

Impacts of Receiving FORWARD Grants/Awards on NDSU Faculty by STEM Status Summer 2013

Description of Full Sample

Seventy women faculty members and three men faculty members completed the survey from an overall sample of 81 faculty members who have received at least one FORWARD grant or award. Thus, this survey has a response rate of 90.1%.

Description of the STEM Sample

Forty faculty members from STEM disciplines completed the survey. In particular, 25 (62.5%) reported receiving a Mentor Travel Award, 18 (45.0%) received a Course Release Award, 14 (35.0%) received a Leap Research Grant, 16 (40.0%) received a Leap Lab Renovation Grant, six (15.0%) received a Climate/Gender Grant, and two (5.0%) received a Leadership Development Award. In addition, 24 (60.0%) faculty members were assistant professors, 13 (32.5%) faculty members were associate professors, and three (7.5%) faculty members were full professors.

It is important to note that within the STEM sub-sample, 17 participants reported receiving one FORWARD grant/award, eight participants reported receiving two grants/awards, nine participants reported receiving three FORWARD grants/awards, four participants reported receiving four FORWARD grants/awards, and one participant reported receiving five FORWARD grants/awards.

Description of the Non-STEM Sample

Thirty-three faculty members from non-STEM disciplines completed the survey. In particular, 27 (81.1%) reported receiving a Mentor Travel Award, four (12.1%) reported receiving a Course Release Award, one (3.0%) reported receiving a Leap Research Grant, one (3.0%) received a Climate/Gender Grant, and six (18.2%) received a Leadership Development Award. In addition, 20 (60.6%) faculty members were assistant professors, 11 (33.3%) faculty members were associate professors, and two (6.1%) faculty members were full professors.

It is important to note that within the non-STEM sample, 27 participants reported receiving one FORWARD grant/award and six participants reported receiving two grants/awards.

Perceptions of the Overall Impact of Grants and Awards

Each of the five major goals of the FORWARD project was assessed using a six-point Likert scale (ranging from 1 = Strongly Disagree to 6 = Strongly Agree) question. The five goals are about Retention, Promotion and Tenure, Leadership, Climate, and Recruitment.

My participation in the FORWARD award/grant program(s) has had a positive impact on my decision to remain at NDSU.

| | Frequency | Percent | Cumulative Percent |
|-------------------|-----------|---------|--------------------|
| Strongly Disagree | 2 | 2.7 | 2.8 |
| Disagree | 2 | 2.7 | 5.6 |
| Somewhat Disagree | 4 | 5.5 | 11.1 |
| 3.50 (Neutral) | 1 | 1.4 | 12.5 |
| Somewhat Agree | 16 | 21.9 | 34.7 |
| Agree | 28 | 38.4 | 73.6 |
| Strongly Agree | 19 | 26.0 | 100.0 |
| Missing Data | 1 | 1.4 | |
| Total | 73 | 100.0 | |

Overall Mean= 4.71(SD= 1.17); For STEM faculty = 4.95; For non-STEM faculty = 4.44; no significant STEM status difference.

Participants also provided the following comments about their decision to remain at NDSU:

STEM Sample

- [No response] I have not decided yet whether I want to remain at NDSU.

Non-STEM Sample

- [Somewhat disagree] It certainly wasn't a negative impact, but in the end this did not change or impact my decision to stay/leave.

My participation in the FORWARD award/grant program(s) has had a positive impact on my tenure and/or promotion process.

| | Frequency | Percent | Cumulative Percent |
|---------------------------------------------------------------------------------------|-----------|---------|--------------------|
| Strongly Disagree | 1 | 1.4 | 1.4 |
| Disagree | 2 | 2.7 | 4.2 |
| Somewhat Agree | 13 | 17.8 | 22.5 |
| Agree | 23 | 31.5 | 54.9 |
| Strongly Agree | 29 | 39.7 | 95.8 |
| NA - already tenured and promoted to full professor before receiving my FORWARD grant | 3 | 4.1 | 100.0 |
| Missing Data | 2 | 2.7 | |
| Total | 73 | 100.0 | |

Overall Mean= 5.09(SD= 1.06); For STEM faculty = 5.11; For non-STEM faculty = 5.06; no significant STEM status difference.

A STEM participant also provided the following comment about the PTE process:

- [Somewhat agree] Helped with tenure, may not help with full professor.

My participation in the FORWARD award/grant program(s) has helped me develop leadership skills that will assist in my career advancement.

| | Frequency | Percent | Cumulative Percent |
|-------------------|-----------|---------|--------------------|
| Disagree | 1 | 1.4 | 1.4 |
| Somewhat Disagree | 7 | 9.6 | 11.6 |
| Somewhat Agree | 28 | 38.4 | 52.2 |
| Agree | 20 | 27.4 | 81.2 |
| Strongly Agree | 13 | 17.8 | 100.0 |
| Missing Data | 4 | 5.5 | |
| Total | 73 | 100.0 | |

Overall Mean= 4.54(SD= .96); For STEM faculty = 4.47; For non-STEM faculty = 4.61; no significant STEM status difference.

My participation in the FORWARD award/grant program(s) has positively enhanced my experience of the campus climate at NDSU.

| | Frequency | Percent | Cumulative Percent |
|-------------------|-----------|---------|--------------------|
| Strongly Disagree | 4 | 5.5 | 5.6 |
| Disagree | 2 | 2.7 | 8.3 |
| Somewhat Disagree | 2 | 2.7 | 11.1 |
| Somewhat Agree | 21 | 28.8 | 40.3 |
| Agree | 21 | 28.8 | 69.4 |
| Strongly Agree | 22 | 30.1 | 100.0 |
| Missing Data | 1 | 1.4 | |
| Total | 73 | 100.0 | |

Overall Mean= 4.65(SD= 1.32); For STEM faculty = 4.79; For non-STEM faculty = 4.48; no significant STEM status difference.

