

**Impacts of Receiving FORWARD Grants/Awards on NDSU Faculty  
by STEM Status  
Summer 2015**

**Executive Summary**

This report summarizes the impacts that receiving a FORWARD grant/award (i.e., Travel Awards, Course Release Awards, Leap Research Grants, Lab Renovation, Climate-Gender Research Grants, and Leadership Development Award) has on faculty members' careers and productivity. Data collection occurred from April 2015 until August 2015.

The 42 STEM faculty members surveyed associated the following accomplishments with receiving a FORWARD grant/award.

- 93 grants submitted
- 36 grants funded for a total of \$4,617,574
- 39 articles submitted to peer-reviewed journals
- 31 articles accepted for publication in peer reviewed journals
- 7 presentations at international conferences, 47 presentations at national conferences, and 24 presentations at regional conferences

The 35 Non-STEM faculty members surveyed associated the following accomplishments with receiving a FORWARD grant/award.

- 4 articles accepted for publication in a peer reviewed journal
- 14 presentations at national conferences and 2 presentations at regional conferences

Participants were also 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**

- 39 (92.9%) participants selected the Leap Research Grant
- 31 (73.8%) participants selected the Course Release Award
- 31 (73.8%) participants selected the Mentor Travel Grant

**Non-STEM Sample**

- 24 (68.6%) participants selected the Course Release Award
- 23 (65.7%) participants selected the Mentor Travel Grant
- 23 (65.7%) participants selected Leadership Development Award

### **Description of Full Sample**

Seventy-six women faculty members and one man faculty member completed the survey from an overall sample of 96 faculty members who have received at least one FORWARD grant or award. Thus, this survey has a response rate of 80.2%. Forty-two (54.5%) participants identified as being in STEM colleges and 35 (45.5%) from non-STEM colleges.

### **Description of the STEM Sample**

Of the 42 STEM faculty, 11 (26.2%) identified as assistant professors, 26 (61.9%) as associate professors, and 5 (11.9%) as full professors. All 42 (100.0%) STEM faculty identified as women.

In particular, 30 participants (71.4%) reported receiving a Mentor Travel Award, 18 (42.9%) received a Course Release Award, 19 (45.2%) received a Leap Research Grant, 16 (38.1%) received a Leap Lab Renovation Grant, 6 (14.3%) received a Climate-Gender Grant, and 3 (7.1%) received a Leadership Development Award.

Additionally, 15 (35.7%) participants reported receiving one FORWARD grant/award, 12 (28.6%) participants reported receiving two grants/awards, 7 (16.7%) participants reported receiving three FORWARD grants/awards, 7 (16.7%) participants reported receiving four grants/awards, and 1 (2.4%) participant reported receiving five FORWARD grants/awards.

### **Description of the Non-STEM Sample**

Of the 35 non-STEM faculty, 1 (2.9%) identified as an assistant professor of practice, 6 (17.1%) identified as assistant professors, 18 (51.4%) as associate professors, and 10 (28.6%) as full professors. Thirty-four (97.1 %) non-STEM faculty identified as women and 1 (2.9%) identified as a man.

In particular, 21 participants (60.0%) reported receiving a Mentor Travel Award, 3 (8.6%) received a Course Release Award, 1 (2.9%) received a Leap Research Grant, 1 (2.9%) received a Climate-Gender Grant, and 16 (45.7%) received a Leadership Development Award.

Additionally, 27 (77.1%) participants reported receiving one FORWARD grant/award and 8 (22.9%) 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 were 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. The below tables report the overall frequencies and at the bottom of each table is the overall mean, the mean for the STEM faculty, and mean for the non-STEM faculty.

**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	1	1.3	1.3
Disagree	8	10.4	11.7
Somewhat Disagree	3	3.9	15.6
Somewhat Agree	19	24.7	40.3
Agree	25	32.5	72.7
Strongly Agree	21	27.3	100.0
Total	77	100.0	

Overall Mean= 4.58 (SD= 1.29); For STEM faculty = 4.86; For non-STEM faculty = 4.26; significant difference at the  $p < .05$  level.

Non-STEM participants also provided the following comments about their decision to remain at NDSU:

- [Somewhat agree] I appreciate it, but reviewers on my promotion and tenure application didn't.
- [Disagree] But the grant did not cause this! Grant was very helpful.
- [Disagree] I am leaving NDSU this year. I have an NSF grant; I asked for a modest counteroffer and I was told, "No counter will be made; thank you for your service."

**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	1.3	1.4
Disagree	6	7.8	9.6
Somewhat Disagree	1	1.3	11.0
Somewhat Agree	16	20.8	32.9
Agree	21	27.3	61.6
Strongly Agree	28	36.4	100.0
Total	73	94.8	
NA+	3	3.9	
Total	77	100.0	

Overall mean= 4.84 (SD= 1.27); For STEM faculty = 5.18; For non-STEM faculty = 4.42; significant difference at the  $p < .05$  level.

+ Already tenured and promoted to full professor before receiving my FORWARD grant

STEM participants also provided the following comments about the PTE process:

- [Somewhat agree] Only in terms of increasing my productivity so I could accomplish more than other faculty.

