

NDSU Advance FORWARD

Advancing Faculty to Move NDSU Forward

FORWARD Grants Information Session

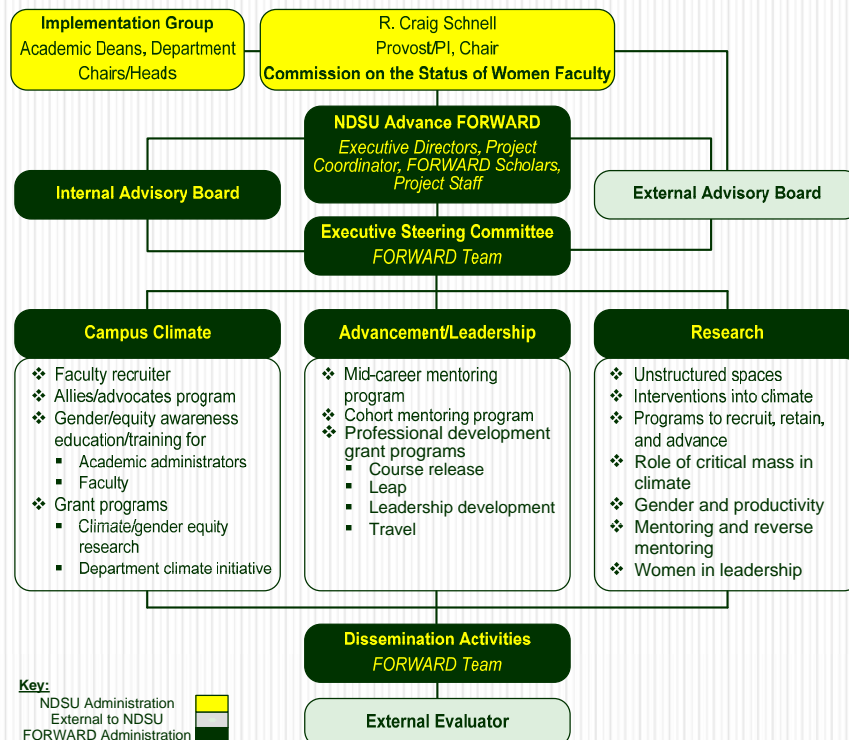
NSF ADVANCE Institutional Transformation Program

- ❖ Funding for comprehensive and sustainable institutional transformation to “increase the representation and advancement of women in academic science, technology, engineering and mathematics (STEM) careers, thereby contributing to the development of a more diverse science and engineering workforce.”

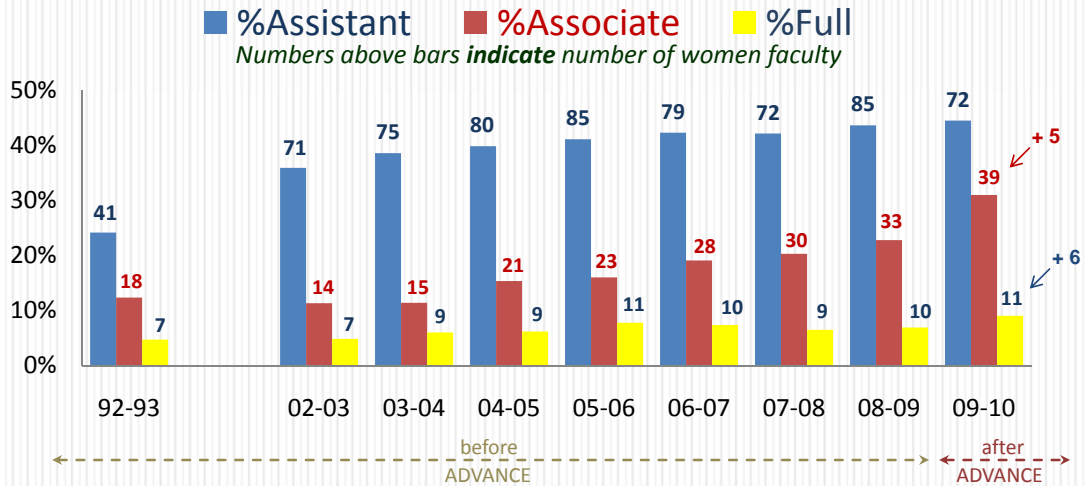
Advance FORWARD Goals

- ❖ **Improve the climate** across the campus
- ❖ Enhance recruitment
- ❖ **Increase retention**
- ❖ **Promote/advance** women associate professors and hire women at advanced rank to build a critical mass of senior women
- ❖ Open faculty leadership opportunities