Participants also provided the following comments on the NDSU campus climate:

STEM Sample

- [Somewhat agree] The climate for women may have improved, international women are still at a disadvantage.
- [Agree] Although I would say the grant programs are excellent, I find many of the on-campus events for FORWARD are not something I would be proud to participate in. Please feel free to contact me if you'd like an explanation. [Participant then lists name, office phone number, and personal phone number.]

Non-STEM Sample

- [Strongly disagree] The FORWARD support is fantastic. The climate on campus is still negative toward women faculty.

The FORWARD program and grants had a significant impact on my decision to come to NDSU.

| | Frequency | Percent | Cumulative Percent |
|---------------------------------------------------------------------|-----------|---------|--------------------|
| Strongly Disagree | 3 | 4.1 | 4.2 |
| Disagree | 9 | 12.3 | 16.7 |
| Somewhat Disagree | 1 | 1.4 | 18.1 |
| Somewhat Agree | 4 | 5.5 | 23.6 |
| Agree | 2 | 2.7 | 26.4 |
| Strongly Agree | 4 | 5.5 | 31.9 |
| NA - came to NDSU prior to the FORWARD program and grants existence | 49 | 67.1 | 100.0 |
| Missing Data | 1 | 1.4 | |
| Total | 73 | 100.0 | |

Overall Mean= 3.21(SD= 1.76); For STEM faculty = 3.91; For non-STEM faculty = 2.58; no significant STEM status difference.

Participants also provided the following comments on the impact the FORWARD grants/awards had on their decision to come to NDSU:

STEM Sample

- [NA] Did not know it before I came.
- [NA] Didn't know about it.

Non-STEM Sample

- [Disagree] Was not aware of the FORWARD program when deciding to join NDSU in 2007.
- [Strongly disagree] Didn't know about it.
- [NA] Was not aware of FORWARD.

My departmental colleagues positively perceived the FORWARD award/grant(s) I received.

| | Frequency | Percent | Cumulative Percent |
|-------------------|-----------|---------|--------------------|
| Strongly Disagree | 2 | 2.7 | 3.0 |
| Disagree | 5 | 6.8 | 10.4 |
| Somewhat Disagree | 3 | 4.1 | 14.9 |
| Somewhat Agree | 19 | 26.0 | 43.3 |
| Agree | 21 | 28.8 | 74.6 |
| Strongly Agree | 17 | 23.3 | 100.0 |
| Missing Data | 6 | 8.2 | |
| Total | 73 | 100.0 | |

Mean= 4.54, (SD= 1.30), for STEM faculty = 4.42; for non-STEM faculty = 4.68; no significant STEM status difference.

Participants were also provided a space to make comments on their departmental colleague's perception of the FORWARD award/grant(s) they received:

STEM Sample

- [Disagree] The room I received the renovation grant for is now a common equipment room. Never benefitted from that.
- [No response] I do not know, nobody expressed any opinion about it.
- [No response] No opinion.
- [Somewhat disagree] At the time I received the awards, my colleagues (many of them) viewed preferential programs to women as unfair and unnecessary. The climate toward FORWARD has improved somewhat since then.
- [Disagree] These awards are a double-edged sword. You are encouraged to apply, but when you get them, the male colleagues think they are "gimmicks" and "non-competitive." If you don't get them, they think something is "wrong" with your research.
- [Disagree] Not all of them. Junior faculty see it as a positive thing for the most part. Senior folks and academic assistant do not.
- [Strongly agree] The Leap research award has been critical to my success here.

Non-STEM Sample

- [No response] They were not interested. All male faculty.
- [Strongly disagree] The climate in my department is not supportive of female faculty (especially if you are a woman who verbalizes your opinion).
- [No response] Not able to assess.
- [Strongly agree] FORWARD has been very helpful in creating a positive at NDSU. Thanks!
- [Strongly agree] I'm guessing – we've never discussed it.
- [Strongly agree] My department chair and other colleagues on campus wrote letters of support for my selection.

Mentor Travel Awards

STEM Sample

The 25 STEM participants who received a travel award reported that the below accomplishments were associated with receiving a FORWARD Travel Award:

- 7 (28.0%) participants presented at regional conferences
- 18 (72.0%) participants presented at national conferences
- 13 (52.0%) participants made progress on a research article
- 14 (56.0%) participants made progress on a grant proposal
- 21 (84.0%) participants met with collaborators
- 21 (84.0%) participants networked with other professionals
- 19 (76.0%) participants received mentorship that helped with career development and advancement
 - On average, these participants met with 2.00 (SD = 1.00) mentors
 - 10 (40.0%) participants met with a graduate school advisor
 - 6 (24.0%) participants met with a mentor for the first time

Non-STEM Sample

The 27 non-STEM participants who received a travel award reported that the below accomplishments were associated with receiving a FORWARD Travel Award:

- 1 (3.7%) participant presented at a regional conference
- 19 (70.4%) participants presented at national conferences

- 3 (11.1%) participants presented at international conferences
- 15 (55.6%) participants made progress on a research article
- 1 (3.7%) participant made progress on a grant proposal
- 20 (74.1%) participants met with collaborators
- 20 (74.1%) participants networked with other professionals
- 23 (85.2%) participants received mentorship that helped with career development and advancement
 - On average, these participants met with 2.27 (SD = 1.35) mentors
 - 13 (48.1%) participants met with a graduate school advisor
 - 10 (37.0%) participants met with a mentor for the first time

Non- STEM participants also provided additional outcomes they associated with receiving a Mentor Travel Award:

- Worked on book chapters with my co-author.
- Was able to bring mentor to NDSU to speak to general audience as well as meet with students, along with meeting with her personally.
- Attended a promotion mentoring workshop in my field.