Non-STEM participants also provided the following comments about the PTE process:

- [Disagree] It was barely acknowledged.
- [No response] No impact.

**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
Strongly Disagree	1	1.3	1.3
Disagree	5	6.5	8.0
Somewhat Disagree	7	9.1	17.3
Somewhat Agree	23	29.9	48.0
Agree	27	35.1	84.0
Strongly Agree	12	15.6	100.0
Missing Data	2	2.6	
Total	77	100.0	

Overall Mean= 4.41 (SD= 1.15); For STEM faculty = 4.18; For non-STEM faculty = 4.68; no significant STEM status difference.

Non-STEM participants also provided the following comments about developing leadership skills:

- [No response] Somewhere else, unfortunately.

**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	5.2	5.3
Disagree	4	5.2	10.5
Somewhat Disagree	6	7.8	18.4
Somewhat Agree	17	22.1	40.8
Agree	26	33.8	75.0
Strongly Agree	19	24.7	100.0
Missing Data	1	1.3	
Total	77	100.0	

Overall Mean= 4.50 (SD= 1.37); For STEM faculty = 4.67; For non-STEM faculty = 4.29; no significant STEM status difference.

Non-STEM participants also provided the following comments on the NDSU campus climate:

- [No response] Yes, though my recent experience with NDSU has been very negative.

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

	Frequency	Percent	Cumulative Percent
Strongly Disagree	3	3.9	11.5
Disagree	2	2.6	19.2
Somewhat Disagree	7	9.1	46.2
Somewhat Agree	9	11.7	80.8
Agree	3	3.9	92.3
Strongly Agree	2	2.6	100.0
NA+	49	63.6	
Missing Data	2	2.6	
Total	77	100.0	

Overall Mean= 3.50 (SD= 1.36); For STEM faculty = 3.67; For non-STEM faculty = 3.13; no significant STEM status difference.

+ Came to NDSU prior to the FORWARD program and grants existence

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

- [NA] Didn't know about FORWARD when accepted position at NDSU.
- [No response] Neither agree nor disagree.

Non-STEM participants also provided the following comments on the impact the FORWARD grants/awards had on their decision to come to NDSU:

- [NA] Did not know about it until arrived.
- [No response] No.

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

	Frequency	Percent	Cumulative Percent
Strongly Disagree	1	1.3	1.4
Disagree	5	6.5	8.1
Somewhat Disagree	5	6.5	14.9
Somewhat Agree	24	31.2	47.3
Agree	20	26.0	74.3
Strongly Agree	16	20.8	95.9
Don't know	3	3.9	100.0
Missing Data	3	3.9	
Total	77	100.0	

Overall Mean= 4.58 (SD= 1.28); For STEM faculty = 4.79; For non-STEM faculty = 4.31; no significant STEM status difference.

STEM participants also provided the following comments on their departmental colleague's perception of FORWARD award/grant(s) they received:

- [Somewhat agree] However, the FORWARD grants are not counted as grants by the department. The reason is that it's supposed that every woman can get any FORWARD grant with a little or no competition.
- [Somewhat disagree] Men faculty perceive it as an "easy" grant to obtain.

Non-STEM participants also provided the following comments on their departmental colleague's perception of FORWARD award/grant(s) they received:

- [Somewhat agree] I don't know that my colleagues were aware of the grant...
- [Somewhat agree] Most weren't aware.
- [Disagree] No one has ever mentioned this as a positive. I think it's just expected that the women will participate.
- [Disagree] The emphasis has been on external research grants.
- [No response] I do not think my colleagues knew about my FORWARD award.
- [No response] Don't think they knew.
- [No response] Don't know - doesn't go on annual report.

## Mentor Travel Awards

### STEM Sample

The 30 STEM participants who received a mentor travel award reported that the below accomplishments were associated with receiving a FORWARD Mentor Travel Award:

- 3 (10.0%) participants presented at regional conferences
- 16 (53.3%) participants presented at national conferences
- 10 (33.3%) participants made progress on a research article
- 6 (20.0%) participants made progress on a grant proposal
- 24 (80.0%) participants met with collaborators
- 21 (70.0%) participants networked with other professionals
- 22 (73.3%) participants received mentorship that helped with career development and advancement
  - On average, these participants met with 1.63 (SD = 0.66) mentors
  - 8 (26.7%) participants met with a graduate school advisor
  - 7 (23.3%) participants met with a mentor for the first time

STEM participants provided the following additional outcomes they associated with receiving a Mentor Travel Award:

- Started a new collaboration.
- Met with a collaborator who is a leader in the field.
- It helped me establish overseas-professorship.

### Non-STEM Sample

The 21 non-STEM participants who received a mentor travel award reported that the below accomplishments were associated with receiving a FORWARD Mentor Travel Award:

- 2 (9.5%) participants presented at regional conferences
- 12 (57.1%) participants presented at national conferences
- 11 (52.4%) participants made progress on a research article
- 4 (19.0%) participants made progress on a grant proposal
- 13 (61.9%) participants met with collaborators
- 9 (42.9%) participants networked with other professionals
- 17 (81.0%) participants received mentorship that helped with career development and advancement
  - On average, these participants met with 2.40 (SD = 1.24) mentors
  - 11 (52.4%) participants met with a graduate school advisor
  - 8 (38.1%) participants met with a mentor for the first time

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

- Brought a mentor to NDSU to speak.
- Published three articles (refereed, in journals).

