect* Grant goal in various ways.

The goal of *Connect* Grants is to “support leadership and career development for all tenured and pre-tenured faculty at RIT,” in line with the AdvanceRIT project objectives. In their final reports, grantees identified 5 main barriers to gender equity among tenured and pre-tenured faculty, around which their projects centered. These five barriers were: professional development for women faculty and women faculty of color (13/16), disparity in opportunities in academia by gender (10/16), struggling with work/life balance (8/16), desire for community (especially among women faculty and women faculty of color) (6/16), and professional development for deaf and hard of hearing faculty (1/16). **Combined together, these identified barriers address the structural, human resources, political, and symbolic objectives of the AdvanceRIT project.** Details about outcomes in line with the four strategic frames (Bolman and Deal) are described in more detail in the body of the report.

“I think it was extremely useful because it was a good opportunity...We’ve had discussions here about sometimes you just need that little bit of funding. It was extremely useful because it helped us to do things we wouldn’t be able to do otherwise. You need just a little bit to get going and we were able to do something significant. This is a perfect program to accomplish those types of things. As a stepping stone, for career advancement it was this little boost. You just need that little bit of boost to get over the hurdle. It was a perfect program for that!”

Executive Summary

The AdvanceRIT *Connect* Grant program has resulted in strong impacts for the grantees of the programs as well as the broader RIT community, based on an evaluation of the program.

From 2014 to 2019, there have been 58 *Connect* Grants awarded to 46 different faculty members and two departments. Grants have varied in size from \$1,000 to \$13,500 and the *Connect* Grant program has disbursed a total of \$330,159 since its inception; 55% of all proposals were awarded. Ten RIT colleges have had *Connect* Grant awardees (all except SOIS); 35 grants went to STEM fields, 11 went to SBS fields, and 12 went to other fields. In total, 111 unique faculty members have been involved in these grants and benefited from them, and some faculty have been involved in more than one *Connect* Grant.

Individual (Human Resources and Symbolic) impacts of the *Connect* Grants have been related to improving women's work life, professional development, career advancement, and improving their working environment. In particular, *Connect* Grantees strengthened internal and external networks which led to career advancement, benefitted from mentoring relationships as mentors and mentees, built skills (including leadership skills) to support their professional development, increased their research autonomy and project visibility, increased their confidence in disseminating and being experts of their work, increased their value and influence, and supported the advancement of women and other underrepresented groups in their field, through their grant projects.

Organizational (Structural) impacts of the *Connect* Grants at RIT are related to refining institutional structures and installing practices to promote representation and advancement of women faculty. Some grantees worked to transform their institutional environment by strengthening community and raising internal awareness of their work, and also created new learning and leadership opportunities which helped to modify institutional policies, practices, and procedures.

Human Resources Objective

- ❖ **Internal Networks were strengthened.** Through luncheons, workshops, speaker series, small group discussions, and lunch-and-learns, grantees built relationships with others working in their fields. These new networks lead to more research collaborations and subsequent grant proposals, as well as increased visibility with the student body.
- ❖ **External Networks were developed.** Through conferences and social media, grantees grew their professional community, which lead to new professional avenues and illuminated new research opportunities.
- ❖ **Mentorship by Grant Mentors and Peers Benefitted Grantees.** Most grantees found mentorship to be a prominent and beneficial element of their *Connect* Grant experience, helping them understand the nuances of the institution. The majority of grantees found working with their designated grant mentors helpful for their career development. They also gained value from mentoring their project

team members, and enjoyed their experience mentoring students. A few grantees did not feel their mentors were particularly involved after the grant proposal was written, for a variety of reasons.

- ❖ **Networking Impacted Grantees' Career Advancement.** As the most common outcome reported by grantees in their reports, networking helped grantees by increasing the visibility for their projects, developing community with those more advanced in the P&T process, promoting their work among others, and establishing connections, such as with researchers in their field who could write them letters for promotion that would otherwise not be built.
- ❖ **Grantees developed a wide range of skills that supported their career advancement.** By participating in their projects, grantees built or strengthened a wide range of professional, technical, and engagement skills.
- ❖ **Leadership Skills Were Built Both by Applying to Grants and Executing Projects.** Managing grants bolstered leadership skills among grantees, and many grantees used their funding to support personal and community leadership development.
- ❖ **Some Grantees Increased their Research Autonomy.** Grantees whose *Connect* Grants were research oriented reported increased autonomy as researchers. The *Connect* Grant helped junior faculty to deepen their engagement and proficiency in their research area, fostered scholarly partnerships and community, and offered a space for researchers to shift and expand the focus of their research areas.
- ❖ **Project Visibility Increased Through Networking and Promotion.** The grant helped most grantees increase the visibility of their *Connect* Grant projects. This increased visibility occurred through developing relationships with other scholars in related fields, promotion through conference presentations, media literacy skill development, and publications in scholarly, university, and media sources.
- ❖ **Grantees saw Important Career Advancement Outcomes.** The majority of grantees noted various career advancement opportunities as a result of the *Connect* Grant, including promotions or tenure, taking on new journal editorial responsibilities, being asked into other positions of leadership, and continuing projects that lead to more grant funding.

Symbolic Objective

- ❖ **Confidence in Expertise and Dissemination of Work Increased.** Grantees discussed how their confidence increased as a result of the grant, as they became more comfortable seeing themselves as experts in their fields, and were increasingly motivated/comfortable sharing their work with others.
- ❖ **Value and Influence Manifested as Respect, Credibility, and Leadership Potential.** Grantees shared how their value and influence increased as a result of the grant, and it was demonstrated by gaining respect in their professional communities, being seen as increasingly credible, and being recognized as leaders.
- ❖ **Research Conducted Reflected Important Issues of Meaning.** Much of the research that grantees conducted promoted the visibility and advancement of women in their field.

- ❖ **Grantees Highlight the Importance of Networking to Enhance the Working Environment and Support Career Development.** Grantees valued peer support and building community through luncheons, social networking, formal and informal mentoring, discussion, and presentations. In these spaces, grantees dealt with issues of representation, visibility, and the advancement of women, DHH, and AALANA faculty.

Structural Objective

- ❖ **Transforming the Institutional Environment Led to Strengthened Communities and Raised Internal Awareness of Work.** Grantees discussed some examples of institutional transformation that resulted from their participation with the *Connect* Grants. The most notable themes were a sense of strengthened community, and raised internal awareness about the grants. This resulted in, for example, a department putting funds towards a new project because of the influence of a *Connect* Grant. Infrastructure, policy, and practice changes resulted in departments and units as a result of the grantees' influence in their professional communities.
- ❖ **Institutionally Transforming Policies and Practices created new learning and leadership opportunities.** Grantees reported that by redesigning learning facilities, establishing post-tenure mentoring programs, and creating new core competencies they can now explore new avenues that were not able to before.

Political Objective

According to Bolman and Deal's framework, taking a political approach would mean focusing on the political realities of the organization. AdvanceRIT envisioned this political frame as "aligning institutional, administrative, and informal systems of power and resources to support and sustain progress by shaping the political frameworks that impact representation and advancement of women." As year-long funded projects, *Connect* Grants arguably do not have the reach to accomplish this. Rather, this objective is met through the concept of AdvanceRIT itself, and is explicitly named as one of AdvanceRIT's strategies.

Thus, there are no results to share in more detail in the body of the report.

Connect Grants over Time

The following are longitudinal award patterns for the 58 *Connect* Grants across the five years they have been administered (2014-2019; the years in charts correspond to the spring of each academic year). Corresponding visual charts can be found in the "Process Evaluation Themes" section.

- ❖ **There was a wide range of funds both requested and awarded.** The highest requested amount was \$40,000 (in 2018), and the highest award amount was \$13,500 (in 2018). The lowest requested amount was \$2,192 (in 2017), and lowest award amount was \$1,000 (in 2017).
- ❖ **The total funding to awardees varied greatly by year.** The highest total amount awarded in any year was \$90,984 in 2015 (11 grants awarded). In 2017, more grants were awarded (14 in total), but they total \$50,412. *Connect* Grants have awarded \$330,299 to date.

- ❖ **Most *Connect* Grants were awarded to faculty as opposed to departments.** Though *Connect* Grants can support both faculty or departments, every year faculty were more likely to propose and receive *Connect* Grants. Only two departments have received *Connect* Grants.
- ❖ **CLA has been awarded the most *Connect* Grants to date.** With 13 total *Connect* Grants, the College of Liberal Arts has been awarded the highest number of grants, followed by the College of Science (11). *Connect* Grants have been awarded in 10 colleges.
- ❖ **Most *Connect* Grants are awarded to STEM fields.** The highest number of both proposals and awards came from Science, Technology, Engineering and Math fields, as opposed to Social and Behavioral Sciences (SBS) or others. A total of 35 grants went to STEM fields, 11 went to SBS fields, and 12 went to other fields.
- ❖ ***Connect* Grants funded more female than male PI's.** Even though male faculty outnumber female faculty in both STEM and SBS at RIT, there were more female than male *Connect* Grant applicants every year, and females had a higher award rate. In total, 55 females and 3 males were awarded grants. A total of 96 females and 10 males applied.
- ❖ **Assistant Professors obtained the most awards (29), followed by Associate (19) and Full Professors (9).** The “hit rates” were very similar for Assistant, Associate, and Full Professors (54%, 58%, and 53% respectively),

RIT CONNECT GRANT REPORT

Evaluation Methods

Focus Group Interviews: UW CERSE conducted 12 focus group interviews with 13 former *Connect* Grant grantees. There were 19 grantees total for 2014 and 2015, so this reflects a 68% response rate. Of those who did not respond to the interview request, 2 indicated they would not be available to participate, 2 were non-responsive to emails, and 2 indicated their interest in participating but never responded to follow-ups. We conducted 12 interviews, which ended up including 19 people, as 7/12 interviews were single interviews and 5/12 interviews were done as focus groups with two or more people. Interviews were an hour in length, and were conducted via video call and/or over the phone. In advance of the interview, grantees were asked to review the consent form and send back their consent via email. We asked former *Connect* Grant awardees about their experiences with the grants, the process of applying, experiences during the award duration, and longer-term outcomes and impacts that have resulted. Participant data was coded in a qualitative software coding program in order to quantify and make sense of prominent themes that emerged.