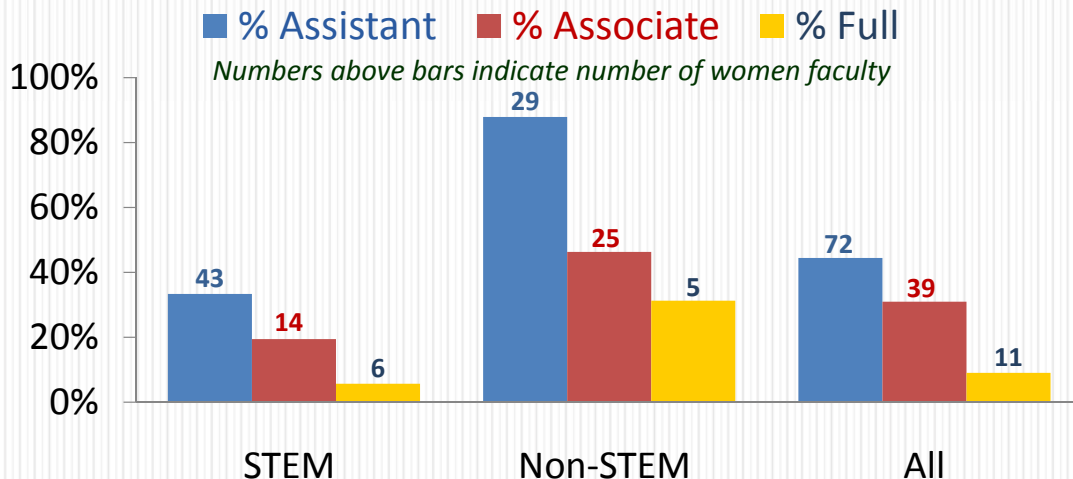
Major Project Components



Percentage of NDSU Women at Rank



Percentage of NDSU Women at Rank 2009-2010



Grant Programs

- ❖ **Course Release** – November 1, 2010
- ❖ **Mentor Relationship Travel** – January 15, 2011
- ❖ **Leadership Development** – February 15, 2011
- ❖ **Leap Lab Renovation** – March 4, 2011
- ❖ **Climate and Gender Research** – March 30, 2011
- ❖ **Leap Research** – April 29, 2011
- ❖ **Mentoring Programs** – *ongoing*

Mentor Relationship Travel Grant

- ❖ Provides funds for meeting with mentors from outside NDSU to build long-term professional mentoring relationships.
- ❖ Eligibility: Tenure-track, tenured women faculty
 - ✓ Assistant, Associate, and not-yet-tenured Professor ranks
- ❖ **Application Deadline: January 15, 2011**

Mentor Relationship Travel Grant: BUDGET

- ❖ **Budget cap: \$1,500 per application**
- ❖ Allowable budget items:
 - ✓ Travel costs associated with meeting your mentor.
 - ✓ Travel costs associated with bringing your mentor to NDSU.

Mentor Relationship Travel Grant: APPLICATION FORMAT

- ❖ **Mentor Relationship Travel Grant cover sheet**
 - ✓ Explain the nature of the anticipated mentoring relationship and how it relates to your advancement and career goals at NDSU.
 - ✓ Email to ndsu.forward@ndsu.edu
 - ✓ Subject line: "Mentor Relationship Travel Grant"
 - ✓ Make sure to cc your chair/head and dean.

Mentor Relationship Travel Grant: REVIEW CRITERIA

- ❖ Nature and richness of expected mentoring relationship.
- ❖ Potential for a positive impact on the successful promotion and/or tenure of the applicant.
- ❖ Overall quality of the application.

Mentor Relationship Travel Grant: OBLIGATIONS

- ❖ **Participate** in program assessment.
- ❖ **Acknowledge** support from the NDSU ADVANCE FORWARD program sponsored by the National Science Foundation, *HRD-0811239*.