## **Course Release Awards**

### **STEM Sample**

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

- 10 (55.6%) participants began a new research project
- 16 (88.9%) participants submitted at least one peer-reviewed article
  - On average, these participants submitted 2.69 (SD = 1.65) articles
  - Overall, these participants submitted a total of 35 articles
- 12 (66.7%) participants submitted at least one peer-reviewed article and had that article accepted
  - On average, these participants had 2.70 (SD = 1.34) articles accepted
  - Overall, these participants had 27 articles accepted
- 9 (50.0%) participants began writing a new grant proposal
- 10 (55.6%) participants submitted at least one grant proposal to a funding agency
  - On average, these participants submitted 3.29 (SD = 2.98) grants proposals
  - Overall, these participants submitted a total of 23 grant proposals
- 4 (22.2%) participants submitted a grant proposal and had that proposal funded
  - On average, these participants had 2.00 (SD = 1.41) grants funded
  - Overall, these participants had a total of eight grants funded, totaling \$599,253
- 5 (27.8%) participants presented at a regional conference
- 10 (55.6%) participants presented at a national conference
- 4 (22.2%) participants earned tenure
- 3 (16.7%) participants earned promotion from assistant to associate professor

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

- Organized a national conference.
- Organized symposium.
- Was able to begin managing a grant that funding was awarded for during the semester I had the course release. Otherwise I would have really struggled with having the time to get the project up and running.

### **Non-STEM Sample**

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

- 1 (33.3%) participants began a new research project
- 1 (33.3%) participants submitted at least one peer-reviewed article and had that article accepted
  - This participant had one article accepted
- 2 (66.7%) participants presented at a national conference

## **Leap Research Grants**

### **STEM Sample**

The 19 STEM participants who received a leap research grant reported that the below accomplishments were associated with receiving a FORWARD Leap Research Grant:

- 15 (78.9%) participants wrote a new grant proposal
- 14 (73.7%) participants submitted a new grant proposal
  - On average, these participants submitted 3.14 (SD = 3.92) grant proposals
  - Overall, participants submitted a total of 44 grant proposals
- 5 (26.3%) participants had a grant proposal funded
  - On average, these participants had 2.20 (SD = 1.30) grants funded
  - Overall, these participants had a total of 11 grants funded, totaling \$ 1,848,071
- 12 (63.2%) participants presented at a regional conference
- 12 (63.2%) participants presented at a national conference
- 7 (36.8%) participants presented at an international conference
- 9 (47.4%) participants earned tenure
- 7 (36.8%) participants earned promotion from assistant to associate professor
- 1 (3.3%) participant earned promotion from associate to full professor

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

- Invited to present research at other universities.
- How would I know [if my earning tenure was related to the grant]? It helped, but I don't know what would have happened otherwise.

### **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

## **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 Research Grant:

- 6 (37.5%) participants wrote a new grant proposal
- 7 (43.8%) participants submitted a new grant proposal
  - On average, these participants submitted 4.33 (SD = 4.41) grant proposals
  - Overall, participants submitted a total of 26 grant proposals
- 4 (25.0%) participants had a grant proposal funded
  - On average, these participants had 4.25 (SD = 4.27) grants funded
  - Overall, these participants had a total of 17 grants funded, totaling \$2,170,250
- 2 (12.5%) participants presented at a regional conference
- 6 (37.5%) participants presented at a national conference
- 3 (18.8%) participants earned tenure
- 2 (12.5%) participants earned promotion from assistant to associate professor

STEM participants provided the following additional outcomes they associated with receiving a Leap Lab Grant:

- Had facility space to conduct research. Can't prove that this led to statements above [listed outcome] but it enhanced our efficiency and safety.

- Lab renovation is not complete.
- The room was converted back to common equipment. I did not benefit from it.

### **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:

- 4 (66.7%) participants submitted one peer-reviewed article
- 4 (66.7%) participants submitted one peer-reviewed article and had that article accepted
- 2 (33.3%) participants presented at a regional conference
- 3 (50.0%) participants presented at a national conference
- 1 (16.7%) participant earned tenure
- 1 (16.7%) participants learned about the value of interdisciplinary research

#### **Non-STEM Sample**

The one non-STEM participants who received a climate-gender grant reported that the below accomplishment was associated with receiving a FORWARD Climate-Gender Grant:

- 1 (100.0%) participants experienced increased acceptance by their colleagues for gender-climate related research

### **Leadership Development Award**

#### **STEM Sample**

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

- 3 (100.0%) participants networked with other professionals
- 2 (66.7%) participants were able to identify skills that will help them be competitive for leadership positions at NDSU
- 3 (100.0%) participants acquired new skills that would help them be competitive for leadership positions at NDSU

A STEM participant also provided this additional outcome she associated with receiving a Leadership Development Award:

- Able to complement some of the ideas in my current leadership role.