Grantee Reports: We also used document analysis to review grantee reports from the 2014 (7) and 2015 cohorts (10). We used a coding scheme that considered themes that emerged from the aforementioned focus groups and evaluation questions, such as: How do the *Connect* Grants support the RIT Advance grant goal? What types of career advancement benefits do awardees receive from the grants? We also coded reports using the four Bolman and Deal frames. We consulted with our contact at AdvanceRIT every other week to ensure we were identifying meaningful themes. We integrated the findings from this more quantitative analysis into one report with the qualitative focus group analysis.

Internal Program Documents: Lastly, we reviewed internal AdvanceRIT data sources. These internal documents and PowerPoint presentations provided helpful context, as well as data regarding overarching themes across five cycles of *Connect* Grants (2014, 2015, 2016, 2017, and 2018). We visualized some of this data longitudinally, to see trends over the four years and overall. We incorporated these new charts in this report. The charts are also provided in a separate PowerPoint appendix. Note that the internal program documents were the only place in which we had information about the 2016, 2017, and 2018 grant cycles.

Human Resources Impacts of the Grants

In interviews and reports, grantees discussed the Human Resources impacts of the *Connect* Grants, and their responses fell into the following themes: **Networking and Mentoring Skill-Building**, and **Career Advancement**. In total, 15 of the 17 grantee reports mentioned Human Resources impacts.

Networking and Mentoring for Professional Development or Quality of Life Improvement

The majority of grantees – 92% of interviewees and 94% of grantee reports - expressed that their **networks were strengthened and bolstered** by the *Connect* Grants, both internally to RIT in their general research areas (8/13) and external to RIT in their professional fields (11/13). This was the most common outcome of the *Connect* Grants. While interviewees remarked on external connections more, some of those external connections were limited to grantees' external mentors or NSF program managers (3/13). From the 17 grant reports, at least 15 *Connect* Grants directly facilitated mentorship opportunities, 12 created new collaborative efforts, and 6 allowed for new hires (often of undergraduate students).

“This is a perfect case where the networking established in this small grant has yielded great results.”

Internal Networks Were Bolstered

A total of 8/13 interviewees remarked on how networking within RIT resulted in building relationships with others working in their fields, leading to more research collaborations and subsequent grant proposals, as well as increased visibility with the student body. One interviewee described finding more faculty at RIT with interest in their field, explaining that “We invite people within the institute to come to workshops and they are in different areas, and this person [and I study the same thing]. I wouldn’t have met him otherwise.” Another interviewee explained that because of increased visibility in their work at RIT, “Internally, my name keeps coming up. I know a lot more people than I did before.” Another interviewee expressed that “At RIT, it connected me to a lot of different people in different colleges because I was asking [my colleagues about my area of inquiry].” These connections led to the development of new research projects with colleagues at RIT.

Several grantees intentionally developed internal networks because they saw the important connection to career advancement. Luncheons, workshops, speaker series, small group discussions, and lunch-and-learns allowed grantees to share best practices in overcoming challenges and therefore supported the development of successful careers at RIT. In response to a previously unsuccessful grant proposal, one grantee specifically sought to form a new “formal research collaboration... through a multi-tiered mentorship model”. Through internal networks, this collaborative partnership came to fruition.

“The network is what it is all about. Connections with people find common ground and commonalities and feeling like an island in the middle of nowhere, I’m sure many feel alone, but being able to connect and develop the lab talks are all things that build support groups for research and that makes things go smoother.”

Also, interviewees mentioned that their *Connect* Grants helped them increase the visibility of their work to the student body, and therefore benefited the students’ academic trajectories as well. One grantee said, “We feel as faculty we are alone, but students feel that even more. The connections we make, helps them make connections.” Finally, one participant remarked generally that they are “surrounded by people who care more about this work at RIT” and developing that scholarly community has reinforced and strengthened their motivation in the work.

Internal connections fostered as a result of the *Connect* Grants led to more research and grant collaborations, as well as increased visibility with the student body.

External Networks Developed

External to RIT, 11/13 interviewees and 16/17 reporting PI’s connected with other professionals in their fields primarily at conferences and through social media. A number of interviewees discussed the profound impact of getting the word out on their work in creating relationships that may be professionally advantageous to them. One interviewee remarked that “The nice thing for me is the external connection to researchers. I know them from conferences or work and connecting with them via twitter and dialoging there. I’ve now expanded my work into different areas and now I’ve begun to access and meet people on both sides of these dimensions. These are additional people that know your name and can help when reviewing the grant.” These relationships enabled this grantee to build upon and expand their research interests while still cultivating a growing professional community. Another grantee explained in their grantee report that networking in fact guides their process: “the garden of ideas to promote the increased retention and advancement of AALANA faculty continues to grow and evolve, as each individual... session becomes fertile ground for the harvesting of further insight into the population it serves.”

“[My network] has broadened and it has deepened. At this conference I attended, I met numerous people that were interested in my research, and found it to be extremely innovative and relevant. They found it valuable enough that they wanted to continue our conversation. So to me, that was pretty extraordinary...that’s something that wouldn’t happen with me cold calling somebody. The exposure allowed me to develop relationships that I believe are significant.”

In their grantee report, one group's creative networking points to a wider conceptualization of networking, namely expanding their sphere of influence online through social media. One grantee in particular explained that the grant allowed them to "leverage communication skills and emerging social media platforms to raise their public and professional profile as a research leader and trusted scientific expert."

Another grantee explained in a focus group that someone who attended their conference panel is doing similar things, is intrigued by their work and has contacted them. Others travelled to conferences in search of similar research and researchers, and to promote the representation and advancement of women faculty. These relationships not only strengthened their research interests but also offer the prospect of expanding the scope of research, as connecting with others opens up innovative and different ways of approaching their research. A total of 3/13 interviewees found that their external networking did not extend beyond their external project mentors or NSF program officers; however, this mentorship was useful to them.

"I found a lot of support along the way, and made a lot of connections that have been and will continue to be helpful."

External research connections were primarily made through conference presentations, an increased presence on social media, and collaborating with external mentors and NSF program officers. These connections reinforced and expanded grantees' research trajectories.

Mentoring Experiences with Official Mentors, Peers, and Students

Most interviewees found **mentoring to be valuable** to the *Connect* Grant experience. A total of 9/13 grantees found they received mentorship helpful for their learning and career development processes. One interviewee shared:

"[Mentoring was helpful] mostly because it was used as a way to help each other with subtle things we don't know about an institution. Subtle nuances when you are new, or little pitfalls or potholes that you don't know because you are new to this college. [Mentoring served as a] guide to help you not make mistakes, not step where you shouldn't and give each other support- read over what people wrote and give editing suggestions, look at each other's work and help each other clarify."

Chosen mentors for the *Connect* Grant proposals were helpful in coming up with the grant ideas, supporting the proposal writing process, and sharing content/context-dependent knowledge that helped give the projects guidance. Four faculty members met with a coach "to help with career success." One interviewee described their mentor as "a quiet supporter [who] believed in the project and our capacity to lead the project and if we needed support, she would intervene."

In contrast, two interviewees expressed that their *Connect* Grant **mentors were not especially helpful** during the grant period. One felt that it may be because they didn't define the mentor's role well enough, and another felt that they weren't sure how to include them in the drafting phase of the proposal, and that set the stage for them feeling unsure about integrating them into the project overall. They said, "I didn't follow-through as much as I had planned, and it's more that, I guess. I was able to do the project without their mentorship." Another interviewee explained that their mentor was involved in the inception of the project, but not after they started to perform the activities.

"It was also a little awkward trying to ask for a mentor trying to play a significant role in a project you don't know if you're going to pursue."

Some interviewees (4/13) felt that even more profound than their official grant mentors, was their experience **mentoring one another** (peer to peer mentorship). These grantees mentored each other as teammates. One of these interviewees remarked, "There is a great balance amongst all of us. We have a good collaboration and work as a great team." And another shared, "between the 3 of us we really mentored each other more than anything." In their reports, some grantees (12/17) referenced a dynamic mentorship model that merged "mentorship and multi-level networking," disrupting the "traditional top-down model. A total of 2/13 interviewees noted the positive impact of **mentoring students** on their grants, developing working partnerships and mentoring skills of their own, and developing their own teaching/mentoring relationships with both graduate and undergraduate students was a rich outcome for these grantees.

Most grantees found mentorship to be a prominent and beneficial element of their *Connect Grant* experience. The majority of grantees found working with their chosen grant mentors helpful for their career development, as was mentoring one another, and gaining experience mentoring students. A few grantees did not feel their mentors were particularly involved after the grant proposal was written.

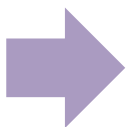
Career Advancement through Networking

Grantees (8/13 interviewees and 16/17 reporting PI's) indicated that the **networking** component of the *Connect Grants* **aided in their career advancement**. In part, networking helped participants get press for their projects, develop community with those more advanced in the promotion & tenure process, promote their work among others, and build relationships that would not have otherwise been forged. One interviewee discussed the benefits of developing a relationship with university news which provided their work with visibility. Another discussed the impact of working with those who are more senior in their career development, remarking that, "Yeah, indirectly [the networking impacted my career advancement]. Like talking to people who are going through tenure...I wouldn't have talked to them if it weren't for the *Connect Grants*. It indirectly helped me to understand better. Definitely, yes."