Course Release Awards

STEM Sample

The 18 STEM participants who received a course release award reported that the below accomplishments were associated with receiving a FORWARD Course Release Award:

- 9 (50%) participants began a new research project
- 13 (72.2%) participants submitted at least one peer reviewed article
 - On average, these participants submitted 2.5 (SD = 1.38) articles
 - Overall, these participants submitted a total of 30 articles
- 14 (77.8%) participants submitted at least one peer reviewed article and had that article accepted
 - On average, these participants had 2.15 (SD = 1.52) articles accepted
 - Overall, these participants had 28 articles accepted
- 7 (38.9%) participants began writing a new grant proposal
- 8 (44.4%) participants submitted at least one grant proposal to a funding agency
 - On average, these participants submitted 2.43 (SD = 1.81) grants proposals
 - Overall, these participants submitted a total of 17 grant proposals
- 3 (16.7%) participants submitted at least one grant proposal and had that proposal funded
 - On average, these participants had 3.00 (SD = 2.83) grants funded
 - Overall, these participants had a total of 6 grants funded, totaling \$624,030
- 3 (16.7%) participants presented at a regional conference
- 8 (44.4%) participants presented at a national conference
- 5 (28.8%) participants earned tenure and promotion from assistant to associate professor

STEM participants also provided additional outcomes they associated with receiving a Course Release Award:

- Submitted and had accepted 2 refereed edited volume chapters, proposed and co-organized a national conference session (accepted) and was the paper discussant at that session.
- Was able to travel to a national conference, after two years of not attending due to maternity issues, which resulted in being invited to future conferences starting the year following the course release.

Non-STEM Sample

The four non-STEM participants who received a course release award reported that the below accomplishments were associated with receiving a FORWARD Course Release Award:

- 2 (50%) participants began a new research project
- 2 (50%) participants each submitted one peer reviewed article
- 2 (50%) participants submitted at least one peer reviewed article and had that article accepted
 - On average, these participants had 1.5 (SD = .71) articles accepted
 - Overall, these participants had 3 articles accepted
- 1 (25%) participant presented at a regional conference
- 2 (50%) participants presented at a national conference
- 1 (25%) participant presented at an international conference
- 1 (25%) participant earned promotion from associate to full professor

One non-STEM participant also provided additional outcomes they associated with receiving a Course Release Award:

- Collected data in another country, made significant progress on six papers and one book chapter – all will be submitted this summer.

Leap Research Grants

STEM Sample

The 14 STEM participants who received a leap research grant reported that the below accomplishments were associated with receiving a FORWARD Leap Research Grant:

- 11 (78.6%) participants wrote a new grant proposal
- 10 (71.4%) participants submitted at least one new grant proposal
 - On average, these participants submitted 2 (SD = 1.25) grants
 - Overall, participants submitted a total of 20 grants
- 3 (21.4%) participants had at least one a grant proposal funded
 - On average, these participants had 1.33 (SD = 0.58) grants funded
 - Overall, these four grants were funded for a total of \$189,985.00
- 6 (42.9%) participants presented at a regional conference
- 9 (64.3%) participants presented at a national conference
- 6 (42.9%) participants presented at an international conference
- 4 (28.6%) participants earned tenure
- 3 (21.4%) participants earned promotion from assistant to associate professor
- 1 (7.1%) participant earned promotion from associate to full professor

STEM participants also provided additional outcomes they associated with receiving a Leap Research Grant:

- Manuscripts in preparation. Lots of great data!
- Submitted two manuscripts – one accepted and one in review.
- Published a paper in a peer-reviewed journal.

Non-STEM Sample

One non-STEM participant received a leap research grant reported that the below accomplishments were associated with receiving a FORWARD Leap Research Grant:

- 1 (100%) participant wrote a new grant proposal
- 1 (100%) participant submitted one new grant proposal
- 1 (100%) participant presented at a national conference

Leap Lab Renovation Grant

STEM Sample

The 16 STEM participants who received a leap lab renovation grant reported that the below accomplishments were associated with receiving a FORWARD Leap Lab Renovation Grant:

- 6 (37.5%) participants wrote a new grant proposal
- 5 (31.3%) participants submitted at least one new grant proposal
 - On average, these participants submitted 3.5 (SD = 4.36) grant proposals
 - Overall, participants submitted a total of 14 grant proposals
- 5 (31.3%) participants presented at a regional conference
- 6 (37.5%) participants presented at a national conference
- 3 (18.8%) participants earned tenure and promotion from assistant to associate professor

STEM participants also provided additional outcomes they associated with receiving a Leap Lab Renovation Grant:

- Renovations were complete late last year. Should be able to do experiments if current pending grants are funded.
- Will begin new research projects once construction is complete.
- Completed a project that utilized the new space.
- Still renovating.

Climate-Gender Research Grant

STEM Sample

The six STEM participants who received a climate-gender grant reported that the below accomplishments were associated with receiving a FORWARD Climate-Gender Grant:

- 2 (33.3%) participants submitted one peer reviewed article
- 4 (66.7%) participants submitted one peer reviewed article and had that article accepted
- 1 (16.7%) participant submitted two new grant proposal
- 1 (16.7%) participant had a grant proposal funded
 - Overall, this grant was funded for a total of \$185,000
- 3 (50%) participants presented at a regional conference
- 3 (50%) participants presented at a national conference
- 1 (16.7%) participant earned tenure and promotion from assistant to associate professor
- 2 (33.3%) participant learned about the value of interdisciplinary research

Non-STEM Sample

The one non-STEM participant who received a climate-gender grant reported that the below accomplishments were associated with receiving a FORWARD Climate-Gender Grant:

- 1 (100%) participant experienced increased acceptance by his colleagues for gender-climate related research
- 1 (100%) participant submitted a conference proposal.