#### **Non-STEM Sample**

The 16 non-STEM participants who received a leadership development award reported that the below accomplishments were associated with receiving a FORWARD Leadership Development Award:

- 15 (93.8%) participants networked with other professionals
- 14 (87.5%) participants were able to identify skills that will help them be competitive for leadership positions at NDSU
- 10 (62.5%) participants acquired new skills that would help them be competitive for leadership positions at NDSU
- 5 (31.3%) participants acquired a new leadership position at NDSU
- 4 (25.0%) participants acquired a new leadership position within a professional association
- 2 (12.5%) participants presented research at a national conference due to their involvement with leadership training



Non- STEM participants provided the following additional outcomes they associated with receiving a Leadership Development Award:

- Attended a leadership conference.
- Helped me identify additional ways to engage in leadership beyond competitive leadership positions on campus.
- Performing more effectively in the leadership positions I had. Considering applying for a future opening.
- I was already in a new leadership position, but the skills I learned at the training were helpful in this position.

### **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**

- 39 (92.9%) participants selected the Leap Research Grant
- 31 (73.8%) participants selected the Course Release Award
- 31 (73.8%) participants selected the Mentor Travel Grant
- 14 (33.3%) participants selected Leadership Development Award
- 9 (21.4%) participants selected the Leap Lab Renovation Grant
- 0 (0%) participants selected the Climate-Gender Research Grant

A STEM participant also provided the following comment about future funding of the FORWARD grants:

- [Course Release Award] For faculty with large teaching load.

#### **Non-STEM Sample**

- 24 (68.6%) participants selected the Course Release Award
- 23 (65.7%) participants selected the Mentor Travel Grant
- 23 (65.7%) participants selected Leadership Development Award
- 18 (51.4%) participants selected the Leap Research Grant
- 4 (11.4%) participants selected the Climate-Gender Research Grant
- 2 (5.7%) participants selected the Leap Lab Renovation Grant

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

- [Leap Lab Renovation Grant]: I haven't needed a lab or lab renovation but I believe these have been really helpful to the women who received them. As I recall, there were very few funded because of the large expense, however.
- [No response] I can't speak to this unfortunately...though it would appear that any time or meetings that focus on how to get published is of primary concern at NDSU.

### **Qualitative Feedback on the FORWARD Grant/Award Programs and Climate Issues**

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

#### **STEM Sample**

- Finding an appropriate replacement that I trusted to teach my course.
- Difficulty in recruiting PhD students.
- Two primary challenges were: 1) It was very difficult to hire personnel with relevant experience and qualifications. Factors included institutional policies, location, and timing of the grants. 2) Withdrawal of facility support after acceptance of funding.

- Inadequate access to departmental equipment. High cost of access to equipment in other departments. Attitude of other faculty. That cannot be changed by funding/FORWARD however.
- Working with facilities was difficult for the lab renovation plans and prices changed, materials got lost, and the process was slow. The lab is nearing completion now, but there have been several frustrating moments.
- The room was converted back to common equipment. I did not benefit from it.
- Building collapse.
- One semester isn't long enough!
- Short timeline on research grant; restrictions on travel award.
- Limited time of LEAP grant. You really have to be ready to hit the ground running the very second you get notification.
- Many research projects cannot be realized in one year and require several years of research. One challenge is to have sufficient funds to continue the research project after the end of the grant.
- My department (senior faculty) is pretty apathetic to FORWARD and it's hard to convey its value to them.
- My leap research grant (submitted during my year two at NDSU) came back with very negative reviews. It was clear that it was not sent to people in my field. That caused a lot of anxiety and loss of self-confidence. Since then I received two NSF grants, which demonstrates that my ideas were not as bad as the reviewers suggested.
- I didn't really have any. I've not been able to use all I learned yet due to teaching, new staff, uninterested staff. But now everyone has a year of experience so I can step away from some day to day tasks this summer and use the knowledge gained which should lead to actualization or more.
- None really. If there is an opportunity for more funds, that would be great!
- Nothing particular.
- None.
- None.
- None.
- None.
- None.
- None.
- None.
- None.
- None.
- None.
- None.
- None.
- None.
- No.
- No.
- N/A.

#### Non-STEM Sample

- Covering classes for the time of the award.
- Never enough time to meet with my mentor/collaborator.
- Lack of funding sources.
- I had to shift my research goals because of the unexpected funding of a major grant.
- Having to rely on participation by human subjects – recruitment has been a challenge.

- Lack of support from dean.
- Major illness, though I was able to reboot and go afterward.
- I am in the College of Business. Most of the grants/awards are not available/applicable to the research that falls in the business areas. For example, I once applied for the Leap Research Grant and got rejected. The rejection reason is my research is not STEM.
- No barriers or challenges.
- None. Outstanding opportunity.
- None.
- None.
- None.
- None.
- None.
- N/A.
- N/A.
- N/A.