In addition to making connections with senior colleagues, making connections with external resources was also helpful for participants. One interviewee was able to get letter writers for their tenure package as a result of the *Connect Grant*. One interviewee shared that, "I'm much more involved in ADVANCE program...I've been to several occasions to talk with NSF people. I'm a lot more connected that way than I would have been." One interviewee expressed that their work enabled them to interact with people from units/disciplines that they otherwise wouldn't have. This variety of networking experiences provided interviewees with more resources and relationships to advance their careers.

"After we have hosted the seminars I was invited back to a few universities to give a talk about my own research as well. I introduced my work more to the faculty members over there. I have the potential to develop more collaborations. The best thing after the seminar was that I was collaborating with two speakers afterwards. We have had good results coming out of the collaborations already. We have submitted joint proposals and joint journal papers and joint research results through this collaboration. All this collaboration wouldn't have happened if we hadn't reached out to these people. This all helped my career a lot."

Networking impacted grantees' career advancement overall, by helping with publicity and promotion for their projects, developing community with those more advanced in the P&T process, and establishing connections that would otherwise not be built and resulted in new collaborations and tenure letter writers.



Grantees found both internal and external connections were bolstered by receiving their RIT *Connect Grants*. These connections were developed through conferences and presentations, social media outlets, and grant mentoring. Mentoring from their chosen RIT grant mentors, peer mentoring, and experience mentoring students were benefits of the grant. Significant outcomes such as getting P&T letter writers were results of this networking.

Career Advancement through Professional Development / Human Resource Development

We heard from grantees the extent to which career advancement occurred due to RIT *Connect* Grants, and their responses reflected three overarching themes: overall **skill-building, leadership development,** increasing their **research autonomy,** and increasing the **visibility** of their work. There were also some specific career advancement outcomes described by grantees which are in a section below.

Grantees built key skills for career advancement.

“I have encouraged others to apply for the Connect Grant. It was beneficial for technical and professional development reasons.”

For grantees, skill-building was a significant outcome of receiving a *Connect* Grant. Skill building was referenced a total of 90 different times across all 17 grantee reports. The grant reports indicated a wide variety of new and strengthened areas including communication, leadership, professional, research, and teaching (see bullet points below). Interviewees gained leadership skills in their fields through experience. Participating in their projects helped them learn strategies to engage others, manage time, and develop more expertise in their project areas.

New and strengthened skills include (from Grantee Reports):

- workshop facilitation
- public speaking
- effective research communication
- communicating with the press and other media engagement
- public engagement
- new social media platforms
- developing a “brand” or reputation in academic circles
- fine art and dance
- film making and directing
- new pedagogical approaches
- collaborative learning and teaching
- the value of 3D printing in science
- overcoming challenges of gender disparity in academia
- cultural sensitivity
- recognizing and overcoming implicit bias
- best practices to support diverse faculty
- tools for balancing work and personal life
- time-management
- leadership strategies
- self-assessing to identify areas for further growth
- program and/or teaching evaluation
- working effectively with peers and administrators
- mentoring
- other professional and career development skills writing case-studies
- technology
- data sharing
- grant proposal development and obtaining funding
- curricula development and new course preparation
- efficient research strategies
- ability to access resources

I do think it's very beneficial and very helpful for the past year, I really improved and learned a lot, and got connected with a lot of people. I appreciate the opportunity for such grants. I think it's important and it benefits me a lot. I wish I could extend the grant for another year so we can have more activities."

Grantees described building a variety of skills, many of which are essential to career advancement. In particular, communication, leadership, professional, research, and teaching skills were named in grantee reports.

The Benefits of Leadership Development

A sum of 9/13 interviewees shared that their **leadership skills were bolstered overall** by getting hands-on **experience** working on the grants, and that this experience helped them to manage time, manage people, and learn how to communicate their objectives and methods tactfully. One interviewee shared their experience developing leadership skills, "It was helpful to learn who to collaborate with, how to engage people, how to manage [time]. Maybe some of them are more management. Still it's part of the whole package. I learned a lot."

"People are looking at what we are doing and seeing value in it. Other faculty members and department heads ask me about how we started all that. It was a leading by example, it is our little group here."

Another interviewee shared, "we had a leadership workshop and learned strategies and pitfalls and got great advice. I had no leadership before doing [the project]. Anything [is helpful] where you have to learn new things." This interviewee learned so much about leadership in academia that they have received three subsequent grants since. The *Connect* Grants offered grantees the opportunity to learn skills they did not already have, which they found substantially helpful. "All the activities were very new. I am developing a little more sense of expertise in them." Interviewees felt the impact of the *Connect* Grants on gaining leadership experience in their fields was a useful stepping stone to success. One way grantees gained leadership skills was through faculty luncheons that provided a forum for women faculty to network and learn from successful local women scientists and mathematicians about leadership development.

"I [gained] very good experiences from successful people from my own field. I know how I can learn from them and manage my aspects of research and teaching more successfully. I know how I can manage my own time more efficiently. That is the biggest benefit I had for leadership. And as I mentioned during the collaborations, I also learned from those people, and when we had joint proposals, I learned from the proposals and they definitely gave me suggestions on how to better structure the proposal and distribute the tasks which make it more reasonable to reviewers. All those aspects are helpful for my leadership."

Grantees Experienced Increased Autonomy as Researchers

A total of 9/13 interviewees discussed how the *Connect Grants* **improved their autonomy as researchers**

“The experience of managing those projects and accomplishing them helped me. It’s like a practice—you do it more and more and are becoming more independent.”

overall, as exemplified by one interviewee’s thoughts, “With the flexibility of the grant I was able to put together a pretty unique project.” Junior researchers found the *Connect Grant* to be a great segue into deepening their areas of research. Grantees also **developed connections with other researchers** to partner with, and were provided with the space to **explore, refine, and expand their research interests**.

One interviewee explained that they built up their scholarly network which may help them with future research collaborations. They said:

“On the *Connect Grant*, it has helped me on the aspect of research. I think I benefitted a lot from the seminars. Those people are doing very well—are all famous professors from [my field]. We are working on a similar research field. If I can get connected with them, it is going to be a huge help to work with them (which is really great for me as a junior professor).”

From grant reports, we saw that 71% of grantees explicitly identified new collaborations that happened as a result of their *Connect Grant*. Further, 35% of grantees reported using some of the *Connect Grant* funding to hire new partners or employees (at least 20 in total), often graduate or undergraduate students early in their STEM or SBS careers. In addition to being “paid a fair hourly wage”, these students built skills, networked, and often presented their work to large audiences.

Three interviewees explained how their research areas have expanded and taken off as a result of their involvement with the *Connect Grants*, as they were given the flexibility to narrow their focus in ways they otherwise would not have. Since increasing autonomy was a generally agreed upon impact, others who did not have this experience tended to have proposed projects that were not research-focused, but more service-oriented. **Developing autonomy as researchers was particularly meaningful to some grantees because RIT is transitioning into a more research-focused institution**, and one interviewee expressed relief to receive this support during this transition.

Most grantees expressed that their autonomy as researchers increased as a result of the Connect Grant. The Connect Grant helped junior faculty to deepen their engagement in their research area, helped foster scholarly partnerships, and offered a space for researchers to shift and expand their research areas.

Visibility for Grantee Work Improved

Almost half of the *Connect* interviewees (7/13) discussed the grants’ impact on **the visibility of their work** which supported their career advancement. Interviewees discussed increasing visibility through **connecting**

with others in their field, going to conferences, and getting **press and publications that promoted their work.** All of this increased visibility bolstered grantees' possibility for career advancement.

Regarding **connecting with others** interested in their work, one interviewee said,

“[There were] ways we got to connect with other people who were interested in [our field]. That kind of increased our visibility. For me, I am pretty new to Rochester as well. It was more like OMG [sic] there are people here I haven't met before. There have been events like that that have happened. When I was freelancing [before working at RIT] I made a bunch of connections. It reignited interest with people I connected with in the past about [collaborating], doing more stuff.”

Another interviewee explained the impact of connecting with other scholars in their field and advancing their research agenda through increased project visibility, “One of the speakers we brought in is in my field and now he is aware of me and knows what I'm working on. I think he was impressed with his visit and with RIT. I think that now I go to a lot of meetings and tell that that we did this.”

Some grantee reports pointed to an increased interest and ability to work with the press, social media, and other creative vehicles to connect with others such as podcasts. Another interviewee explained that the grant visibility gave other colleagues information about their own professional development. This grantee said, “one impact is raising the visibility of the grant – her colleagues thought they would apply this year. They were able to see that this is possible for those at the global [RIT] campus. Within [one conference], I was invited to facilitate a roundtable discussion around working internationally.”

In both interviews and reports, grantees discussed the impact of **showcasing/promoting their projects** both on campus and beyond. This manifested as presenting on conference panels (9/17 reports), getting published in student newspapers, university news (5/17), local news, and scholarly publications (11/17). One interviewee shared, “The NSF grant has been a public relations bonus. It is a great grant doing terrific work. It is a modest grant, but it got in the news quite a lot.” Another interviewee expressed their work not only got visibility for their professional advancement, but for their students as well. They shared, “Because of this grant, we had undergrad students to showcase the project. We got visibility on campus and the students got visibility and others got an opportunity to see what we are doing. What I really want to see is a nice starter grant to help to promote the project and see NSF future interest in this.” Another grantee spoke in their report to the validation of developing external networks, by explaining that introducing her work to relevant program managers allowed her understand how her research can fit into their programs. Others boasted that sharing their work both nationally and internationally increases the external visibility not only of their team, but also of RIT.

[One interviewee explained how partaking in the research only fueled their excitement and passion for the work:] "I felt good about getting the conversation out there. It made me feel I was giving something back. I like still being part of that conversation...This conversation has made me think I can't let this stuff go. I have to keep talking about it."