Leadership Development Award

STEM Sample

The two STEM participants who received a leadership award reported that the below accomplishments were associated with receiving a FORWARD Leadership Development Award:

- 2 (100%) participants networked with other professionals
- 2 (100%) participants were able to identify skills that will help them be competitive for leadership positions at NDSU
- 1 (50%) participant was able to acquire new skills that would help her be competitive for leadership positions at NDSU
- 1 (50%) participant acquired a new leadership position at NDSU
- 1 (50%) participant acquired a new leadership position within a professional association

Non-STEM Sample

The six non-STEM participants who received a leadership award reported that the below accomplishments was associated with receiving a FORWARD Leadership Development Award:

- 6 (100%) participants networked with other professionals
- 6 (100%) participants were able to identify skills that will help them be competitive for leadership positions
- 5 (83.3%) participants were able to acquire new skills that would help them be competitive for leadership positions at NDSU
- 1 (16.7%) participant acquired a new leadership position at NDSU

One non-STEM participant also provided an additional outcome she associated with receiving a Leadership Development Award:

- Enabled me to be a stronger faculty leader within department understanding technical aspects of our specific program accreditation.

Future Funding of FORWARD Grants

Participants were asked about which of the FORWARD grants/awards were the three most important to continue to fund in order to support women faculty member's promotion, advancement, and retention at NDSU:

STEM Sample

- 34 (85.0%) participants selected the Leap Research Grant
- 32 (80.0%) participants selected the Course Release Award
- 26 (65.0%) participants selected the Mentor Travel Grant
- 11 (27.5%) participants selected the Leap Lab Renovation Grant
- 10 (25.0%) participants selected Leadership Development Award
- 1 (2.5%) participant selected the Climate-Gender Research Grant

STEM participants also provided the following comments about future funding of the FORWARD grants:

- Comment [on Leap Lab Renovation Grant]: NDSU should provide better infrastructure without requiring grants for basic upgrades and improvements.
- Leap Research Grant – only consider NSF? Leap Lab Renovation Grant – I don't have a lab. Climate-Gender Research Grant – only for certain programs.
- They could all be constructed better, with fewer limitations.

Non-STEM Sample

- 30 (90.9%) participants selected the Mentor Travel Grant
- 27 (81.8%) participants selected the Course Release Award
- 22 (66.7%) participants selected the Leap Research Grant
- 13 (39.4%) participants selected Leadership Development Award
- 3 (9.1%) participants selected the Leap Lab Renovation Grant
- 3 (9.1%) participants selected the Climate-Gender Research Grant

Qualitative Feedback on the FORWARD Grant/Award Programs

1. What if any challenges or barriers did you experience in completing the goals of your grant/award?

STEM Sample

- The only barriers to my goals were that I still had to teach a 1 credit hour capstone course that is intensive and my service labor increased during that semester. For those of us who have to teach 2/2+, we need something that completely releases us from all teaching (and maybe service) so that it is a true research release. I could have finished and submitted a third journal article.
- Too much service activity.
- Could establish the goals stated in my proposal.
- The short turn around. LEAP research grants get awarded late – and then you just have the 1 year. I was awarded one – but it happened during my maternity leave so I didn't get to use it all. The option for an extension would have been awesome.
- My work isn't always viewed as "real science."
- Biomedical research is a challenging area for a number of reasons: funding is tight, research is expensive, facilities are important. To get a program up and running was difficult to do in six years. Although I sought and found good support on campus (Provost Schnell was a fantastic mentor!), an option for a longer probationary period would have been appropriate. Other universities have this (University of Minnesota – Pathology and Lab Medicine). It would have taken a lot of stress out of my life. I sometimes worked 20-hour days to get everything done. That's hard.
- The PI moved to a different institute, no real follow-up done.
- Even with the course release, there were still service obligations that took time.
- The timeline allowed was difficult to fit the proposed research into as we were also confined to when the tissues could be collected. However, this is the case for many projects when working with animals.
- It is challenging to recruit and retain good graduate students.
- Wish I had requested funds to cover one-month summer salary.
- I was in the first trimester of pregnancy during my course release and unfortunately due to fatigue and morning sickness it was hard to submit as many manuscripts as I had planned. However, I did make significant progress working on them that I otherwise would not be able to and they will be submitted shortly and will likely have a significant positive impact when I go up for tenure.
- Not much. Lab renovation and working with facilities was a pain.

Non-STEM Sample

- Illness in my immediate family.
- There is no one to teach for buyouts – no one qualified nor available – very difficult to find time to write with teaching and service load.
- Making travel arrangements and inviting a mentor to campus but requiring them to pay and be reimbursed. This is a Budget Office issue, but was a barrier.
- Balancing demands of position (research, teaching, service); duration of data completion.

- Time to work on my paper/research.
- None, each grant I received was a tremendous help and allowed me to attend more than one conference a year. THANKS!
- No barriers. I am grateful for the grants.
- The completion of the travel for research does not have challenges.
- Restricted timeline, limited opportunities for data collection and poor participation rate.
- Lack of support from dean.
- Only the limitations of time – I got much out of the reward.
- Not enough time.
- None. Went smoothly.
- I hope the grant is open for faculty (women) from all disciplines, not just STEM.
- None, though childcare for travel is a huge challenge for my family.
- Two grants that had been submitted prior to the award were funded while I was trying to complete the goals of the award. This slowed down my progress toward my FORWARD award goals.
- Not being in a STEM discipline severely limited the grants I was eligible to obtain. Thus, I do not see FORWARD as a way to improve my research or an influence in the climate I experience at NDSU.