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

STEM Sample

- Successfully obtaining extramural grant funding.
- The extramural funding climate is very hard. Despite receiving internal funds and submitting many extramural grants, I have not been awarded any large external grants (only a few small ones).
- I am too busy being a research technician/research specialist because my staff do not have skills they should have, nor passion in the crop. Thus, I'm making up for their lack and not writing. I love writing and am fairly good at it, but there just aren't enough hours in the day. (My staff are male – I fear being perceived as a witch if I stand up to them like my male colleagues would – they would have faced them by now.)
- Little has changed. Seems like administrator is still the good ole boy guard, hiring a few female assistants that they can control. Felt isolated and that any award that I received was discounted. On the outside looking in but not included.
- Toxic work environment (gossip manipulation, etc.), unfriendly co-workers, incompetent technicians, lack of spousal accommodation, poor leadership, culture of silence.
- In addition to the previously mentioned factors, a covert, implicit bias against “stereotypes” (international/woman STEM scientists), which is not unique to NDSU. Based on recurrent personal experience, the most specific patterns were: 1) lack of trust towards the “stereotype” both in terms of acknowledging technical expertise and professionalism/integrity, 2) differential levels of support for “stereotype” and “non-stereotype” individuals, 3) differential expectations of behavior and treatment “stereotypes” should tolerate (e.g., lack of performance or bullying by coworkers/students while “non-stereotype” do not).
- Other women faculty working against me.
- I have had to meet a higher standard/accomplish much more than my male colleagues that have received tenure with, or before me.
- Typical challenges of balancing work and personal life.
- Having to teach, doing research, and being a mom of two kids! There is never enough time to prepare the courses as well as I would like, enough time to do all the experiments and projects I would like to do in research, and never enough time spent with my kids – it is a constant struggle!

- Most barriers are related to personal life and difficulty not having family in town. Raising small children, husband with progressive condition that is becoming disabling, and eldercare for father in neighboring state, followed by handling his estate.
- I had good support from the department when I had my three children before tenure and promotion. The challenges I had were also common among female faculty mothers that balancing work and family was tough. I was lucky to have strong family support as well.
- None...except childcare for female faculty. There should be preference for female faculty with children for admittance into the daycare facility at NDSU. This seems to be the biggest hurdle for female faculty.
- Tenure: no barriers. Full professor: early promotion is not looked upon as positive.
- None – my own confidence.
- Nothing particular.
- None for me.
- None.
- None.
- None.
- None.
- None.
- None.
- No.
- No.
- N/A.

#### Non-STEM Sample

- Our Ph.D. program doesn't seem to be doing well. We get few applications and I have not had a Ph.D. student to mentor yet.
- Lack of support from dean.
- Lack of resources to support research both within the college as well as university.
- Department and college PTE committees applying criterion that do not exist in the PTE documents.
- Time. Very unclear expectations for promotion to full and a sense that department politics will play a large role (negative role) when I do go up. Being a woman who doesn't fit gender role norms is not a positive at NDSU.
- Appropriate mentorship at NDSU. New administrators not becoming familiar with department and college guidelines. Department politics. All-male PTE department committee.
- Male colleague threatening me with not getting tenure because he didn't like my work. Negative attitudes of members of PTE committee. Unclear directions for assembling the dossier.
- Guidance in product writing and publication would be extremely beneficial. I signed up for a 14-day writing challenge through an organization – this type of coaching and support would be very beneficial if offered as a service to faculty at NDSU.
- Far too many responsibilities and expectations that aren't valued at all in promotion and tenure process.
- Balancing time demands.
- Too much work to do – not enough time to do it, despite being quite hardworking.
- Heaving teaching load; small department so all must share heavy service load.
- Being from a small department means that everyone is expected to assume a large role in committees that are necessary for departmental functioning because there are fewer people amongst which to divide the workload.
- Too many committee responsibilities and too much teaching responsibility.

- Over serviced! Messages about the “right” kind of service when I worked on primarily diversity initiatives even though I was involved in more service than my colleagues. My own time management without a local mentor on campus.
- Times issues – service requirements, teaching requirements, leave little time for research. Life/work balance is a joke.
- Too many leadership and service expectations, few research supports.
- Obtaining tenure after acquiring a leadership position was very difficult in that 75% of my allocated effort was administrative leaving very little time to research.
- Leadership responsibilities make it harder to engage in research.
- I’m not sure colleagues (in my department) have much understanding for my family position, and view it as taking away from my professional work, but this perception is skewed and incorrect.
- Challenges = having to use reduced-pay research leave to have “parental leave.” Heavy service load.
- Death of spouse and family members shifted my focus temporarily.
- Having a baby prior to tenure and length of waitlist at NDSU daycare.
- None.
- N/A.

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

- Meet other female faculty, develop professional relationships on campus.
- Networking with other women on campus through several events.
- My colleagues think twice before they could pass any comments/opinions. I definitely feel that each woman faculty has a strong pillar of support from “FORWARD”.
- The program really helped to feel supported, here at NDSU as a woman faculty.
- The grant and reviewers comments helped me gain confidence – in myself and that research was significant and that it could contribute to understanding the disease.
- The opportunity for professional development (Travel Grant) and studies supported Leap Research Grant, Lab Renovation, and Course Release led to publications and research proposals. All these activities boosted my confidence in my career.
- The travel grant has allowed me to visit another campus, guest speak in class, and talk about NDSU with administrators. The mentorship I received about PTE and well-being has been invaluable. I feel very fortunate to have these opportunities.
- I had only one federal grant. FORWARD leap-grant helped me to establish a new research area, which was an important factor towards my tenure.
- A good training in writing my first proposal! It’s great to be supported 😊.
- The leap lab research grant allowed me to keep my lab running in the one year I had a funding gap between various external grants. The leap renovation grant allowed me to remodel general space to create workable lab and accommodate a centrifuge. The course release grant allowed me critical time off for teaching to accomplish research.
- The renovated lab has allowed for extra space for equipment and students.
- It was very positive to have a break from the same routine (i.e., having a break from teaching the same class at the same time very year.)
- I appreciated the recognition from colleagues in receiving the award, and I enjoy seeing the research of other women bolstered by the award.
- Not able to attribute anything else.
- No.