Grant reports also indicate that the PI's explored both **traditional and creative ways to share their work**. The most popular dissemination method was conferences, talks, or presentations; 88% of grantees were involved in conferences in some way; 9 grantees presented at a conference, 8 organized a conference, 8 attended a conference, and 2 received conference presentation awards. Grantees also used funding to support new publications (53%), and develop new grant proposals (59%). Attending, organizing, and facilitating workshops were also very popular, with 7/17 grantees involved in some way. While the majority of grantees shared their work through those more conventional methods, at least 4/17 grantees took an arts-based approaches, such as films (2/17), podcasts or radio (2/17), fashion (1/17), or coordinating a hack-a-thon (1/17).

The grant helped most grantees increase the visibility of their projects. This increased visibility occurred through developing relationships with other scholars in related fields, promotion through conference presentations, and publications in scholarly, university, and public media sources.

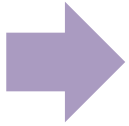
Career Advancement Outcomes

Interviewees discussed how the *Connect* Grants informed their career advancement, and a total of 12/13 grantees all found that there were positive outcomes that came with being recipients of the *Connect* Grants. The 13th grantee was at a place in their career where they were not seeking advancement. Outcomes included, but were not limited to: tenure or **promotion** (or the hope of being promoted/tenured this year), **taking on an editorial responsibility at a journal**, being asked into other **positions of leadership**, and **continuing research projects that led to more grant money**. In their final reports, at least two grantees detailed their plans to continue the project that the *Connect* Grant allowed them to start, even without further funding. A total of 12/17 grantees discussed future plans in their report. In future grant cycles, requiring grantees to report about longer-term plans could help contribute to the sustainability of projects or initiatives, and support grantees to grow into financial independence.

Some of grantees' reflections in interviews on their career outcomes as a result of the *Connect* Grants included:

- “I was recently approached by a colleague for a journal associate editor. I would not have taken that role a year ago, but putting yourself out there affects your professional standing.”
- “Without the grant I wouldn't have been able to go up for promotion because I wouldn't have the service.”
- “I'm going up for tenure this year. So, this year, it has profoundly impacted my career. A funded NSF grant goes a long way, since it shows that I can get grants and I can get money.”
- “We've had more opportunities to take on leadership roles because of our *Connect* Grants.”
- “We have had good results coming out of the collaborations already. We have submitted joint proposals and joint journal papers and joint research results through this collaboration. All this collaboration wouldn't have happened if we hadn't reached out to these people. This all helped my career a lot. I am a new assistant professor, and that collaboration helped me to write one of my own grants right now.”

Grantees discussed career advancement outcomes that included promotion in the tenure process, taking on editorial responsibility at a journal, stepping into new positions of leadership in their fields, and continuing research projects that led to more grant money.



Grantees discussed how their projects strengthened their career development. Skill-building, leadership development, increasing their autonomy as researchers by developing scholarly partnerships, and gaining project visibility all led grantees to more favorable career advancement outcomes. Outcomes included advancement in the P&T process, more leadership opportunities, and more grant money for participants.

Symbolic Impacts of the Grants

In carrying out their *Connect* Grant funded activities, grantees reported various symbolic implications of their work. Ten grantees explained in both their reports and interviews that their work around **leadership development, research, and networking** supported greater issues of meaning within their organization.

Leadership to Emphasize Organizational Issues of Meaning

We interviewed former RIT *Connect* Grantees about the leadership impacts of their grants. The leadership impacts mostly came out via the interviews because we asked about it specifically—it was not a direct goal of most grants, but it was a common secondary/indirect impact. Their responses fell into two types of gains: **confidence**, and **value and influence**.

Confidence Increased

Many interviewees (8/13) shared that their **confidence increased** as a result of the *Connect* Grants. A sum of 4/13 interviewees found they were **more comfortable as experts**, and one participant explained an increase in overall confidence succinctly, saying, “Yes, those achievements helped me to have a better idea of who I am and what I can do. That builds my self-confidence.” Another interviewee explained that they have also developed an ability to market themselves, saying, “self-confidence and self-promotion have improved. The seminars are a good opportunity to introduce my research at RIT to external people. I kind of have been practicing how to promote myself.” Regarding harnessing their agency as an expert (as a woman in a male-dominated field), one interviewee shared that they increased confidence “in serving as an expert to others. Other women and myself speak in uncertainties. Recognizing those uncertainties, I can still share things that can have an impact.” One grantee expressed that “I have a lot of confidence. Nobody can question me and my skills. I know what I’m doing, as does [my colleague].” Harnessing confidence in their expertise was a major impact of the grants.

“The activities that I pursued throughout the project also developed my confidence in the field. But it’s not as if I’m going to places, talking about my Connect grant and people saying “wow you are the most amazing person” but through the work, I developed my confidence in different areas.”

Participants also developed confidence and motivation to share their work with others. A total of 3/13 interviewees found they were more motivated to share their work with others. One interviewee illustrates this, saying “I’ve been told that I’m good at writing grants and telling stories and I was uncomfortable with this. But now I realize what I’m doing is good and I should be putting myself out there. That is my pattern in my career. I don’t realize that I’m doing good things until I talk with others.” They received positive affirmation as a result of their work on the grant which gave them incentive to feel more confident putting themselves out there. Another interviewee felt they gained more confidence in their ideas as a whole, saying their colleagues were “willing to run with some of my ideas” instead of dismissing them. Echoing this sentiment, grant reports show several PI’s gained confidence in using social media or online platforms (5), and felt more confident speaking to the public or media about their work (6).

Grantees discussed how their confidence increased as a result of the grant, as they were increasingly comfortable seeing themselves as experts in their fields, and were increasingly motivated to share their work with others.

Value and Influence

A total of 9/13 interviewees asserted that the *Connect* Grants helped them develop **more value and influence** in their work. Value and influence is a broad notion, and includes feeling valued and respected by one's department and administration, having some social interaction with members of one's department, having a quality plan for one's career trajectory, feeling on-track with that trajectory, and being seen as a scholarly resource or leader among one's colleagues. A total of 4/13 interviewees felt **increased respect** as a result of the grant, 3/13 found they were seen as **more credible** in their research communities, and 2/13 felt the grants helped them be **viewed as leaders** in their academic communities. In at least one grantee report, we saw that building leadership to promote value and influence within RIT and the greater science community was an explicit aim of the project. One interviewee explained that people have to call on you to exercise leadership, and that this grant helped others to see them as a leader. To illustrate gaining increased respect, one interviewee explained that "the influence would be the respect that I got. [Colleagues] saw value in that and that was influential." Another interviewee shared that having others gaining respect for their work makes them "feel valued in our community that we have built. I don't see any negatives. It makes me feel better about being here and working in this area." That particular interviewee discussed how they were able to leverage their increased respect in the department to apply for and receive more funding for their work.

Thus, gaining respect from their colleagues strengthened grantees' commitment to and momentum with their work. A sum of 3/13 interviewees found that their credibility increased as a result of the *Connect* Grants, which is illuminated by this interviewee's thoughts, "[we] have built credibility through this *Connect* Grant series in a positive way. We used to be seen as groups of women who whined and didn't do anything positive or helpful and we are now doing things for the community and that has been helpful." Another interviewee mentioned how their project credibility gave a graduate student the platform to share their work with confidence, believing that people cared about it. Finally, 2/13 interviewees pointed to the *Connect* Grants steering them towards leadership opportunities, such as being asked on review panels for grants, or gaining leadership skills from grant mentorship.

"Leadership comes from having a degree of confidence and knowing when to back off and move forward. Working on a project like this...that in itself was enough of an experience in that it added to our leadership skills. I can't definitively say where, but it's in your portfolio and now you can move forward and tackle what comes."

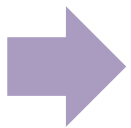
Grantees shared how their value and influence increased as a result of the grant, and it was demonstrated by gaining respect in their professional communities, being seen as increasingly credible, and being recognized as leaders.

Research to Emphasize Organizational Issues of Meaning

Four grantees reported using *Connect* Grant funding to conduct research that reflected important organizational issues of meaning. In one case, a grantee analyzed the citation rates of men and women in the field of Philosophy of Science, comparing those figures to publication rates of men and women. Another grantee gathered information on post-tenure mentoring, work-life balance, and promotions, and disseminated that research to “the RIT community and beyond.” Even in projects that were oriented more towards technical content research, many grantees managed to satisfy symbolic implications as well. For example, one project that was focused on publishing articles and attending conferences also supported female students and introduced them to other cultures. In all of these cases, *Connect* Grants were used to “enhance the working environment and support career development” of women, reflecting their vision to support the advancement of women in their fields.

Networking and Mentorship to Emphasize Organizational Issues of Meaning

In at least 5 grantee reports, it was clear that networking and/or mentoring had important symbolic implications. Faculty luncheons, social networking, formal and informal mentoring, intentional discussions, presentations, and lunch-and learns allowed grantees to explore issues of representation, visibility and advancement of women, DHH and AALANA faculty. In some cases, networking meetings were held to discuss networking strategies themselves. In one interview, a grantee shared, “I think the climate at RIT has changed since I’ve been here. There are more people who are actively seeking out to be my ally and champion.” Another interviewee explained that “[Community building] has been really huge. I’ve felt a shift in my working environment.” Clearly, networking and mentorship efforts reflect what is truly important to women faculty.



Grantees developed leadership capacities as a result of their *Connect* Grants. With stronger leadership skills, grantees felt increased confidence in sharing their work and which resulted in greater value and influence of their work. This created more respect, credibility, and tangible leadership skills such as time management and leading others gracefully. Along with research with symbolic implications, and an emphasis on networking and mentoring to improve the working environment, development of these leadership skills reflects the AdvanceRIT mission to support the career development and enhance the working environment for women, DHH, and AALANA faculty,

Structural Impacts of the Grants

We heard in both interviews and reports that grantees worked to effect change at the institutional level. Through developing and sharing strategies to implementation, three grantees' work had structural impacts. These projects had structural impacts through **institutional change of the environment** or **transformation of policies and practices**.