2. What, if any, challenges or barriers have you experienced in your progress towards promotion and/or tenure?

STEM Sample

- I feel bullied in my department and believe that 1 or 2 colleagues will try to prevent my promotion for reasons of personal bias.
- I experienced some barriers, but it happened in 2001-2002.
- Limited funding opportunities for our particular group both within NDSU and outside the campus.
- Seemed like the rules kept changing for grant priorities and I was always a low priority.
- Balancing work/life. Selfish/unrealistic attitude from higher administration. Good old boy network. Spousal career issues. General campus climate (chilly). Lack of transparency. Unethical attitudes/practice. Incompetence of others. Lack of leadership/guidelines/expectations etc.
- The largest barriers are teaching overload due to low faculty numbers plus major graduate student growth, non-existent developmental start-up for certain STEM disciplines, and a lack of institutional infrastructure support. I teach 3/2/1 then 3/3/1 in 2-year rotations plus supervise graduate students, field research, and independent studies. I was unable to negotiate any start-up beyond a computer which in reality was paid for by another unit not my own. In my field one cannot be competitive for large research grants without seed research being done or without institutional support such as labs/software/hardware equipment.
- Too much service.
- Did experience some challenges; but with advise from FORWARD mentor, channelized the challenges into a in a [illegible] track.
- Lack of mentorship and advocacy. I directly asked my chair for advice. He talked to me for literally 5 minutes and basically said, “Well, just make sure your package is strong.” I contacted an Advocate in ANOTHER DEPARTMENT to get help.
- No lab space.
- None but this grant had little to do with that. I earned tenure before I received a travel award.
- Balancing time spent on teaching and service with time spent on research is difficult. The service obligations, while important, take up a huge amount of time.

- The biggest challenge is (as always) balancing work and home.
- A lot of challenges from personal side, such as maternity leaves. My department has made great accommodations for my maternity leaves. And the FORWARD grants helped significantly in my progress.
- None – I have been well-supported at NDSU.
- Change of leadership in the department and not getting enough support from new head of department, including refusal to sign off grants that I was perusing.
- Gaps [between] grants. Difficult to get started.
- I need better balance of my time and more money to do my research.
- Balancing all aspects of my position – as any pre-tenure faculty member would I think. Nothing exceptional.
- Being asked to wait another year, even though I felt ready to go forward with tenure.
- Acceptance of my research area as a STEM field from the college- and university-wide community.
- It has been challenging to successfully obtain extramural grant funding.
- The funding climate is very difficult. The low funding rate at NSF causes me a lot of anxiety, which is why the Leap Research award is so important to keeping research moving forward. Aside from FORWARD, there are very few opportunities to apply for internal funding.
- NDSU seems to only be able to count pubs and nothing else.
- In two [illegible] space? Competition for all resources – time, space, money.

Non-STEM Sample

- Illness and death of immediate family members.
- Finding time to write; getting clear direction as to formatting of PTE document.
- I did not publish early enough and have had to catch up. Early on in my tenure process I did not have senior collaborators, which has been helpful recently.
- Balancing demands of position (research, teaching, service); duration of data completion.
- Time to work on my research.
- There are several male faculty members in my department that try to intimidate and bully the female faculty who express their opinions. During meetings they are openly hostile to me and other women in the department. We recently brought in a female applicant for the Chair position in my department. She was treated so poorly by two of our male faculty that she said she wouldn't take the job if it were offered to her.
- Relocation to cubicles in Ehly Hall for three years of tenure clock. ☹
- Inequity has been apparent and very prevalent during my time at NDSU.
- Advising load is too heavy. Too much time wasted on trivial administration tasks (e.g., safety training). Poor research infrastructure at NDSU (e.g., research office understaffed).
- Lots of service. Lack of female mentors in college.
- Lore about time in rank for promotion to full professor.
- Unclear expectation of PTE by provost/administrators on campus.
- A big challenge for me personally was dealing with a senior male colleague who threatened me with not getting tenure because he didn't like a paper I had written. He convinced others that they, too, should attack me and my paper, which created a negative environment.
- No real barriers yet. However, I fear narrow perceptions of what should count as research or at least as high quality research. And these valuations are gendered. Teaching and service are gendered feminine; research about teaching is sometimes valued less than research of other types; collaboration is feminized in academic culture at times. So the barriers are my “worst-case scenario” expectations and the heavy service load. And lack of faculty!

- Time conflicts that cause delays in my research.
 - I'm a bit at a stand still as I think about sources of funding for the next step of my current research project. And I've only just started thinking about it, but I'm not sure where to even start looking. PLUS I don't know what to ask for. My research is survey-based. If NDSU had an established survey research center, I would start there. But since we don't, it seems like I would need to write a grant to fund that – which feels like too much when I just want to field a survey.
 - Too many committees for service. Too big of classes (over 50 students each class).
 - Being in a male-dominated profession, where some men still seem to feel women aren't as capable as men.
 - 1) Provost's repeated comments that if people have not attempted promotion to full by year six, they probably don't deserve it. 2) Amount of service and teaching because university is so understaffed we cannot get course releases for service/administrative work.
 - Stretched too thin so not enough time. NDSU has completely inadequate infrastructure to support research and grants.
 - Non-supportive colleagues and inconsistently applied PTE policies.
 - I am unwilling to share these experiences in writing. I suppose that says a lot though.
 - Just to find resources (both time and money) to complete research projects. Lack of college support in terms of resources.
 - It is difficult to pursue the level of work I need to prepare for promotion to full professor while leading a very active department.
3. In addition to the benefits identified previously in the survey, were there any other benefits you experienced due to receiving a FORWARD grant/award?