Mentor Relationship Travel Grant: AWARDEES

- ❖ Carol A. Archbold, *Criminal Justice and Political Science*
- ❖ Tracy Barrett, *History*
- ❖ Kristen Benson, *Child Development and Family Science*
- ❖ Peggy Biga, *Biological Sciences*
- ❖ Ann Braaten, *Apparel, Design, & Hospitality Management*
- ❖ Sarah Browning, *Criminal Justice and Political Science*
- ❖ Kasey Carlin, *Animal Sciences*
- ❖ Hyunsook Do, *Computer Science*
- ❖ Stevie Famulari, *Architecture and Landscape Architecture*
- ❖ Lingling Fan, *Electrical and Computer Engineering*
- ❖ Victoria J. Gelling, *Coatings and Polymeric Materials*
- ❖ Erin Gillam, *Biological Sciences*
- ❖ Wendy Gordon, *Psychology*
- ❖ Anna Grazul-Bilska, *Animal Sciences*
- ❖ Kendra Greenlee, *Biological Sciences*
- ❖ Kristi Groberg, *Art*
- ❖ Kimberly Vess Halbur, *Pharmacy*
- ❖ Harlene Hatterman-Valenti, *Plant Sciences*
- ❖ Angela Hodge, *Mathematics, School of education*
- ❖ Xinhau Jia, *Agricultural and Biosystems Engineering*
- ❖ Wei Jin, *Computer Science*
- ❖ Sumathy Krishnan, *Mechanical Engineering*
- ❖ Jae Ha Lee, *Apparel, Design, & Hospitality Management*
- ❖ Juan Li, *Computer Science*
- ❖ Siew Hoon Lim, *Agribusiness and Applied Economics*
- ❖ Miriam Mara, *English*
- ❖ Carol Pearson, *Modern Languages*
- ❖ Carrie Anne Platt, *Communication*

Mentor Relationship Travel Grant: AWARDEES

- ❖ Deirdre Prischmann-Voldseth, *Entomology*
- ❖ Birgit Pruess, *Veterinary and Microbiological Sciences*
- ❖ Katie Reindl, *Biological Sciences*
- ❖ Yeong Rhee, *Health, Nutrition and Exercise Science*
- ❖ Joy Sather-Wagstaff, *Sociology/Anthropology*
- ❖ Kelly Sassi, *English*
- ❖ Jane Schuh, *Veterinary and Microbiological Sciences*
- ❖ Senay Simsek, *Plant Sciences*
- ❖ Sherri Stastny, *Health, Nutrition and Exercise Science*
- ❖ Amy Taggart, *English*
- ❖ Annie Tangpong, *Mechanical Engineering*
- ❖ Verena Theile, *English*
- ❖ Rullin Tian, *Management, Marketing and Finance*
- ❖ Cindy Urness, *Architecture and Landscape Architecture*
- ❖ Kim Vonnahme, *Animal Sciences*
- ❖ Courtney Waid, *Criminal Justice and Political Science*
- ❖ Yechun Wang, *Mechanical Engineering*
- ❖ Anita Welch, *School of Education*
- ❖ Kara Wolfe, *Apparel, Design, & Hospitality Management*
- ❖ Rebecca Woods, *Child Development and Family Science*
- ❖ Jun Zhang, *Industrial and Manufacturing Engineering*
- ❖ Qi Zhang, *Plant Sciences*

Leadership Development Grant

- ❖ Provides funds for attending a national leadership training program.
 - ❖ The goal is to help promote the advancement of women faculty and open leadership opportunities.
- ❖ Eligibility: Open to **tenured** women faculty.
- ❖ **Application Deadline: February 15, 2011**

Leadership Development Grant: BUDGET

- ❖ **Budget Cap: \$10,000 per application**
- ❖ Allowable budget items:
 - ✓ Costs associated with attending a leadership development event.
 - ✓ Costs associated with bringing a professional leadership trainer to NDSU.