- No.
- No.
- No.
- N/A.
- N/A.

#### Non-STEM Sample

- Meeting female faculty from many disciplines was a benefit.
- Making connections to faculty and staff in other departments/colleges.
- It put me in touch with inspiring women and has helped me in my teaching, service, and scholarly work. It has given me contacts who are interested in similar areas that I am.
- Networked with women faculty on campus.
- Meeting other women on campus.
- Opportunity to network and dialog, not just with my mentor, but with other key colleagues in my research areas.
- Support of other FORWARD individuals.
- It helped me feel valued on campus. Women were often invisible at NDSU. FORWARD and the grant programs have helped to increase visibility and recognition of capabilities.
- Greater job satisfaction. Enhanced self-confidence when beginning/assuming new leadership roles due to having had some related preparation or training.
- A sense of confidence and progress. ☺
- Learned so much, became more confident.
- Credit toward tenure.
- The leadership training I went to a) helped broaden my knowledge of issues in higher education and b) increased my confidence in applying for administrative positions – interacting with a search firm was very informative.
- Nothing additional.
- No.
- N/A.
- N/A.

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

##### STEM Sample

- ‘FORWARD’ has created a positive impact at NDSU. This should continue, so that new coming women faculty would definitely benefit. The ‘FORWARD’ empowers each and every woman faculty here at NDSU.
- There is more discussion about issues that matter, which is an improvement from ignorance and silence.
- At least we are talking about it. However – bullying continues – not always male on female but female on female – female or male.
- Increased awareness of climate issues.
- More awareness of climate in most areas – some still with head buried.
- There is a recognition and active action to prevent gender bias and discrimination. The fact that the dialogue about such issues is happening is a positive sign.
- People are more aware of women’s rights and their specific needs.
- People are more aware of gender and diversity issues on campus.
- More awareness of gender issues.
- Great reduction in explicit bias.
- I think we are more diverse.

- There are improved numbers, but there are still a lot of climate issues – I feel them more now than ever.
- Not sure – but given what I know about the statistics of male/female faculty, I am very sure there is an improvement. The very presence of more female faculty at all levels sends a very strong positive message.
- There are many more women faculty in STEM now, due to this grant (FORWARD), so it's made a big difference.
- Female faculty numbers are rising in STEM, and women are holding more leadership positions.
- Increased promotion of women in leadership positions on campus.
- More women faculty have taken on leadership roles.
- See above (#12: [I appreciated the recognition from colleagues in receiving the award, and I enjoy seeing the research of other women bolstered by the award.]). Many more female junior colleagues, several women now tenured and heading toward full professor, and many women receiving national grants. More women in administrative positions.
- Maternity leave policy now is in place for faculty members.
- It is helpful to have more male colleagues who openly identify as allies.
- Faculty at NDSU, at least in my school, value each other immensely – female or male. There is an excellent climate at NDSU.
- My department has always been very supportive.
- I arrived when the program was already established.
- I don't know.
- Haven't seen any in my area – hopefully others have.
- None, only been here two years.
- N/A.

#### Non-STEM Sample

- At least we talk about it!
- Better networking with people with similar interests. More awareness of climate issues.
- There seems to be an awareness of the gender issues.
- Greater awareness of gender inequity and more conversations about gender inequity.
- More acceptance of women faculty.
- Gender sensitivity, greater sensitivity to diversity in general.
- Conversation around unconscious bias has changed/grown. Some women have moved into leadership.
- Little bit more female faculty friendly environment.
- Beginning to look more friendly towards women and families. Still a long way to go in developing that culture.
- Women in leadership, women participating fully in university.
- More women chairs/heads. More women sticking around.
- We are seeing more female leadership. I'm curious as to whether that will help of if they'll tow the normative line instead of making changes.
- Hiring Provost Ingram was a wonderful step. Hiring an ombudsperson was positive.
- Fewer "secret" appointments to leadership/administrative positions, more searches for positions that were previously just given to someone.
- Pockets of improvement – have seen some women advance on campus, some implementation of work/life balance policies.
- Far better policies for parental leave, for modified duties. More women in leadership.

- Greater emphasis on creating policies to support family leave. Creative solutions like allowing dual career couples to split course reductions when baby is born (instead of just mom staying home). More women in prominent administrative positions.
- Child care leave policy.
- I think there have definitely been improvements across my 18 years here. However, I think there were more opportunities for those in STEM areas than in the Humanities.
- Slowly, some of the “worst offenders” are retiring.
- The climate in my area has remained good.
- No improvement (unfortunately). I have just accepted the way things are on this campus...I come to work and do my job. I stay at NDSU because I have family living in the state...that is the only reason I stay.
- None – the old white boys’ network has just gone underground; it has not gone away, so any changes are superficial. The people pulling the strings are the same as before. In fact it has gotten worse because any women promoted got there “only because of FORWARD” (a quote from a colleague) and not because she is deserving.
- N/A.