STEM Sample

- Some of the workshops are good. ☺
- My collaboration resulted in 2 presentations at scientific meetings, and publication of 1 paper.
- Building network with faculty within NDSU.
- Enhanced mental well-being (at least someone cares how women are doing at NDSU and is trying to do something).
- Benefits included respect from some of my colleagues who understand the need for course releases.
- I believe the survey covers everything.
- NDSU visibility at the conferences.
- It is a source of information, support, and encouragement.
- Opportunities for collaboration with researchers at NDSU. Priceless!
- Can't tell.
- I was given the opportunity to work with my colleagues in a positive setting to help in the re-design of the renovated laboratory.
- Attendance.
- It enables me to attend conferences and network!
- Encouragement! The boost to morale is very important.
- It allowed for a rich collaboration across departments.

Non-STEM Sample

- Meeting and interacting with faculty from other disciplines.
- FORWARD has provided some excellent networking opportunities; panel presentations; opportunities to see what others have and can do – very encouraging!

- Professional development is mentioned, but deserves mention again. My mentor has provided valuable support and instruction to further develop my research skills, and has provided mentorship on how I can better mentor others.
- Networking and support of people I met or spent time with as a result of participating in FORWARD projects. I've asked for quite a bit of advice as a result.
- The travel grant was helpful for networking and presenting research. I met several people that have similar interests and we will likely collaborate on a project in the future.
- Something else to add to awards section on CV.
- Time to sort through my priorities and get some perspective on the treatment and view of those in administration at NDSU.
- Networking: I got to know several good colleagues associated with FORWARD.
- Gave me time to focus on the question of whether I wanted to move out of research/teaching to administration.
- Collegial support and recognition within university.
- Collegiality with other recipients.
- Unexpectedly, I was approached by a journal editor to submit my presented work as a pedagogical article.
- The community associated with FORWARD is invaluable. Knowing it is there provides a tremendous psychic boost.
- Recognition from my department and college.
- Making a connection with a wonderful, creative person (the mentor).
- Not teaching in the fall gave me the flexibility I needed to move my research program to the next level.
- In addition to being able to meet with my mentor, I was also selected as a HELI scholar and was able to network with other assistant professors from across the nation. We are still connected as a cohort and share information and resources. A colleague I met at the HELI conference recommended me for the Hampton Faculty Fellows program, Cohort II with Mayo Clinic.
- Publications – the collaboration led to three research articles.
- Opportunity to learn skills to enhance my effectiveness in communicating with colleagues and how to successfully initiate change.

4. What, if any, improvements have you noticed in the climate at NDSU?

STEM Sample

- Some women have advanced, but I am also missing some that used to be here.
- This question is too general; it should be more specific.
- Going to need people changes (retirement, etc.) before one will notice improvements.
- No improvements noticed, but see above. [Enhanced mental well-being (at least someone cares how women are doing at NDSU and is trying to do something).]
- I think it is positive to the department as a whole to show that you are contributing to the betterment of the department. Lab renovation grant helped this.
- Honestly, it has worsened but is more hidden than ever.
- We have more tenured faculty in our department.
- Increase in female hires, increase in females receiving tenure, decrease in good-old-boy system politics.
- Many. Much more acceptance to the idea that there are barriers for women and the need for institutionalized change. It seems that hiring of female faculty is up.
- Still needs much improvement!
- FORWARD is recognized; authority/administrators think twice before they could turn you down.

- In my department – none. It is all lip service. Our new dean, however, is really doing things to improve climate.
- Everyone seems more aware of inequities.
- See below: [For both [questions] 13 and 14, I see a generally wonderful place to work, but there are still pockets of misogynistic (for lack of a better word that isn't coming to mind) assholes. They are painful and should be marginalized at every opportunity.]
- More female (faculty) in leadership positions.
- At the department level, faculty and chair are more aware and the climate is better. FORWARD's efforts to educate the wider campus community are good and receive attention.
- Hard to tell.
- Very little. I guess in some ways one indication that climate is changing is having more resistance from those worried about losing their privileged status and I feel that. I'm also experiencing a very different climate as an Associate faculty member than when I was an Assistant.
- Knowing that the FORWARD office is looking out for climate issues gives me confidence that the climate is changing and will keep moving in the right direction. I have enjoyed some of the speakers who have been brought in to highlight climate issues.
- There seems to be more concrete policies in terms of maternity leave, tenure extension, etc. than previously. When interviewing in 2006, I asked about maternity leave and was met with a blank stare and told by my potential boss that he had never been asked that question before and had never needed to deal with it for faculty. I was surprised since our department had hired three women faculty in the three years prior to me. There is now a precedent set into place (for my home department) for these needs by faculty.
- More programs/activities organized by women and for women. Several women faculty have advanced to leadership positions. They are encouragement and role models to other female faculty, particularly those on tenure-track.
- While I have been able to visit with the NSF ~~staff~~ leaders directing the Advance NSF grant and voice my concerns, I remain unsure of actual gender climate changes made in some upper administration and colleagues in my department and others in my college.
- Improvement in the number of women faculty hired.
- I have become more aware of issues/resolution of issues but I feel that has more to do with increased involvement on campus in general as I have been here longer.
- Not qualified to answer (at NDSU less than 3 years).
- More awareness among faculty.
- I have really appreciated the work of the FORWARD Advocates. I feel they have helped improve the climate quite a bit in addition to other FORWARD initiatives.
- I have only been here 3 years, so I don't know what it was like before FORWARD. But, the climate in my department is great.
- FORWARD seems to act as an ombudsman for the faculty when sucky things happen. [96]
- None. But at least the administration feels like something is being done. No actual change, however.

Non-STEM Sample

- More women in leadership roles, more women being promoted.
- I have seen FORWARD become more valued and recognized on campus, which contributes to an improved climate for women at NDSU.
- I haven't been here long enough to have the perspective needed to evaluate climate changes.
- I think just an overall improved acceptance of importance/presence of women faculty/research/leaders.