Leadership Development Grant: APPLICATION FORMAT

- ❖ Leadership Development Grant cover sheet
 - ✓ Explain what you hope to gain and how it relates to your advancement and career goals at NDSU.
 - ✓ Email to ndsuforward@ndsuforward.edu
 - ✓ Subject line: "Leadership Development Grant"
 - ✓ Make sure to cc your chair/head and dean.

Leadership Development Grant: AWARDEES



Karen Froelich
Management and Marketing



Judy C. Pearson
Communication



Marion Harris
Entomology

- ✓ Leadership Programs Panel/Luncheon
 - ✓ **November 18, 11:30**, sign up on FORWARD website
 - ✓ <http://www.ndsu.edu/forward/>

Course Release Grant

- ❖ Provides funds for one-semester release from teaching responsibilities.
 - ❖ The goal is to help promote the advancement (tenure and promotion) of tenure-line women faculty in STEM disciplines.
- ❖ Eligibility: Open to **tenure-track** or **tenured** women faculty in **STEM disciplines**.
 - ✓ See NSF STEM list
- ❖ **Application Deadline: November 1, 2010** (Fall 2011/Spring 2012)

Course Release Grant: STEM DISCIPLINES

- ❖ Classification as STEM can be ambiguous; therefore the onus is on the applicant to clearly describe how her discipline is categorized as STEM.
- ❖ The National Science Foundation's classification of STEM degree programs can be found at <http://www.nsf.gov> and serves as a guide as to which disciplines fall under STEM by NSF standards.
<http://www.nsf.gov/statistics/nsf08321/pdf/nsf08321.pdf>

Course Release Grant: BUDGET

- ❖ **Budget cap: Cost of teaching replacement for the applicant**
- ❖ Priority will be given to
 - ✓ Assistant professors
 - ✓ Associate professors

Course Release Grant: PRIORITY

- ❖ Priority will be given to Assistant Professors who have recently received a third year review.
- ❖ Associate Professors will be given priority status if two years past their promotion from Assistant Professor to Associate Professor and have at least two years before they intend to apply for promotion to Professor.
- ❖ Priority will also be given to those who were hired at Associate Professor rank and have at least two years before they intend to apply for promotion to Professor.

Course Release Grant: APPLICATION FORMAT

- ❖ Advance FORWARD Course Release Grant cover sheet
 - ✓ Explain need for Course Release funding and how it relates to advancement and career goals at NDSU.

- ❖ Vita – two pages; additional pages for funding activity

Course Release Grant: APPLICATION FORMAT

- ❖ Letter of support from department chair/head
 - ✓ Explain how the requested funds will be used to offset costs of teaching replacement for the applicant.

- ❖ Evaluations of progress toward promotion and/or tenure
 - ✓ A copy of the most recent department level review and a copy of the most recent college level review if available.
 - ✓ If an applicant has not had a review, then one should be requested from the department chair /head to include in the application.

Course Release Grant: APPLICATION SUBMISSION

- ✓ Email application materials—**saved as a single pdf file** – to ndsuforward@ndsuh.edu
- ✓ Subject line: “Course Release Application”
- ✓ Make sure to cc your chair/head and dean

Course Release Grant: REVIEW PROCESS

- ❖ Applications will be screened for compliance.
- ❖ An NDSU internal review committee will evaluate the compliant applications and make the award decisions.
- ❖ Special care will be taken to prevent conflicts of interest.
- ❖ Reviewer evaluation form is posted.

Course Release Grant: OBLIGATIONS

- ❖ **Submit** manuscript(s) to peer reviewed journal(s).
- ❖ **Participate** in program assessment.
- ❖ **Acknowledge** support from the NDSU ADVANCE FORWARD program sponsored by the National Science Foundation, *HRD-0811239*.

