FINAL REPORT

IDEAL

Institutions Developing Excellence in Academic Leadership

Case Western Reserve University — EST. 1826

IDEAL

FINAL REPORT

INSTITUTIONS DEVELOPING EXCELLENCE IN ACADEMIC LEADERSHIP (IDEAL) was a three-year NSF-*ADVANCE* PAID project to seed gender equity transformation at five regional public institutions of higher education in northern Ohio (Bowling Green State University, Cleveland State University, Kent State University, University of Akron, and University of Toledo) and continue the institutional transformation at Case Western Reserve University (CWRU).

The goal of this innovative partnership was to create an institutional learning community that is empowered to develop and leverage knowledge, skills, resources and networks to transform academic cultures and enhance equity and inclusion.

IDEAL adapted and disseminated the successful academic leadership development and institutional transformation methods developed by CWRU during its five-year NSF-*ADVANCE* Institutional Transformation initiative, Academic Careers in Engineering and Science (ACES).

OBJECTIVE 1

Create a regional learning community of academic leaders in northern Ohio that is informed about the factors responsible for the under representation of women and minority groups in academic S&E and committed to transforming institutional cultures in S&E disciplines.

Strategy: CWRU adapted its successful executive coaching program to create an annual leadership development program consisting of training sessions as well as team coaching. The leadership development program contained segments specifically addressing the institutional factors that slow women's advancement in S&E including unconscious and systemic factors that preferentially disfavor and accumulate disadvantage for underrepresented groups.

Implementation: The change leader teams have consisted of participants who are department chairs or faculty identified as emerging leaders within their institution. Half-day leadership development sessions were held bimonthly in each of the three years of the IDEAL project with the location of the sessions rotating among partner institutions. The three and a half-hour working session included skill training, peer group exchange, networking, and group cohesion. The leadership sessions provided instruction on topics such as "Defining the Work of Academic Leaders", "Lessons from the Institutional Transformation at CWRU", "Building Influential Alliances", "Leading for Change", and "Leadership Vision". Data regarding gender equity trends in academic S&E and literature on successful NSF-*ADVANCE* initiatives were also presented to inform participants about national issues and increase the participants' commitment to implement and sustain gender equity change at their universities.

OBJECTIVE 2

Develop a cohort of formal and informal S&E leaders at each partner institution to implement, adapt and sustain customized change initiatives on individual campuses.

Strategy: Change leader teams at each partner institution identified and implemented annual change projects. Each institution's change projects focused on directly impacting the S&E departments identified in their IDEAL project scope, as well as directly and indirectly impacting their larger university. The annual change projects cumulatively contributed to institutional transformation around an issue identified by the Co-Directors as important for gender equity-related S&E transformation at that university.

Implementation: The Institutional Transformation themes chosen by the co-director included recruitment, retention, advancement, climate improvement, and leadership development. While the annual change projects differed between teams who created stand alone projects for their year and those that built on the work of prior change teams, the implementation utilized similar tools such as data gathering and dissemination, raising awareness of obstacles and barriers for women, conducting workshops, external speakers and establishing or enhancing mentoring programs.

OBJECTIVE 3

Assemble the senior academic leadership of partner universities to disseminate best practices from NSF-ADVANCE institutions, exchange regional institutional research, policies and practices, and evaluate change initiatives.

Strategy: Annual IDEAL Plenary Conferences (September 2010 and 2011) were held to reinforce institutional commitment to gender equity change initiatives. Attended by national experts, senior administrators at the partner institutions, and the change leader teams, participants engaged in cross-university discussions about each institution's transformation efforts.

Implementation: The plenary conferences brought together Presidents, Provosts, Academic Deans, Diversity Officers, Co-Directors, change leader teams from all three years, and other key administrators from the six partner institutions. IDEAL's external advisory board members, the team coaches, and external evaluator also attended the proceedings.

In addition to presentations and posters from the six partner institutions, each plenary conference also featured a morning keynote address by a national expert (Brenda Manuel, Assistant Administrator for Diversity and Equal Opportunity from NASA and Margaret Tolbert, Senior Advisor, Office of Integrative Activities, National Science Foundation) and remarks from representatives of the Ohio Board of Regents (Eric D. Fingerhut, Chancellor and Stephanie Davidson, Vice Chancellor).