Institutional Transformation of the Environment

In interviews, grantees discussed the ways in which they believed their work environments changed as a result of their *Connect* Grants. The two most prominent changes were **strengthened community amongst colleagues** and **raised internal awareness about their work**.

A total of 6/13 interviewees discussed **strengthened community with other colleagues** in their workplaces as a result of their *Connect* Grants. One interviewee explained that their colleagues now see them in a more competitive way and as more successful. This respect and visibility helped to build and strengthen relationships at RIT. Another grantee explained that they have started building relationships across campus with others, and they said, "You don't feel alone. Some of the seminars help educate people. We've had discussions about those unconscious bias sorts of things. Sometimes we are preaching to choir, but we are also getting to people who wouldn't have heard this before." The *Connect* Grants built community through providing visibility for the grantees' work, and this visibility helped to foster new connections around ideas and projects.

Interviewees described **increased internal awareness** about their work as a result of the *Connect* Grants (6/13 grantees). As awareness about faculty scholarship and projects increased, colleagues learned about how they could plug into the work, and departments were able to reach out to students with specific interest in the work.

One interviewee described this climate change overall, saying, "It helped demonstrate to my dean what I'm doing, raised internal awareness, and also connected us with other researchers." One department was able to use the *Connect* Grant projects **to help recruit students to help conduct research**, seeking exceptional candidates with specific interest in the grant projects. Another department brought in various different programs and ways of teaching undergraduate and graduate students, bringing together students from different interests. An interviewee shared, "[because of what I learned about social media through the *Connect* Grant] now my department has a twitter account and we are using that for

"In our own department I became much more conscious of what we were doing for mentoring. I thought much more about new faculty coming in and who was going to mentor them. I also learned that it is important for people to have more than one mentor. I promote this. I encourage people to get mentorship elsewhere. Find people in a similar position. I think we're seeing a little more of that at RIT now. Get mentors from other universities, find out what's going on. The mentor that you get within your own department normally is a senior faculty member in that department. That is especially true for young women."

admissions and recruitment. It affected the department by helping us get better students. It will help us transition from a masters to a doctoral university.” As indicated by this grantee, the *Connect* Grant indirectly helped to build their departmental credibility through recruitment of high quality graduate students. Multiple interviewees mentioned that the *Connect* Grant was helpful for them in making the transition to a research-focused university.

Interviewees explained how their **colleagues’ awareness** of their work was often **to their colleagues’ benefit**. One interviewee discussed the impact of the seminars getting the word out to other colleagues, who also benefitted from more information or resources in a related field. In addition to building in opportunities for other colleagues to benefit from the projects, colleagues’ awareness also began inspiring them to consider pursuing similar projects. One grantee said, “All of a sudden colleagues thought that we could do our own work like this...That inspired more people to think about what they could do immediately within our small community.” **Increased awareness of the *Connect* Grants helped colleagues build scholarly connections and motivated them to consider embarking on similar projects in the future.**

Institutional Transformation of Policies/Practices

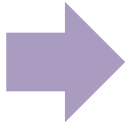
Interviewees discussed how the *Connect* Grants influenced their institutional policies, practices, and procedures. They spoke of **infrastructural changes**, as well as **policy and practice changes** that have resulted from receiving the *Connect* Grants.

Interviewees explained that **infrastructure changes** included more lab talks, and more collaborations in the department. One interviewee explained that “Our facilities did have an impact. We were doing things that hadn’t been done before...We had to work with facilities to allow for more flexibility within the space. They trained one of our students to manage the facilities themselves and they had to re-evaluate the spaces to offer more experimental learning.” The facilities were re-designed to consider what spaces would be most amenable to inclusive student learning.

At least 2 *Connect* Grant projects were focused on institutional change in **policies and practices**. One project aimed to gather information and case histories through literature review and interviews about post-tenure mentoring from across the country. They then developed a post-tenure mentoring program that emphasized work-life balance and career planning for women faculty. In addition to sharing their work online and through workshops, they designed a post-tenure mentoring process and instituted such a process at RIT, in which all associate professors in the School of Communications will complete an individualized post-tenure plan. Another grantee explained in their report that creating a “sustainable core competency” in a STEM field not currently explored at RIT was one way they promoted the visibility and leadership of women in that field.

Another interviewee discussed how their unit is using what they learned in their grant to promote other programs within their unit. An interviewee explained that their unit is more conscious of mentoring programs, and their department is encouraging people to get mentors from other universities, thinking about what policies they could implement to reinforce this value of mentorship. One department now has a Twitter Account that is being used for admissions and recruitment as a result of *Connect* Grantees’ increasing familiarity

with the platform. Another grantee referred in their report to encouraging the Provost to support faculty membership in the National Center for Faculty Development and Diversity and participation in Faculty Success Program, which if successful, could lead to great changes in the policies and practices of RIT as a whole.



Grantees discussed institutional transformation of their environment that resulted from their participation with the grants. The most notable themes were a sense of strengthened community, and raised internal awareness about the grants which often led other colleagues to benefit professionally, and resulted in recruitment efforts for students interested in grant projects. Infrastructure, policy, and practice changes happened in departments and units as a result of the grantees' influence in their professional communities.

Process Evaluation Themes

We reviewed grantee reports looking for project or initiative activities, examined internal AdvanceRIT program documents with the program scope, and asked interviewees about the process of applying for the *Connect Grants*. The data indicated the following themes:

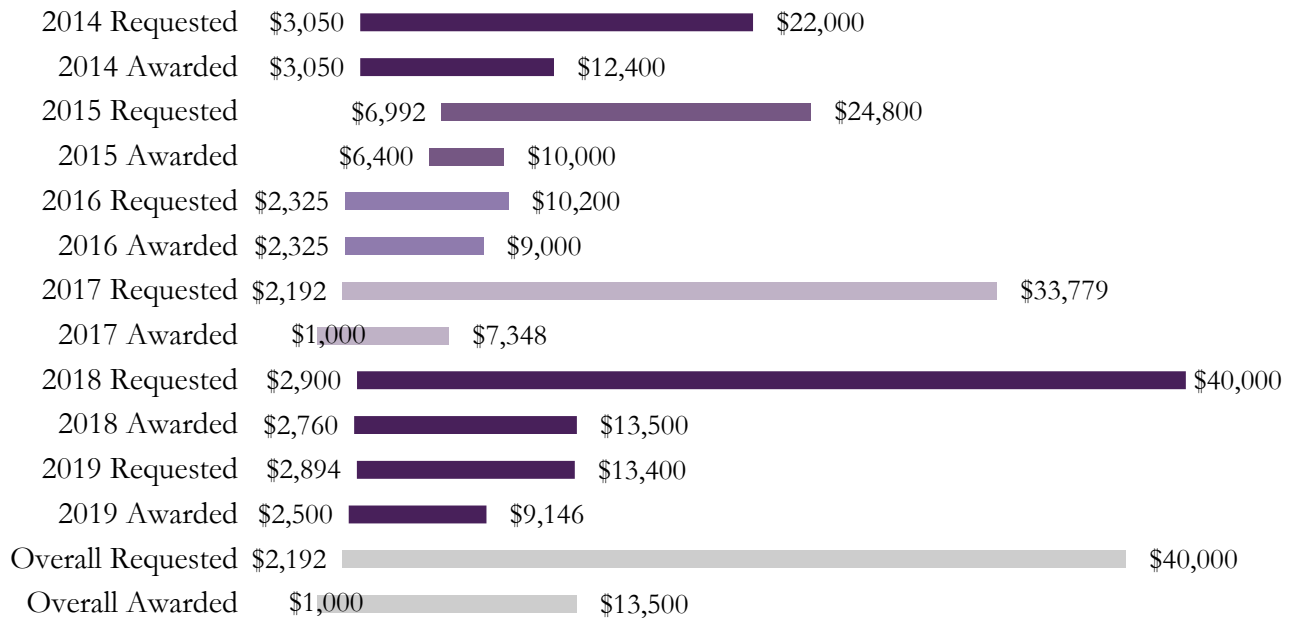
- ❖ **Proposed and Funded Projects Varied by Amount, College Affiliation, and Designation.** While grant proposals came from a range of places and were diversely awarded, funding decisions seemed to align with the *Connect Grant* goal and values.
- ❖ ***Connect Grants* Were Advertised Broadly.** The *Connect Grants* were advertised broadly through email announcements, and shared within communities on the main RIT Campus. The *Connect Grant* website was a highly frequented resource. One grantee at a global satellite campus described that the *Connect Grant* program was not advertised globally.
- ❖ **Writing the Grants was Beneficial.** Grantees found the grant writing process to be beneficial in helping them refine and package their ideas, build relationships with mentors, and develop literature reviews. Some of the grantees found themselves using parts of their proposal for federal grant proposals.
- ❖ **Grantees were Motivated to Apply to Advance their Careers.** Interviewees discussed their motivation for applying for the grants, reflecting the following themes: female-specific professional development, mentorship, and continuing a former project.
- ❖ **Projects were focused on programming, dissemination, and/or research.** The majority of projects supported more than one of these themes, and grantees aimed to carry out these themes in various creative ways.

Proposed and Funded Projects Varied by Amount, College Affiliation, and Designation.

The funded projects coalesced around three main themes. A total of 34 of the 58 projects discussed how their project would build community or collaboration within or outside of RIT. Research progress was the next most common theme with 29 projects explicitly trying to improve or broaden their research program/projects. Finally, 25 of the funded projects referenced how the project would benefit their own and/or their collaborators' advancement as faculty. Half of the funded projects discussed how their project would address two or more of these themes.