Course Release Grant: AWARDEES

- ❖ **Maria Alfonseca-Cubero**, *Mathematics*
- ❖ **Peggy Biga**, *Biological Sciences*
- ❖ **Lingling Fan**, *Electrical and Computer Engineering*
- ❖ **Chris Kelland Friesen**, *Psychology*
- ❖ **Victoria J. Gelling**, *Coatings and Polymeric Materials*
- ❖ **Wendy Gordon**, *Psychology*
- ❖ **Kendra Greenlee**, *Biological Sciences*
- ❖ **Mila Kryjevskaia**, *Physics*
- ❖ **Lisa Montplaisir**, *Biological Sciences, School of Education*
- ❖ **Cristina Popovici**, *Mathematics*
- ❖ **Jane Schuh**, *Veterinary and Microbiological Sciences*

Leap Research Grant

- ❖ The Leap Grant provides research grants to seed successful grant proposals.
 - ❖ The goal is to help promote the advancement (tenure and promotion) of tenure-track and tenured women faculty in STEM disciplines.
- ❖ Eligibility: Open to **tenure-track** or **tenured** women faculty in **STEM disciplines**.
 - ✓ See NSF STEM list
- ❖ **Proposal Deadline: April 29, 2011**

Leap Research Grant: STEM DISCIPLINES

- ❖ Classification as STEM can be ambiguous; therefore the onus is on the applicant to clearly describe how her discipline is categorized as STEM.
- ❖ The National Science Foundation's classification of STEM degree programs can be found at <http://www.nsf.gov> and serves as a guide as to which disciplines fall under STEM by NSF standards.
<http://www.nsf.gov/statistics/nsf08321/pdf/nsf08321.pdf>

Leap Research Grant: BUDGET

- ❖ **Budget cap: \$30,000 per proposal**
- ❖ **Allowable budget items:** Salary; budget fringe at NDSU level, equipment, supplies, travel, and publication costs. **Direct costs only** (no overhead).
- ❖ Priority will be given to
 - ✓ Assistant professors
 - ✓ Associate professors

Leap Research Grant: PRIORITY

- ❖ Priority will be given to Assistant Professors who have recently received a third year review.
- ❖ Associate Professors will be given priority status if two years past their promotion from Assistant Professor to Associate Professor and have at least two years before they intend to apply for promotion to Professor.
- ❖ Priority will also be given to those who were hired at Associate Professor rank and have at least two years before they intend to apply for promotion to Professor.

Leap Research Grant: PROPOSAL FORMAT – Part 1

Saved as one PDF file:

- ❖ Advance FORWARD Leap Grant cover sheet
 - ✓ Explain need for Leap funding and how it relates to your advancement and career goals at NDSU.
 - ✓ Discuss future funding and dissemination plans
- ❖ Project Description – three pages
- ❖ Budget with justification; use NDSU budget form
- ❖ References cited
- ❖ Vita – two pages; additional pages for funding activity

Leap Research Grant: PROPOSAL FORMAT – Part 2

Saved as one PDF file:

- ❖ Evaluations of progress toward promotion and/or tenure
 - ✓ A copy of the most recent department level review and a copy of the most recent college level review if available.
 - ✓ If an applicant has not had a review, then one should be requested from the department chair /head to include in the application.

Leap Research Grant: PROPOSAL SUBMISSION

- ✓ Email **two** PDF files to ndsuforward@ndsuforward.edu
- ✓ Subject line: "Leap Research Grant Application"
- ✓ Make sure to cc your chair/head and dean

Leap Research Grant: REVIEW PROCESS

- ❖ Proposals will be reviewed by external reviewers from other universities.
- ❖ The final decisions for awards will be made by an internal review committee.
- ❖ Reviewer evaluation forms are posted on the FORWARD web site.

Leap Research Grant: EXTERNAL REVIEW CRITERIA

- ❖ Scientific and intellectual merit
- ❖ Clarity and feasibility of objectives
- ❖ Qualifications of the PI
- ❖ Potential for enhancing grantsmanship and increasing journal publication of the PI
- ❖ Overall proposal quality

Leap Research Grant: INTERNAL REVIEW CRITERIA

- ❖ Priority status
- ❖ Potential for positive impact on achievement of career goals and successful promotion and/or tenure of the PI
- ❖ Evaluation of the external reviewers' feedback
- ❖ Soundness of the budget justification
- ❖ Overall quality of the proposal

Leap Research Grant: OBLIGATIONS

- ❖ **Submit** manuscript(s) to peer reviewed journal(s).
- ❖ **Submit** a research proposal to a funding agency within 12 months of the end of Leap Grant award.
- ❖ **Participate** in program assessment.
- ❖ **Acknowledge** support from the NDSU ADVANCE FORWARD program sponsored by the National Science Foundation, *HRD-0811239*.