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

STEM Sample

- There is still much to do in terms of gender bias within departments. Wage gaps and salaries still seem to be part of the problem.
- I’m worried about the push to move to more research and how that affects the progress we’ve made when some in administration think we’ve “solved” all the problems.
- I don’t feel that there has been any real changes to the climate, or that it has reached the people who need it most – i.e., the people who are creating and maintaining a hostile climate for women and minorities at NDSU.
- There are still many faculty colleagues and students who are discriminating towards women. Although FORWARD program increased awareness of these issues and improved the conditions for women, we still have a long way to go.
- Lack of effective females in high leadership positions. Lack of female mentors.
- People who are willing to accept FORWARD movement are making progress; however, people who are resistant have not changed much.
- I still wish more individuals were on board with the goals of FORWARD on campus.
- Unrealistic in my thought that if you show them the unfairness, they would try to correct.
- Perhaps it has changed, but I rarely, if ever, attend due to teaching and research conflicts, but in early years WISMET (Women in Science, Mathematics, Engineering, and Technology) seemed more like a complaining session than a group trying to share talents, the ability to do equal work, etc.
- Continued issues with implicit bias, but that Allies/Advocates program addresses this.
- I have appreciated the male allies on campus, and the program that supports and educates allies. I’m still wishing to run into senior administrators who are loudly vocal about diversity on campus. Those men may exist, but I haven’t met them yet, although I appreciate the quiet supporters.
- The biggest challenge to keeping faculty is the lack of administrative support for research and research infrastructure.
- In addition to point 11 above [I have had to meet a higher standard/accomplish much more than my male colleagues that have received tenure with, or before me], I feel that the expectations are not consistent across colleges/departments. Also, policy is misquoted/misinterpreted, leading to different expectations for different faculty even within a department.



- While it is clear that NDSU wants to stay competitive at a national level, implementing the cultural changes and renegotiating priorities to achieve this outcome seems to be a major stumbling block.
- I hope that departments should more appreciate work based on FORWARD. I think that it's a unique program and NDSU faculty have to be proud of having this program available, even if they aren't involved in it.
- People are as negative about outspoken people and people that are different as they were ever before. Support to women applies only to married women and women with kids. ADVANCE/FORWARD is much better at advancing themselves and each other than unaffiliated women.
- Lots. I think there are still many structural barriers. I also think FORWARD itself needs to reflect on its own role in the climate, because it does not always want to address or look at how it has participated in the negative climate. FORWARD has done a lot of great work, but I fear it is not as grassroots as it used to be and does not like to engage in diverse solutions and work well with other groups on campus. I worry that will impact the longevity of its work.
- Thinking about equality – opportunities for ALL faculty (men and women) should be a consideration; while I recognize – and tremendously appreciate – the opportunities FORWARD has provided, bias is inherently a part of award opportunities and this is something negatively perceived with potential unintended consequences.
- Teaching toward the end of a pregnancy can be very challenging both physically and emotionally, or coming back to teaching shortly after delivery. I was fortunate to be released from teaching when my babies were due in the middle of a semester. But some colleagues in other departments were not as fortunate. It is also not good to the students to switch instructors in the middle of a semester or having everything condensed into fewer weeks. It would be good to make it a policy that if having baby due during the semester, the mom should be released from teaching entirely. I have heard some universities do that. The FORWARD Program or the university could cover the costs needed to hire an adjunct, lecturer, or graduate student to cover the classes. The mom should not be required to make up for the class later.
- Faculty assume other faculty have the same political and religious views as them. I am very frustrated with the anti-Republican and anti-conservative Christian comments my peers and administrators routinely make.
- I believe my department may be better than most – women are very much appreciated and opinions are strongly valued.
- I am completely comfortable here.
- None personally.
- None.
- None.
- None.
- N/A.

#### Non-STEM Sample

- There is still much to be done.
- I still hear anecdotes from time to time about climate problems, so there is still work to do.
- Many departments are horrible places to be.
- Less passive-aggressiveness would be nice, but it is generally collegial.
- The culture here feels impossible – not open to change, rigid, obnoxiously homogeneous, not transparent, top-down, resistant to everything in general, insider-outsider narrative, staff/faculty chasm, politically rigid.