- Our Dean seems to go out of his way to support women, which is great. Unfortunately, the climate in my department has become worse. If I didn't have family in ND, I would look elsewhere for a position.
- Greater efforts to formalize policy on/secure family leave.
- I have not seen improvements in equity at NDSU. It is not equitable by administration.
- It is difficult to say. The work of FORWARD has brought gender and other means of marginalization into the public discourse at NDSU. But whatever progress has been made seems tempered by the general dis-ease around administration and the direction the University is heading.
- In my college the climate has actually gotten worse, much worse.
- Women in leadership positions and pools for leadership positions. Support for family-friendly policies.
- None.
- No, the climate got worse compared to FORWARD grant due to new administrators on campus.
- None – my department does not have any women in leadership positions and our latest hire was another white male.
- More women in leadership positions. More clearly and fully articulated policies in some areas such as PTE and hiring.
- I have sensed an incredible shift within AHSS since Dean Sandstrom arrived. I have incredible trust and faith in his leadership (including Associate Deans). Knowing college leadership gets it is really, really helpful.
- Workshops and trainings.
- We at least can talk out loud about challenges and name them. My morale is lowest ever.
- None.
- Interdisciplinary collaborations have increased, particularly with faculty members who teach in the various tracks in the Master of Public Health program, as well as nursing.
- More women in leadership roles. More faculty members being willing to talk about climate challenges for women.
- None.
- Policies are getting more women/family friendly (A step in the right direction.) E.g., 6-weeks time off for new parents. I wish I had this benefit when I was a new mom.
- More women at the chairs meetings!

5. What, if any, challenges or concerns do you have about the climate at NDSU?

STEM Sample

- I think the climate for international people got much worse and that we are being held to higher standards.
- Unfortunately, relatively high proportion of women is leaving NDSU, and moving to other institutions.
- Highly doubt if any changes will occur, the good ole boy system will just be less blatant.
- See above. [Balancing work/life. Selfish/unrealistic attitude from higher administration. Good old boy network. Spousal career issues. General campus climate (chilly). Lack of transparency. Unethical attitudes/practice. Incompetence of others. Lack of leadership/guidelines/expectations etc.] Also, many people do not even understand what the word “diversity” means – even those in administrative positions.
- Nearly everything I can think of, especially regarding the need to start at both the bottom (faculty/staff) and top (administration). Subtle culture change is simply not working.
- More general concerns about faculty and the important role they play being recognized by upper administration.

- Not specific to women, but there is little recognition of work-life balance issues.
- Lack of maternity leave. Lack of sick child care.
- In our department, the gender climate is great.
- For both [questions] 13 and 14, I see a generally wonderful place to work, but there are still pockets of misogynistic (for lack of a better word that isn't coming to mind) assholes. They are painful and should be marginalized at every opportunity.
- None.
- When it comes to higher administration, I often get the feeling from their decisions that their support to FORWARD is more lip-service than real commitment.
- I don't really have any concerns.
- Many concerns that a 5-year grant can't remedy. Climate issues are going to require continued work over many years. As an Associate woman, I feel terribly overworked in different ways than when I was an Assistant faculty. I think the climate issues are tangled in with a variety of intersectional markers that include, but are not limited to, gender. Some of it is related to paradigm shifts in my discipline (and others), some of it is related to generational/age issues, some of it is related to the shifting structure of the academy itself, some of it is related to how power works within people, some of it is related to a climate of fear and apathy that is pretty strong here, some of it is related to administrative stasis that is not just at NDSU but goes up the chain to the NDUS system and state. I wish I could be more optimistic, but my biggest concern is that after this granting period, work will cease on the climate and we will see only minimal changes in that some women may have been afforded better positions on campus, but that the actual climate itself will largely remain the same.
- The climate toward women is improving. However, the anti-faculty climate of the university and the state makes it difficult to retain people. In addition, the horrible infrastructure and old buildings contribute to the anti-faculty climate. Lack of grad student support and difficulty recruiting students to ND make it harder here.
- There will always be an imbalance in how different genders are treated and expectations from administration seem to be different. I don't know if it can be fixed.
- Hope the climate will keep improving at NDSU.
- There remain many individuals, in administration and otherwise, who will retain gender-bias regardless of Advance FORWARD efforts. This is not the fault of Advance FORWARD but in administration for not implementing an anti-bullying policy. This is true for male and female administrators in some cases.
- There are some faculty in some departments who act like they are entitled to being the ones who determine the direction of the department. No effort is made to be inclusive in decision making process.
- The tension between faculty and administration (upper) could derail efforts to improve climate.
- Leadership remains male-dominated. Women have very little voice.
- I believe it can be difficult for some faculty at times to be on board with the FORWARD mission because they don't see some of the issues that female faculty deal with. As a result, I have heard some faculty say that it is unfair that women receive extra awards and grants that they can apply for.
- It seems like lots of faculty have been leaving or considering leaving. Maybe it's just my friends so I notice it more. Child care isn't sufficient.
- That FORWARD enables the administration to feel good about themselves as the climate stays the same. Also, criticizing FORWARD is seen as disloyal. Also, self-satisfaction of FORWARD administration.