Leap Research Grant: AWARDEES



Victoria J. Gelling
Coatings and Polymeric Materials



Wenfang Sun
Chemistry and Molecular
Biology



Kasey Maddock Carlin
Animal Sciences

Leap Research Grants: AWARDEES



Carrie Hammer
Animal Sciences



Senay Simsek
Plant Sciences



Erin Gillam
Biological Sciences

Leap Research Grant: AWARDEES



Birgit Pruess
Veterinary and
Microbiological Sciences



Annie Tangpong
Mechanical Engineering
and Applied Mechanics

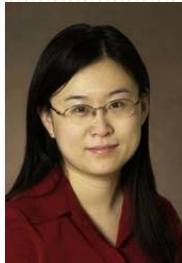


Lisa Montplaisir
Biological Sciences,
School of Education

Leap Research Grant: AWARDEES



Catherine Logue
Veterinary and
Microbiological Sciences



Yechun Wang
Mechanical Engineering
and Applied Mechanics



Linda Langley
Psychology



Kimberly Vonnahme
Animal Sciences

Leap Lab Renovation Grant

- ❖ Provides funds to improve lab infrastructure to advance research programs.
- ❖ Eligibility: Open to **tenure-track** or **tenured** women faculty in **STEM disciplines**.
 - ✓ See NSF STEM list
- ❖ **Proposal Deadline: March 4, 2011**

Leap Lab Renovation Grant: BUDGET

- ❖ **Budget cap**
 - ✓ Total funds available for the program: **\$100,000**
 - ✓ Expect to fund 1-5 applications

- ❖ **Allowable budget items:** Funds are available for lab renovation only, **not for equipment or instrumentation.**

- ❖ Priority will be given to
 - ✓ Assistant professors
 - ✓ Associate professors

Leap Lab Renovation Grant: PROPOSAL FORMAT

- ❖ Advance FORWARD Leap Lab Renovation Grant cover sheet
 - ✓ Explain need for Lab Renovation funding and how it relates to your advancement and career goals at NDSU.
 - ✓ Discuss future funding plans

- ❖ Project Description – three pages

- ❖ Copies of renovation estimates

- ❖ Vita – two pages; additional pages for funding activity

Leap Lab Renovation Grant: PROPOSAL SUBMISSION

- ✓ Email one PDF file to ndsu.forward@ndsu.edu
- ✓ Subject line: “Leap Lab Renovation Grant Application”
- ✓ Make sure to cc your department chair/head and dean

Leap Lab Renovation Grant: REVIEW PROCESS

- ❖ Proposals will be reviewed by external reviewers from other universities.
- ❖ The final decisions for awards will be made by an internal review committee.
- ❖ Reviewer evaluation forms are posted on the FORWARD web site.

Leap Lab Renovation Grants: AWARDEES

“Veterinary and Microbiological Sciences”



Birgit Pruess
Principal Investigator



Penelope Gibbs



Margaret Khaita



Jane Schuh

Leap Lab Renovation Grant: AWARDEES

“Chemistry and Molecular Biology”

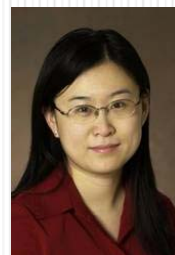


Sangita Sinha

“Mechanical Engineering and Applied Mechanics”



Annie Tangpong



Yechun Wang

Climate and Gender Research Grant

- ❖ To engage the university in research on gender, develop interdisciplinary research teams.
- ❖ Demonstrate the value of research on gender and the academy.
- ❖ Advance understanding of gender in the academia, especially in STEM, and is expected to be separate from FORWARD related programs.

Climate and Gender Research Grant

- ❖ Eligibility:
 - ✓ Open to **tenure-track** or **tenured** faculty (**women & men**) in **ALL disciplines**.
 - ✓ Open to **all interdisciplinary research teams** composed of tenure-track or tenured faculty.
- ❖ **Proposal Deadline: March 30, 2011**

Climate and Gender Research Grant: BUDGET

- ❖ **Budget cap: \$10,000 per proposal**
- ❖ **Allowable budget items:** Salary; budget fringe at NDSU level, equipment, supplies, travel, and publication costs. **Direct costs only** (no overhead).