2011 IDEAL Plenary Conference

FINAL REPORT
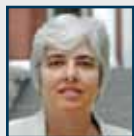
IDEAL

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BGSU®

Institutional Transformation Theme:

"Build intellectual community and collegiality around diversity and inclusion in science, technology, engineering and mathematics (STEM) designed to foster recruitment and retention of women students and faculty in STEM fields at BGSU." Change leaders were drawn from the eight departments in the College of Arts and Sciences: Biological Sciences, Chemistry, Geology, Geography, Environmental Health, Mathematics, Physics and Astronomy, and Computer Science, where all of the initiatives took place.

CHANGE PROJECTS DESCRIPTION

In year 1, the BGSU change team designed and conducted a faculty climate survey and focus groups to identify specific barriers to the hiring, retention and advancement to women in STEM. Change leaders raised awareness of potential barriers for women in STEM by arranging a campus visit by Bernice Sandler, godmother of Title IX, and working with faculty senate to promote woman friendly personnel policies.

In year 2, the team undertook extensive analyses of the climate survey, whose results showed that female faculty members were significantly more likely to report feeling isolated and that discriminatory attitudes were present at BGSU. Women also felt more stress than men related to scholarly productivity, securing research funding, and teaching and service responsibilities.

Engaged in a faculty driven, grass-roots campaign to raise awareness of equity issues among the STEM

Bowling Green State University year 2 change leaders and team coach.

faculty, the change leaders disseminated the survey results and solicited strategies for creating collegial interactions, such as a faculty writing club. To address hiring barriers the change leader team met with STEM search committees to discuss unconscious bias and best practices in diversity recruiting.

In year 3 the team developed climate survey result brochures, and surveyed department chairs about resources to support women and URM in STEM. Change leaders are developing the search committee training for use university-wide.

PROJECT ACTIVITIES

Search Committee Training

The year 2 change team conducted two training sessions for STEM faculty search committees in Fall 2010. To prepare for these sessions, the team reviewed various materials related to implicit bias and other challenges to fair recruiting and interviewing practices. The team prepared a PowerPoint presentation on these issues, and also developed handouts, including a suggested candidate evaluation tool.

Change leaders from BGSU, CSU, UA and UT at a leadership development breakout session.

1
YEAR ONE GOALS

- Identify specific barriers at BGSU.
- Develop strategies for creating opportunities for collegial interactions.

YEAR ONE ACTIVITIES

- Conducted climate survey and faculty focus groups, Spring 2010.
- Raised awareness of potential use of Title IX to increase diversity at BGSU.
- Campus visit by Bernice Sandler, May 4, 2010.
- Supported efforts of the Faculty Senate to promote change impacting women faculty.

2
YEAR TWO GOALS

- Increase community and collegiality around diversity and inclusion in STEM.
- Foster recruitment and retention of women students and faculty in STEM fields at BGSU.

YEAR TWO ACTIVITIES

- Met with nine S&E search committees to discuss subtle bias and best practices in diversity recruiting.
- Completed factor analysis of climate survey results.
- IDEAL BGSU website was created and linked.
- Proposed a writing club to support networking while promoting research productivity.

3
YEAR THREE GOALS

- Foster discussions about biases and barriers in STEM.
- Institutionalize activities to promote collegiality and support STEM faculty.
- Create climate survey.

YEAR THREE ACTIVITIES

- Updated IDEAL website and blog.
- Trained new search committees.
- Surveyed department chairs about resources to support women and URM in STEM.
- Initiate developing an NSF-*ADVANCE* IT proposal.

The College of Arts and Sciences, which has in the past taken the lead in professional development for department chairs, is committed to institutionalizing the search committee training sessions. The benefit of these sessions will extend beyond the science areas in the college. In the future, we will explore partnering with other colleges and the Office of Equity and Diversity to promote additional training in this area.

WEBSITE

A BGSU IDEAL website was created and resides within the Provost's Office web structure: www.bgsu.edu/offices/provost/ideal/index.html. This website includes extensive links to relevant news articles; the BGSU Climate Survey results, resources on faculty recruitment, retention, and promotion; work–life balance; diversity–related groups

within national STEM professional societies; readings; BGSU offices and services; and information about the IDEAL project and change team members.