Non-STEM Sample

- There is still a perceptible hierarchy of disciplines and within researchers by describing true experimental studies as “pure research” and describing social science/historical research as “pseudoscience.” I felt that my work was being devalued and it wasn’t a good feeling.
- Gender inequity continues to be a problem. We still function under a good ole boys club. The lack of awareness that the President showed when claiming he did not know the gender of the faculty’s \$1.2 million grant set the campus back. Nursing and HDFS? Really?
- Overall, I think it is a good climate.
- Still much work to be done.
- I have expressed my dissatisfaction with the treatment of women in my department and nothing seems to change. I really like my job and several people in my department, but the male faculty make the environment toxic. I am going up for (full) Professor next year and fear that some of my male colleagues will try to make it difficult.
- None. I feel like the climate in my college (AHSS) is very good.
- Administration is not equitable in the treatment of women at NDSU. There are a few particular people in various levels of administration who are unsupportive of equity. There are others who are even more disturbing in their treatment of women and who are malicious or knowingly turn a blind eye for equity.
- It seems everyone I talk to is drastically over-extended. We seem to be constantly asked to do more with less. That is just not sustainable...
- Still a bad climate for women in my college – seems better in other colleges?
- Searches that are not really open but re-ordained.
- Old boy leadership. Focus on motherhood rather than gender writ large.
- Lack of understanding of PTE/ unclear guidance/ lack of communication by the administrators with faculty on campus.
- Value systems that reflect gender bias at all levels – and, admittedly, this is not just an NDSU problem. It is cultural and academic culture. I’d like to see a wider range of scholarly and academic tasks and skills valued more evenly (a la Boyer’s scholarship reconsidered).
- Still a good ol’ boys club and a complete lack of transparency in administration.
- Leadership above the college – both university and the state legislature. The business around the grant was disheartening, both because it happened, but also because it felt like upper administrators do not have our backs. Plus the continued sad state of, the lack of equality (or even legal protection) for the LGBT community.
- Being in a male-dominated profession, where some men still seem to feel women aren’t as capable as men.
- Living in ND is a political challenge for any woman. The number of women who approach me about climate issues is still huge. Ag is a terrible problem; it’s mostly ignored.
- In some ways it seems like it’s either getting worse or I’m just more aware of it. This last year has been a bad one in terms of blatant gender discrimination/hostility and benevolent sexism.
- Our students need to learn more about our nation’s history in relation to the First Americans, the American Indian. Students and faculty could benefit from workshops, presentations, etc. about the American Indian culture and worldview.
- The lack of women in senior (Provost, Deans) academic positions.
- The same few people are in positions that seek change and the alternate voices are not heard. NDSU is challenged by the homogeneity of the region and the strong incentives/desires to hire and promote couples.
- Generally less research support for non-STEM disciplines. FORWARD grants help to some extent. But university can help overcome this barrier. I am lucky to be working on STEM projects, so I qualify. Several other women faculty aren’t as lucky.

6. Are there any other comments you would like to share with us about the FORWARD grants and awards program?

STEM Sample

- Is it possible to increase the number of Leap Research Awards? Or making special category to increase funding support for small commodity groups?
- Thought there would have been more help for women as a whole. Seemed beneficial for a select few.
- The people who need the most training on diversity issues are the ones least likely to go and educate themselves. Stronger leadership is needed. (? Training programs incentivized/mandated by those in leadership positions).
- Thank you for your work – this is a truly Sisyphean battle and every little bit can have good outcomes!
- This has been an amazing program for me that has had several positive impacts on my career. Thank you!
- Love the FORWARD grants!
- Why do the Advocates/Allies get paid money? They don't do anything for the female faculty.
- The reviews that I received for my leap research grant (not awarded) did not seem to come from an expert in my area of research. The reviews had a tremendous negative impact on my self-esteem until I received very positive feedback from a colleague in my area. NDDSU FORWARD people should be more careful in this regard since they can hurt young researches more than help. Otherwise, I appreciate the work that NDSU FORWARD team does for our community.
- Given that I do not think the climate will have changed dramatically, I think it's important to give these awards, so that women can have a fighting chance... The more I realize the struggles with institutional climate change, the more I feel it is important to provide individuals with opportunities for success, because that is going to be the most immediate and effective way to help women on our campus succeed.
- Thank you for all the hard work! It has been wonderful to see the positive changes occurring with FORWARD.
- I greatly appreciate all the supports offered by the FORWARD program, and I thank everyone involved in managing this program, particularly Canan, who has been a great executive director of the program.
- I appreciate greatly the opportunities FORWARD has opened for female faculty. I still witness bullying of female faculty by male and female colleagues and Administrators. A strict anti-bullying policy is desperately needed.
- They have been helpful in raising awareness about barriers women faculty face.
- Transparency!
- Thanks to everyone involved for providing these opportunities to NDSU faculty!
- I am pleased to have it as an opportunity as it has awarded me time/funding to work towards tenure goals.
- I would like to very much thank you for providing this opportunity!
- I am still discouraged by the review process for the Leap Research grants. I sit as the only woman in my department to be turned down – not based on intellectual merit, but based on a belief that this research isn't science. The review panel needs some education!
- As a junior faculty member, I am particularly grateful for the existence of the FORWARD grant and awards in preparing me for applying for tenure and promotion.
- I really hope you are able to continue with internal funds after the grant is over. Course release grants are relatively inexpensive but have a huge effect on productivity.
- No, thank you. Good luck!

Non-STEM Sample

- Needs to be expanded beyond STEM related fields.
- I appreciate all the efforts of the FORWARD program. In addition to faculty support, I enjoy the speakers you bring!
- I really appreciate the speakers you've brought to campus. Thanks!
- People want a real change in climate, not just a lot of words thrown around to make it seem like climate has improved.
- Extremely valuable and reputable across campus.
- Thank you for the hard work!
- Thank you for the monetary and psychological support.
- Thank you for the grant! Hope to see the on-going support from the FORWARD years to come.
- Thank you for your support!
- Thank you!
- This grant and what I've accomplished have helped it feel more realistic that I can go up for promotion to full in 1 to 2 years.
- You are a wonderful asset to NDSU!
- Thank you for your support!
- Thanks!