Climate and Gender Research Grant: PROPOSAL FORMAT

- ❖ Advance FORWARD Climate and Gender Grant cover sheet
- ❖ Project description – five pages
- ❖ References cited
- ❖ Vita – two pages

Climate and Gender Research Grant: PROPOSAL FORMAT

- ❖ Budget with justification
 - ✓ One page
 - ✓ Itemize, describe, and justify each budget item.
 - ✓ Use the NDSU budget form

- ❖ List funding agency and program to which you will submit a proposal. Include target date for submission(s) and estimated budget amount.

Climate and Gender Research Grant: REVIEW PROCESS

- ❖ Proposals will be reviewed by external reviewers from other universities.

- ❖ The final decisions for awards will be made by an internal review committee.

- ❖ Reviewer evaluation forms are posted on the FORWARD web site.

Climate and Gender Research Grant: REVIEW CRITERIA

❖ Primary Criteria

- ✓ Intellectual merit and methodological rigor
- ✓ Clarity and feasibility of objectives
- ✓ Qualifications of the research team
- ✓ Interdisciplinary nature of the research team
- ✓ Potential for external funding and publications

❖ Secondary Criteria

- ✓ Soundness of the budget
- ✓ Quality of the proposal

Climate and Gender Research Grant: PROPOSAL SUBMISSION

- ✓ Email application materials—**saved as a single pdf file** – to nds.forward@nds.edu
- ✓ Subject line: “Climate/Gender Research”
- ✓ Make sure to cc your department chair/head and dean

Climate and Gender Research Grant: OBLIGATIONS

- ❖ **Submit** manuscript to peer reviewed journal.
- ❖ **Submit** a research proposal to a funding agency within 12 months.
- ❖ **Participate** in program assessment.
- ❖ **Acknowledge** support from the NDSU ADVANCE FORWARD program sponsored by the National Science Foundation, *HRD-0811239*.

Climate and Gender Research Grant: AWARDEES



Erika Offerdahl
Chemistry and Molecular Biology



Nathan Wood
School of Education

Assessing Toward Equity in STEM

Climate and Gender Research Grant: AWARDEES



Kathy Enger
School of Education



Achintya Bezbaruah
Civil Engineering

Motivation and Adaptability Factors for Females
in the "Leaky Engineering Pipeline"

Climate and Gender Research Grant: AWARDEES



Angela Hodge
Mathematics, School of Education



Christina Weber
Sociology

Gender Equity in Mathematics Classrooms:
What Does it Take to Succeed

Total Awarded to Date

- ❖ Travel, Course Release, Climate/Gender, Leadership, and Leap Research & Lab Renovation Awards
 - ✓ **68 STEM and non-STEM women** received at least one FORWARD award
 - ✓ **Total: \$630,000**

Advancement/Leadership: Mentoring Programs

- ❖ Mid-career Mentoring Program
 - ❖ Funds to create peer, mixed-gender, mid-career mentoring teams, that will meet informally once a month.
 - ❖ Includes twice-yearly formal meetings with academic administrators.
 - ❖ Applications taken on an on-going basis.
- ✓ Promotion to full-professor luncheon series
 - ✓ **October 12, 11:30**, sign up on FORWARD website
 - ✓ <http://www.ndsu.edu/forward/>

Department Gender Equity Award

“Biological Sciences”

- ❖ Award given to an academic department that makes the greatest effort in supporting and advancing gender equity.
- ❖ The department showed improvement in one or more of the following five areas:
 - ❖ Improved Climate
 - ❖ Enhanced Recruitment
 - ❖ Increased Retention
 - ❖ Promotion and Advancement of Women
 - ❖ Creation of Leadership Opportunities

Questions?

Canan Bilen-Green— *Industrial & Manufacturing Engineering*

Elizabeth Birmingham— *English*

Ann Burnett— *Women and Gender Studies*

Kalpana Katti— *Civil Engineering*

Christine McGeorge— *Child Development & Family Science*

Julie Nash— *Coordinator*

Donald Schwert— *Center for Science & Math Education*

Charlene Wolf-Hall— *Veterinary and Microbiological Sciences*