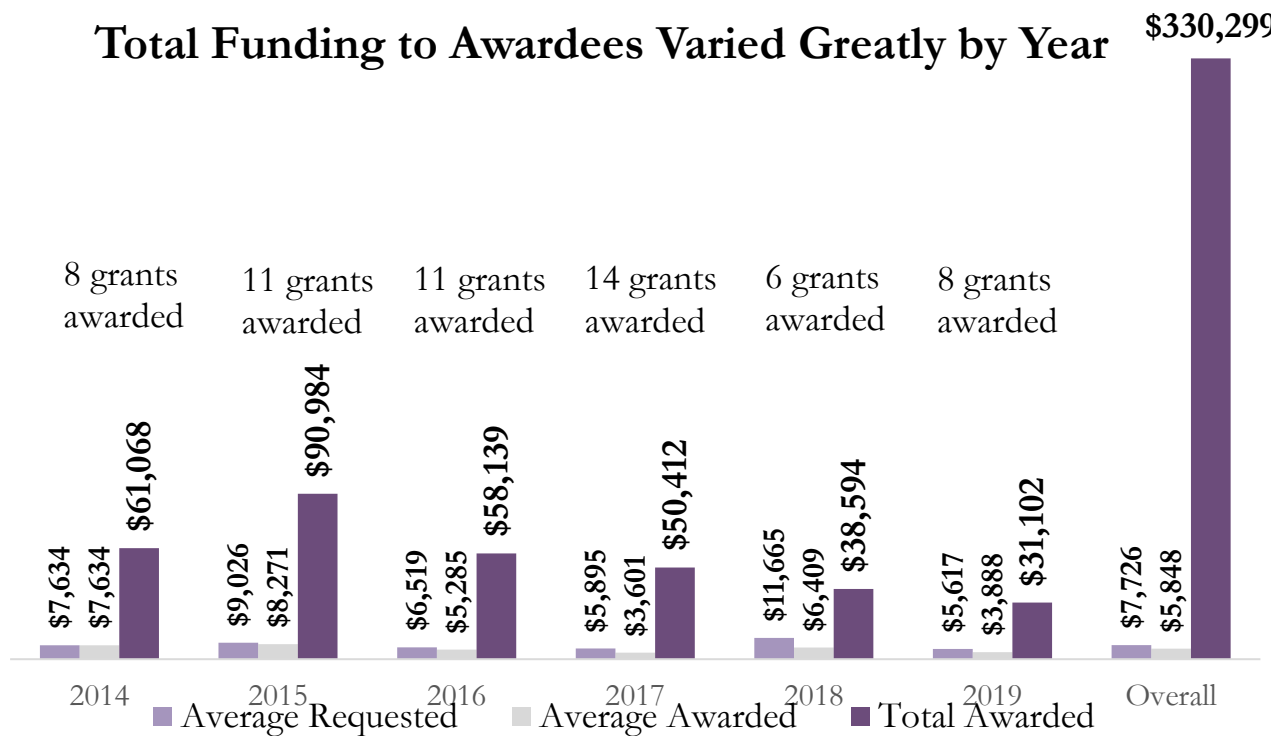
How large is the *Connect Grants* program? Between 2014-2019, *Connect Grant* funding requests ranged from \$2,192 - \$40,000 with an overall average of \$8,303. Approved amounts for the 58 awardees varied from \$1,000 - \$13,500, with an average of 5,692.

There was a Wide Range of Requested and Awarded Funds



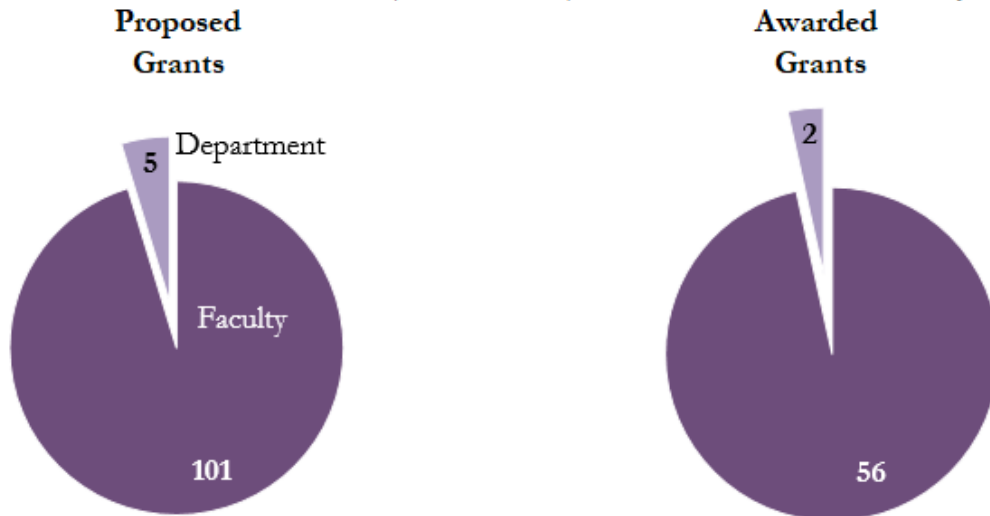
The total amount of funding awarded varied greatly by year, with 2014-2015 having the largest disbursement. A total of \$330,299 was disbursed over the five years.

Total Funding to Awardees Varied Greatly by Year

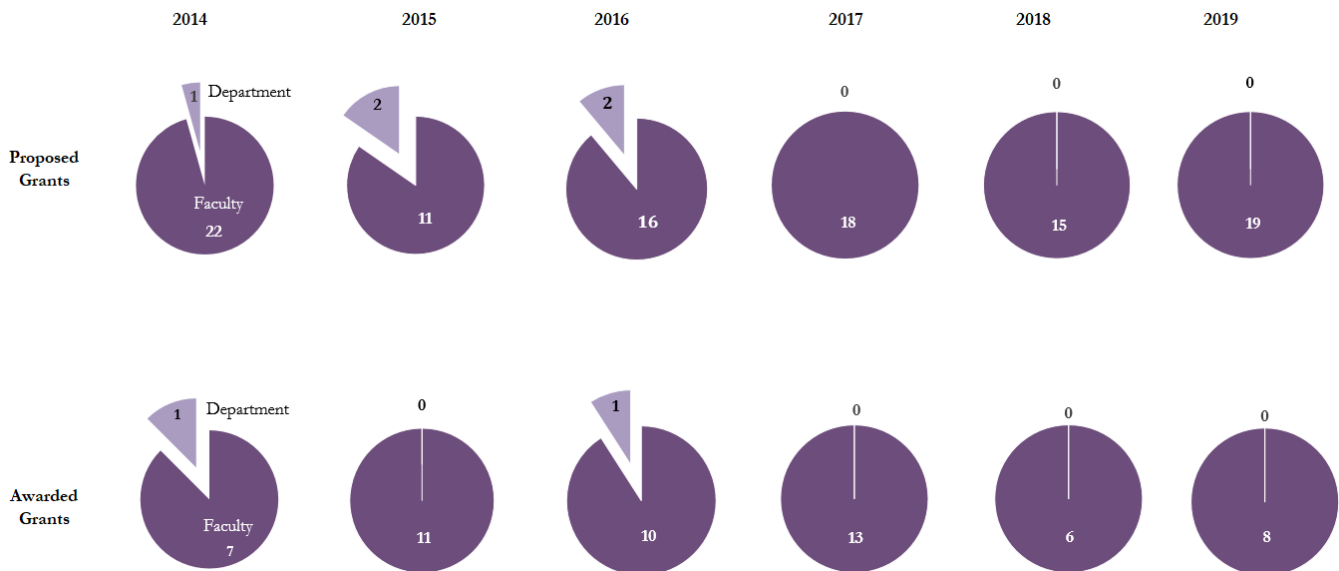


Who received the *Connect* Grants? Though *Connect* Grants can support both faculty or departments, every year faculty were more likely to propose and receive *Connect* Grants. Five department-level proposals were received and two were funded. No department level proposals were submitted in the last 3 years.

Most *Connect* Grants (2014-2019) are Awarded to Faculty



Most *Connect* Grants are Awarded to Faculty, although Two Departments have Received Awards