Climate Survey

To gain a better understanding of the challenges facing women faculty in STEM areas, the year 1 IDEAL team initiated an online faculty climate survey that was conducted by Institutional Research in Spring 2010. The survey assessed the institutional climate for support of teaching, research and service, job satisfaction, and perceptions of the University environment. All full time faculty members at BGSU were asked to complete this 140-question survey. The overall response rate was 47% (51% women, 39% men). Detailed item-level results are available at the BGSU IDEAL website.

The year 2 IDEAL team analyzed the data through factor analysis to aid interpretation. Through this process, related items were combined into scales. Items which did not load onto any factor were retained as individual items. This process yielded 20 factors and 21 individual items. Details about the factors and the exact wording of items can be found on the IDEAL website.

A blog was set up to collect feedback, reactions, and suggestions from faculty in response to the climate survey results and serves to identify more clearly the causes of dissatisfaction and to develop actionable responses. The climate survey will be repeated during 2012-2013. It is hoped that conducting the survey every three years will be supported by the administration as part of its initiative to diversify the faculty.

Writing Club

The team has proposed the creation of writing clubs to provide a mechanism by which faculty can increase their

"Before IDEAL, I never had conversations on these topics on campus."
—A female change leader

BGSU IDEAL website.

research productivity while also interacting positively with colleagues.

Retention of STEM faculty, especially women and under-represented minorities, should be a high priority for the University and the College of Arts and Sciences. The 2009-10 BGSU Faculty Climate Survey revealed that STEM faculty tend to be less satisfied with their relationship with colleagues, and that female STEM faculty, in particular, feel scholarly productivity to be a significant cause of stress. Providing a formal opportunity for faculty to increase their research productivity while promoting collegial interactions should pay off in increased rates of tenure and improved faculty morale as well as higher metrics for scholarship and external funding.

PROJECT ACCOMPLISHMENTS

The reanalysis of the BGSU Climate Survey has allowed us to uncover several significant differences between women and men at BGSU. The presentation of these results to the BGSU faculty will help to raise the profile of women's equity in STEM, and the resulting discussions should help us clarify the causes of these differences and seek actionable responses.

- The faculty-to-faculty, discussion-centered format of the search committee training sessions proved to be an effective mode for engaging STEM faculty and will be institutionalized.
- Developing the website and blog has provided online resources for STEM faculty that have not existed in the past.

It is hoped that the writers' club proposal will be implemented and provide a new support structure for faculty productivity and community-building.

Bowling Green State University year 2 team members presenting at the plenary.

The Vice President for Research and Economic Development is providing support for the development of an NSF-*ADVANCE* IT grant proposal to continue the work initiated by the IDEAL teams.

KEY ACCOMPLISHMENTS

The BGSU Climate Survey factor analysis results showed that female faculty members were significantly more likely to report feeling isolated and that discriminatory attitudes are present at BGSU. Women also felt more stress than men related to scholarly productivity, securing research funding, and teaching and service responsibilities. Sharing these results with faculty at BGSU raised awareness of women's equity issues in STEM and generated discussion that allowed us to identify the causes of inequity and propose solutions.

CASE WESTERN RESERVE
UNIVERSITY — EST. 1826

Institutional Transformation Theme

"Enhancing Collegiality and Inclusion in S&E". Change leaders were drawn from a different school/college during each year of the project, and addressed specific needs of their school that contributed to advancing the overall transformation theme. The participating schools were the College of Arts and Sciences (CAS) in year 1, Case School of Engineering (CSE) and the Weatherhead School of Management (WSOM) in year 2, and the School of Medicine (SOM) in year 3.

IDEAL DEPARTMENTS COVERED BY THE ANNUAL CHANGE PROJECT

All science departments in the College of Arts and Sciences (*Anthropology, Astronomy, Biology, Chemistry, Geological Sciences, Mathematics, Physics, Political Science, Psychology, Sociology, & Statistics*), all departments in the Case School of Engineering, five departments in the Weatherhead School of Management (*Economics, Information Systems, Marketing & Policy Studies, Operations, & Organizational Behavior*) and the Basic Science departments of the School of Medicine.

INSTITUTIONAL TRANSFORMATION VISION

The vision for this effort is to improve faculty climate by enhancing collegiality and inclusion via a grass roots movement where all faculty are given the opportunity to contribute recommendations for the process and to benefit from resources arising from implementation of the resulting recommendations.