- Female faculty are not valued on this campus. I know of two female associate professors (both tenured) who are leaving NDSU at the end of this semester due to the climate regarding women on this campus. This is not a sign of progress.
- At least four accomplished female faculty (two of them already tenured, one with an NSF grant!) have left NDSU due to climate problems in their departments that AHSS dean was unwilling or unable to address. In one case, the dean did not even make a counter-offer. This really made me wonder about the college and NDSU's commitment to supporting/advancing female faculty.
- The climate at the micro and meso level has not really changed. It's still a boy's club. It's almost more frustrating now because FORWARD was supposed to help and it seems like the bias is just more covert. I do not believe NDSU is serious about retaining female faculty when male deans and chairs decide not to make counteroffers. I was told by my chair the reason I did not receive a counteroffer is because my dean said I am "smug" and "difficult". Those EXACT words were used.
- Old boys network still exists. Women colleagues in other colleges (agriculture) still experience barriers to participating in FORWARD events and programs. I have serious concerns about the Vice President for Equity, Diversity, and Global Outreach as she has contributed to women faculty leaving NDSU.
- Old boy's network still exists and women going for promotion to professor are viewed as a threat and actively undercut by those who wish to retain their hold on power. A related phenomenon is the selection of a few "right answer" women to promote into sub-leadership roles. Also, the only women of color who was a VP was recently demoted.
- Lack of women in leadership positions in my college. Lack of diversity.
- No clear route to deal with problems. Raising the problems with higher level leaders (deans and up) is likely to backfire – I've seen and experienced this. Also, the level of benevolent sexism is quite high.
- Chairs/heads need better training and more accountability for their work. I fear FORWARD initiatives will be continued in a top-down manner, similar to other structures on campus.
- I have been told by a previous NDSU administrator (who is still at NDSU) that he has had former male colleagues come to him and complain of being bullied by female faculty members. I don't believe this truly is bullying but rather these male colleagues (and this particular male administrator) are merely unhappy that their apple cart has been upset.
- The same as the climate everywhere – which is not what I would hope. It is our society in general – and NDSU needs to ADVANCE FORWARD and have male faculty/administrators in full support of female faculty – not in words but in practice.
- See above – nothing has really changed. When push comes to shove, the same people still win.
- Women in my program seem to carry the load, for the most part. Many of the men literally do not even come to work. They contribute almost nothing to the program and hitchhike on publications.
- Women's service loads.
- I fear that in some situations we've seen unanticipated consequences (e.g., positions may be "open" but information networks discourage applications so the desired candidate is hired.)
- Most of the awards/grants are focused on women in STEM. This is extremely important for NDSU, but non-STEM fields or areas that do STEM-type work but the college is not classified under STEM has relatively no support.
- There is a hierarchy of research types: 1st experimental, 2nd quantitative, 3rd qualitative. That is another form of discrimination. I found it insulting to have my historical research called "pseudo-science," but I understand where it is coming from.
- Too much focus on research and self-promotion with a striking de-emphasis on teaching – to the point that extremely high teaching scores get very little recognition in the PTE process.

- None in relationship to gender. If the university wants its tenure-track faculty to be more successful, provide writing groups and online writing support and coaching would be helpful. Matching productive researchers with new investigators would also be helpful.
- Lack of gender diversity on PTE committees.
- Need ongoing reinforcement of positive changes made.
- None.
- N/A.

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

#### STEM Sample

- These grants are critical.
- The FORWARD grants are invaluable help when female faculty are expected to outperform male colleagues for the same job.
- Please keep the grants. It would be nice to have them prioritized for STEM women faculty.
- Increase the number of recipients of Leap Research Grant (less money per project). Help more faculty.
- I would like more special/guest lectures from the teaching experts. This year 2014-2015 workshops and lecture series were excellent and fruitful.
- It's hard to get a contact with FORWARD administration. The e-mails are answered (if answered at all) in several days and usually it's not an answer, but the contact information of someone else; but this one also does not answer ☺.
- Good idea on paper but that's about all that I've experienced.
- FORWARD is a phenomenal program. I truly believe it has helped create systematic change at NDSU.
- It is a great program with "worked" well because of the great faculty who have implemented the program at NDSU.
- Great programs! Hope the university keeps supporting these.
- They have been very helpful to me, and I am very grateful for the support.
- Excellent program and your efforts are very much appreciated!
- I think it has been a good program for brining awareness and opportunities to our campus.
- Thank you!
- Thank you very much!
- Thanks for all your efforts!
- Thank you for all that you do! It makes a positive difference.
- Thank you so much for the work you do with FORWARD. It helps a lot of people.
- I appreciate your efforts. You make a difference. Please take care to ensure that the feedback from the grant do not hurt "new" and "young" female faculty.

#### Non-STEM Sample

- Keep focusing on women's advancement at NDSU. We need all the help we can get! I hope it continue and expands – perhaps mandatory training for all faculty on relevant issues...?
- I am a professor in communications – a social-science discipline. I am not sure whether FORWARD actually covers social-science or not – that stopped me from applying for more FORWARD grants.
- Make the program more inclusive to other women faculty as well. FORWARD has done a fantastic job! I've appreciated everything FORWARD has done for me.
- I also valued the mid-career mentorship opportunity to have colleagues review materials for promotion.

- We need to work on birth control coverage and remember that woman does not equal mother.
- I'm concerned that FORWARD is/perceived as elitist.
- Thank you!
- Thank you!
- Thank you!
- Thanks for the support!
- Thanks for all your efforts!
- Thank you! My career has been strongly supported by FORWARD program.
- Thank you so much for the work you do with FORWARD. It helps a lot of people.
- Thank you for delving into this effort to improve the climate for women at NDSU.
- No. Thank you for all that you are doing.