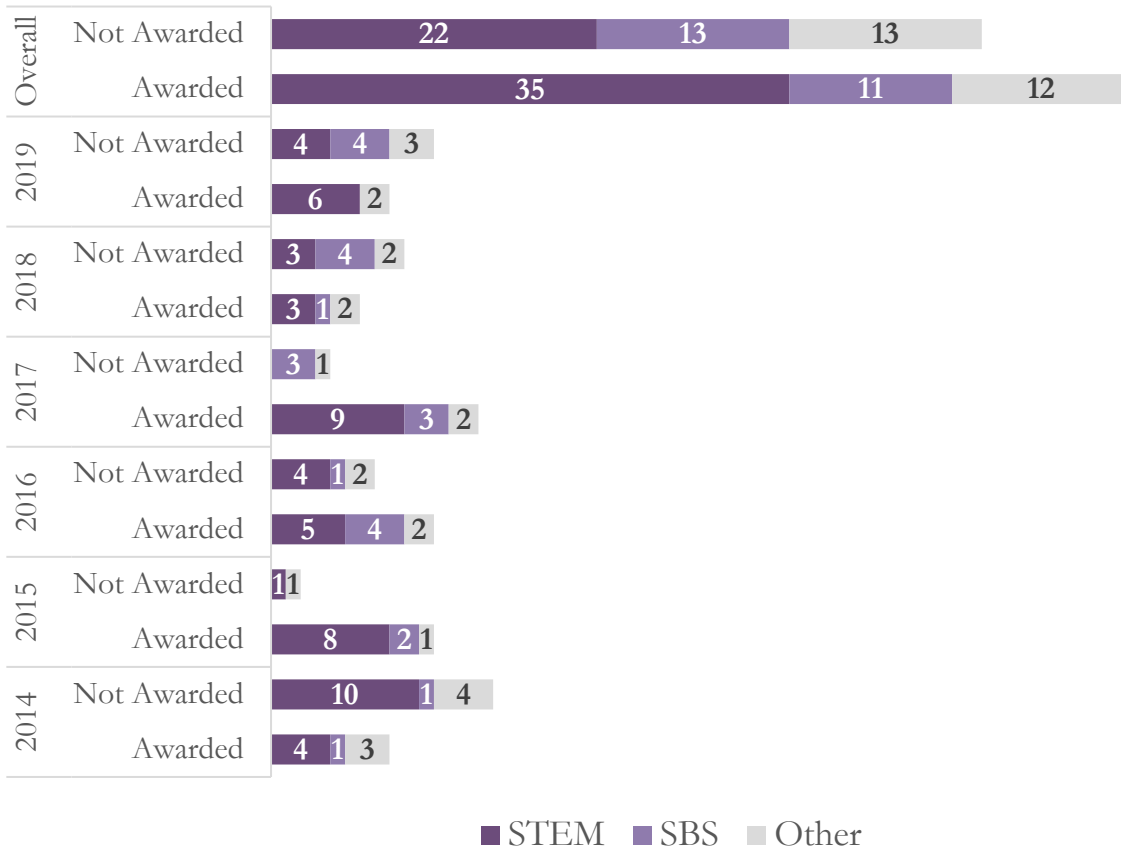
The most commonly awarded college was College of Liberal Arts (13 grants in total), followed by COS, CIAS, and KGCOE (11, 10, and 9 grants respectively).

CLA has Been Awarded the Most *Connect* Grants to Date



The highest number of both applicants and awardees come from STEM fields, which is in line with the departmental disparity shown above. A total of 35 grants went to STEM fields, 11 went to SBS fields, and 12 went to other fields.

Most Connect Grants are Awarded to STEM Fields

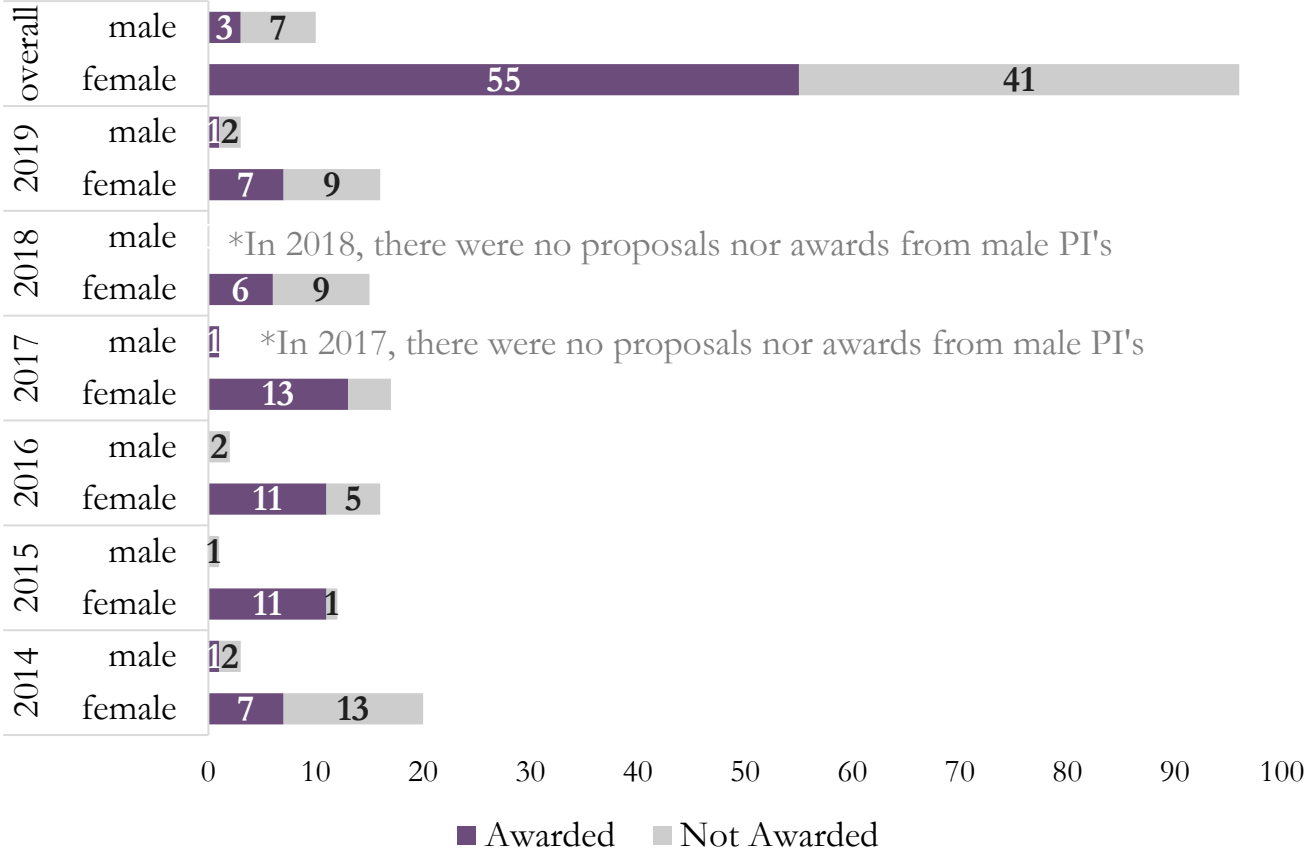


Note:

- In 2015, all SBS proposals were awarded, thus there is no bar segment for “2015 SBS not awarded”
- In 2017, all STEM proposals were awarded, thus there is no bar segment for “2017 STEM not awarded”
- In 2019, no SBS proposal were awarded, thus there is no bar segment for “2019 SBS awarded”

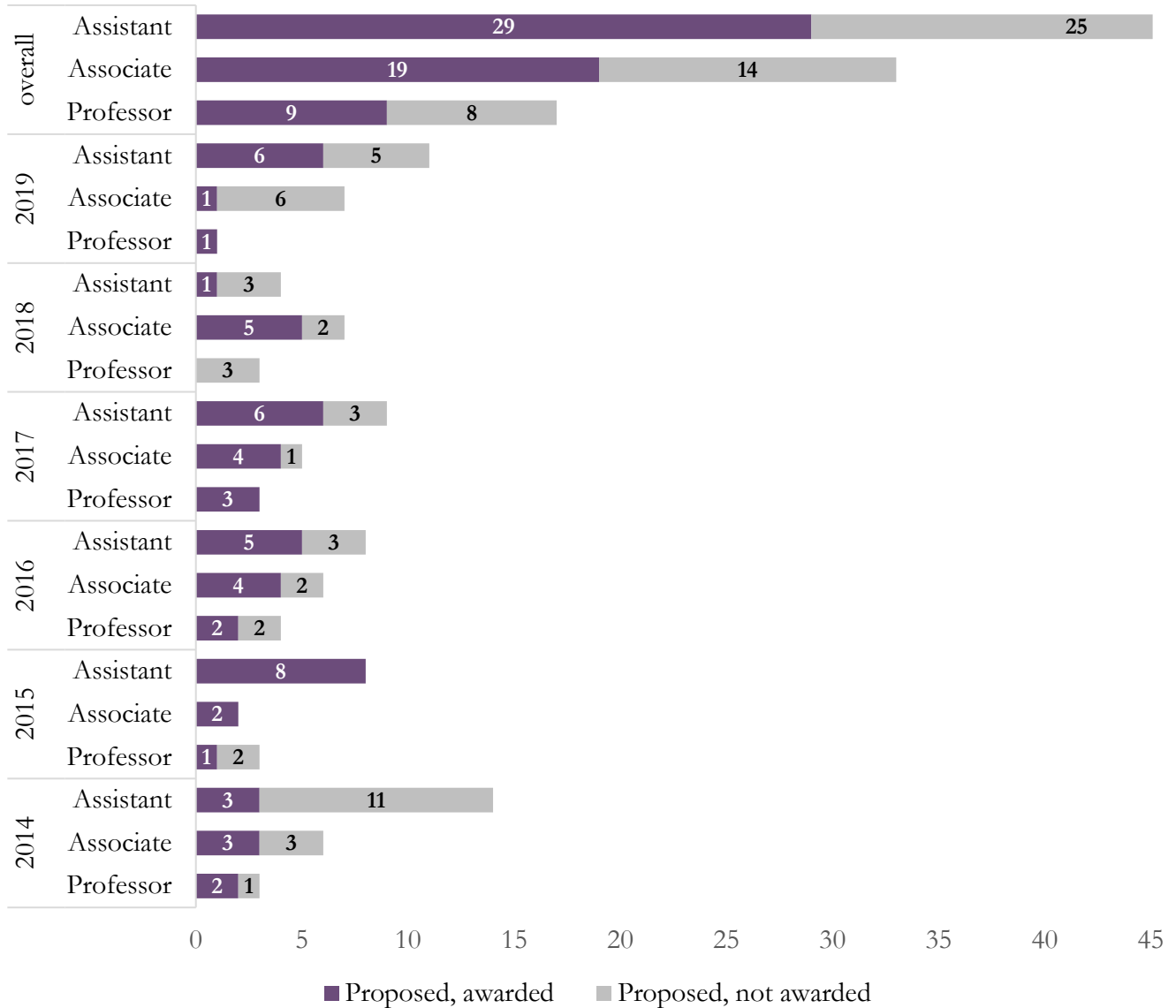
At RIT, 25% of faculty members in STEM are women, while 33% of faculty in SBS are women. Across all fields, there were more female than male applicants every year, and female applicants had a much higher award rate. Only three male PI's were successful in obtaining a *Connect* Grant.