Advisory Board member Abigail Stewart and change leaders Anurag Gupta, GQ Zhang and Erin Lavik.

CHANGE PROJECTS DESCRIPTION

In year 1, change leaders identified faculty development needs by career stage at CAS by convening faculty caucuses by rank and administering a follow-up survey based on the caucus discussions. From these results they proposed promising practices and worked with the dean to develop a feasible and effective plan.

In year 2, change leaders designed a launch committee to support and integrate new faculty hires at CSE and give them a head start in establishing their research program during their first year. The project defined goals, expectations, and composition (an advocate, a department member, and department chair) of the launch committee, as well as the expectation for new faculty to transition to a more typical mentoring committee after one year. Also in this year, change leaders conducted

and evaluated a pilot mentoring program for new junior faculty (under three years) at WSOM by crafting shared expectations and goals for mentors and mentees. A report summarizing the experience recommended institutional mechanisms for a sustainable faculty mentoring program to be administered and supervised by an associate dean.

In year 3, change leaders conducted discussion groups of tenured faculty at SOM to solicit recommendation for climate improvement activities in response to data from the 2011 CWRU faculty climate survey. Four themes emerged (research sustainability, faculty engagement and recognition, promoting collaborative research, and promoting the careers of women faculty) and are being discussed with key SOM governance committees and department chairs for feedback and refinement prior to presentation to the dean.

1

YEAR ONE GOALS

- Identify faculty development needs by career stage in the College of Arts & Sciences (CAS).
- Recommend sustainable mechanisms to the dean.

YEAR ONE ACTIVITIES

- Convened CAS faculty caucuses (by rank) and administered survey based on caucus results.
- Convened STEM department chairs for feedback on caucus results.
- Developed best practices and worked with the Dean to develop a feasible and effective plan.

2

YEAR TWO GOALS

- Conduct a pilot mentoring program for new junior faculty (under three years) in Weatherhead School of Management (WSOM).
- Design a Launch Committee to establish new faculty at the Case School of Engineering (CSE).

YEAR TWO ACTIVITIES (WSOM)

- Created and shared expectations and goals.
- Designed/implemented mentoring program.
- Determined steps to institutionalize mentoring.

YEAR TWO ACTIVITIES (CSE)

- Defined goals, expectations and committee structure (advocate, department member and chair).
- Established assessments performed by committee.
- Piloted committee with four faculty members.

3

YEAR THREE GOALS

- Build participation and support for the development of institutional mechanisms for climate improvement and increased recognition.
- Generate a report to identify the needs, opportunities and strategies.
- Propose recommendations for institutional mechanisms to dean.

YEAR THREE ACTIVITIES

- Conducted faculty discussions to solicit suggestions for the improvement of the climate.
- Consolidated comments into a report shared with stakeholders.
- Developed implementations suggestions.
- Presented report and suggestions to the dean.
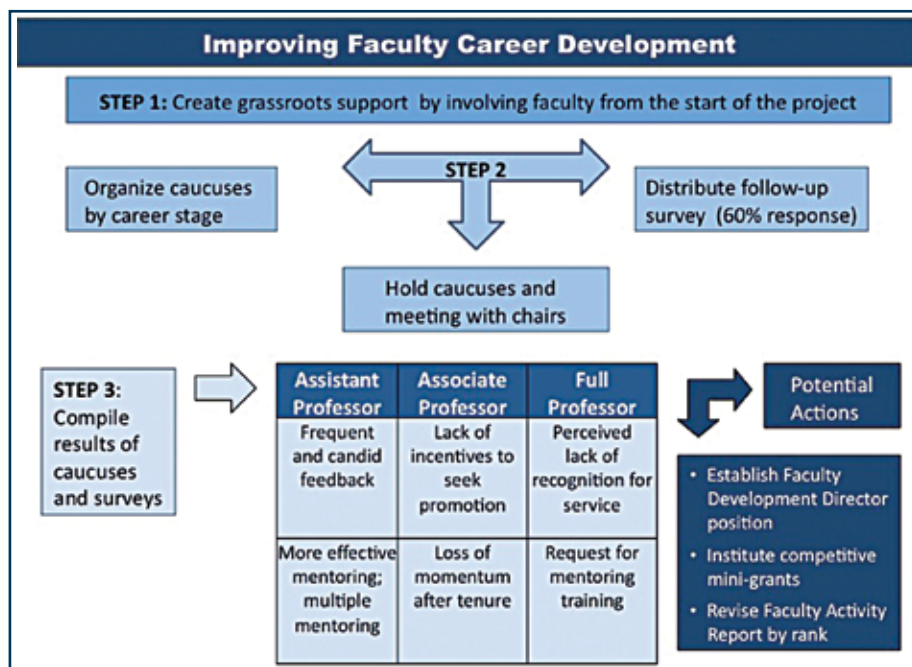
COLLEGE OF ARTS AND SCIENCES