Connect Grants Funded More Female PI's than Male



Finally, an analysis of the rank of those awarded and not awarded *Connect* Grants indicates that a) Assistant professors have obtained the most awards, b) the “hit rates” were very similar for Assistant, Associate, and Full professors (54%, 58%, and 53% respectively), and c) the most Associate professors applied in 2019, but only one received the award.

Assistant Professors Obtained the Most Awards, but Associate Professors had Slightly Higher Rate of Obtaining an Award, If They Applied



Connect Grants were advertised broadly. A total of 10/13 interviewees found out about the *Connect Grants* through a call for proposals (primarily via email), and agreed that the grants were well-advertised in their communities. Many interviewees spoke to the utility of the website to secure additional information about the grants. One interviewees worked at a global RIT campus and stumbled upon the grant information on the RIT website, suggesting that increased promotion of the grants at RIT’s global campuses would be helpful. One interviewees learned about the grants through word of mouth from a colleague who knew about their interest in research and women’s rights.

“When I was applying, RIT has a good website for the Connect Grants. There is a lot of information from the website like the most recent activities, what is going on with the awardees, who are the awardees, What is their project topic? I learned a lot. The purpose and goal of the grant were very clearly listed on the website so I learned a lot from the website.”

Everyone benefitted from writing the proposal.

The majority of interviewees (12/13) explicitly stated that writing the proposal was beneficial to them, for a variety of reasons. The proposal helped them to refine their ideas (4/13), package/brand their work (4/13), provided an opportunity to learn from a mentor (3/13), and more thoroughly develop a literature review (2/13). One interviewee described the benefit of writing a grant as a junior scholar, explaining, “Being able to package yourself and look at your work removed, from an academic objective view was a newer exercise for me, and I was able to see it broken down, and project what the impact would be.” Also, one interviewee talked about how the grant document is a resource for them as they continue to write grants, explaining that “writing it down and following it up was helpful. Also I refer to the grant now as I move forward in grant writing down the road as a resource.”

“I had the idea for the project, but since I didn’t know if I could pursue it, hadn’t written anything up. The process of writing the proposal helped clarify my own understanding of what the project would be.”

The promise of career development motivated grantees to apply.

Of the 16 grantee final reports that explicitly named the primary benefactor(s) of the grants, the majority of grant were utilized for the PI’s directly (82%). Additionally, 69% of the grants awarded were used both by the PI’s and shared with others. Only 19% of PI’s gave their funding almost entirely to others. In at least one of these cases, the PI was male who used the money to support female colleagues.

We asked interviewees why they were motivated to apply for the *Connect* Grants and their responses all reflected career development themes: seeking female-specific professional development (4/13), desiring professional mentorship (4/13), and wanting support to continue with a previous project (3/13). Regarding female-specific professional development, one interviewee remarked that “[for our program]—we have so many things we want to do and we don’t have a budget. We have generous donations, but not a set budget every year. So we try to piece together money to fund what we want to do. It is a no brainer. This helps us.” On seeking out professional mentorship, an interviewee grantee expressed that “I do want to learn from others to see if there is anything I can do in order to enhance my career as well. That’s why I think it’s important to have this opportunity.” Finally, an interviewee discussed how the RIT *Connect* Grant was an extension of former grant proposal work, saying, “We had applied for previous funding together and were looking for more data to address criticisms in previous grant applications.”

“[I was motivated to apply because of] exactly everything [like] to help develop the capacity of female professors on tenure track and their ability to go through ranks and progress through ranks. Anywhere you are doing research, funding is difficult to come by. It was a great opportunity to get more money to get additional skill development and that I couldn’t afford myself, and to expand the research itself.”

Consider offering more time for the projects. One interviewee shared that funds were released by June 1st and had to be used by September 1st, and this made the timeline for their project hastier than they would have liked. They would have appreciated more time to use the funds, and subsequently, more time to work on their project.

Projects were focused on programming, dissemination, and/or research. We saw 3 major themes within project activities in grantee reports: programming (10), dissemination (12), and research (10). The majority of projects set out to accomplish more than one of these activities, with 7 projects covering 2 of these themes and 5 projects covering all three. Often, one activity was a secondary outcome of the other, such as a publishing a paper that was later presented at a conference, or a conference becoming an ongoing workshop series. Programming activities included workshops, speaker series, mentorship systems, curricula, and writing groups; dissemination activities included conference attendance and/or presentation, online publication, small group discussions, media contact, showcases, podcasts, and lunch-and-learns. Research activities included field research, scholarly research, scientific laboratory research, and meetings and new collaborations.

Next Steps

- ❖ **Advertise the RIT *Connect* Grants at Satellite Campuses.** Include global/satellite RIT campuses in the advertising plan for *Connect* Grants with email announcements, contact with global leadership, and other preferred ways to disseminate calls for proposals.

- ❖ **Consider Institutionalizing the *Connect* Grants past the Period of the ADVANCE IT Grant.** Multiple grantees described the grants as helpful for their careers as RIT makes the transition to a doctoral /research-focused university. However, these types of grants would likely be more effective in helping people make the transition if the grants were research focused and not service focused (even though those types of grants had their own impacts).
 - **Similarly, Consider Extending the Grant Period.** Consider extending the period of time that grantees can use the *Connect* Grant funds in order to offer projects more flexibility and freedom. Another option is to **Offer Extension Money for former Grantees.** Offer former grantees the ability to apply for a follow-up package allowing them to expand upon their projects. A number of interviewees felt that with continued resources, they could develop more meaningful and sustainable projects.
- ❖ **Encourage Consistent Follow-Through with Mentors.** Emphasize the importance of consistent communication with mentors during the grant period so that grantees can get the most from the grant experience, since two grantees described that their mentors were only active during the application process.
- ❖ **Train Leaders on how to Support Women’s Career Advancement.** Grantees suggest leader-specific trainings to help them understand how to best support women’s advancement. Grantees suggested that if leaders do not have this awareness and focus, organizational change will be significantly impeded.
- ❖ **Practice Applicable Skills in Trainings.** Use training and professional development time to bring theory to practice so that attendees can apply what they are learning in an experiential way.
- ❖ **Offer Needs-Based Trainings.** Design and promote trainings for specific groups who would benefit from them, such as those who have little exposure to supporting women’s advancement in academia, or, in contrast, for women to best learn how to self-promote for career advancement.
- ❖ **Ask Grantees to Consider Project Sustainability.** With only a little more than half of grantees reporting their future plans, it is difficult to know whether *Connect* Grants are contributing to sustainable and long term transformation. Requiring that grantees report on their future plans could encourage grantees to consider project and initiative sustainability.
- ❖ **Grantees Would Like to See More Leader-Specific, Skills-Based, and Need-Based Trainings.** Suggestions for future RIT Leadership trainings include offering trainings for leaders who need more awareness, women faculty who could benefit for their promotion & tenure, and offering platforms for attendees to practice the strategies and skills (rather than just discuss them conceptually). More detail about these ideas is described below.

Leadership Training Ideas for RIT

In interviews, we asked former grantees what other leadership training ideas they suggest RIT offer to complement the *Connect* Grants. Their responses fell into the following categories: **leaders being informed** (4/13), **leadership training necessary for women faculty** (2/13), and importance of offering **spaces to practice leadership skills** (3/13).

Interviewees discussed the importance of **leaders being informed** on how to best foster and cultivate women's academic potential. There was some concern from an interviewee that some leaders have little awareness of the challenges women face. One interviewee shared, "for me, personally, what's the point if our actual leaders aren't going to take those workshops as well? I would rather they're taking the workshops otherwise it's like there's no point." One participant felt like the people who are already bought-in are the people who tend to attend the workshops, and wished that a more resistant population had exposure to this information. They said, "There have been so many workshops about unconscious bias and stuff. The wrong people are told to take those classes. You are asking the brown woman at the bottom of every totem pole to come learn how unconscious bias affects her?"

"Sometimes there are remnants of the old guard and how they treat women. Sometimes women issues with leadership is still old guard, and some of the newer faculty too. I would like to see a workshop on being a female leader when you know there are specific things that are happening because of gender, and how to handle those things. And how to not let it affect other parts of your life. Handle it dispassionately... Things like budgets—I know grant budget, but not department budgets and how those should look, so that if you get into a leadership position like a chair you aren't floundering with issues like budgets. If in leadership position how you take your vision and make it happen? How do you put proper resources together to make that happen?"

Alternately, **leadership training is necessary for women faculty themselves**.

Another interviewee shared, "It would be great to have guidance or mentorship regarding how to be an effective female leader in academia. I feel like it's something to address/something to help women deal with the discrimination that exists even in the short term." Another interviewee specifically suggested that they would like to see a training available to make promotional materials specifically for women, and "It would be [great to] see more intensive training to understand peoples' roles in moving towards promotion." Representing another perspective on this matter is an interviewee who discussed that they would like to see trainings for women to self-advocate for their

"Yes, developing these [Connect] projects is wonderful and necessary, but I wonder if there are simple things too, to combine with it. Like how to discuss gender bias in evaluations with your department chair. How to deal with clearly sexist students. I don't know, I feel like there are so many ways in which women are discriminated against on a daily basis that some kind of everyday strategies would be helpful."

own promotion and tenure, giving them the tools to harness their own agency in career development. Training women how to lead and support their own and other women's success would directly support RIT faculty women in advancing professionally.

Interviewees discussed the importance of offering spaces to **practice leadership skills** rather than just learn about them conceptually. One interviewee said, “We need to practice the skills, in terms of helping faculty...especially the leadership skills, and managing conflicts. If they had a longer workshop, then that would be more helpful.”