CHANGE PROJECT DESCRIPTION

The College of Arts and Science (CAS) change project sought to increase attention on faculty career development by identifying needs, opportunities and best practices by career stage (pre-tenure and post-promotion faculty) and establish institutionalized mechanisms for addressing those needs in the IDEAL departments of CAS.

All faculty in science departments in CAS were invited to one of three caucuses according to their rank to discuss what actions could most effectively improve the climate, and build a strategy for effecting and sustaining those actions. After caucus results were compiled, a meeting was held with the department chairs of science departments to report on the broad themes of the three previous caucuses, and, to get feedback from the chairs concerning their main issues. Subsequent to that meeting, all science faculty were sent a survey to further refine the information and define priorities.

GOALS

- Identify faculty development needs by career stage in the College of Arts & Sciences.
- Recommend sustainable mechanisms for addressing those needs.

ACTIVITIES

- Convened faculty (by rank) and department chair caucuses in CAS.
- Administered survey based on caucus results to CAS faculty.
- Developed best practices and worked with the dean to develop a feasible and effective plan.
- Released recommendations to the faculty.

RECOMMENDATIONS

- Create a new position of Faculty Development Director for CAS.
- Broaden participation among faculty in key roles within the College and the University.

- Customize faculty activity reports to reflect expectations at different career stages.
- Institute a system of competitive mini-grant programs.
- Improve and increase mentoring program and training.

KEY ACCOMPLISHMENT

Three caucuses were held, one for each of the tenure track or tenured levels of faculty. At each caucus, two or three themes, as planned by the IDEAL team, were proposed for discussion as starting points, and the subsequent discussion was guided by the interests of the participating faculty. A verbal report on the caucuses was given to the chairs of the participating departments and the chairs' feedback was also solicited. Following the chairs meeting, a survey was prepared, guided by the results of these caucuses, and sent to all faculty in the participating departments. The results of this survey are available on the IDEAL website. Approximately 60% of the faculty polled responded to the survey. The IDEAL team held a meeting with the Dean of the College to learn of his concerns with faculty development and climate, and to report to him on the results of the caucuses and survey.

The project established that issues and needs of the three groups are quite distinct and that the pre-tenure faculty members desire for good mentors was mirrored by the tenured faculty members' desire for mentor training.

CASE SCHOOL OF ENGINEERING

CHANGE PROJECT DESCRIPTION

To provide the support and mentoring to help the Case School of Engineering (CSE) new hire feel like a part of the community and be able to get up to speed with their research as quickly and effectively as possible.

GOAL

In order to provide institutional support for new hires the change leaders designed a "launch committee" to monitor, assist and advocate for a new hire. The launch committee will begin working with the new hire from the day they sign their contract until the end of the hire's first year. At that point, the committee will transition to a more typical mentoring committee and the membership may change depending on the hire's needs.

Four areas must be addressed for a new hire to be successful. The assessments (how we know the committee is working) follow the areas:

1. Lab space. Engineers cannot be successful without functional lab space.

Assessment: Has the space been identified? Are there drawings? Has construction begun? Ideally, the new hire will have final drawings in hand before starting.

2. Funding. The committee will work with the new hire to identify opportunities, review proposals internally, and help include the new hire in larger program project-type grants.

Assessment: Are the new hire's grants getting internal reviews? Are they being included in larger program projects or team-based grants?

3. Lab personnel and hiring. The committee will help the new hire find the right people for the lab.

Assessment: Is the person getting the people they need in their lab? Are those lab members being productive?

4. Integration in the university. The committee will be the first people that the new hire meets. They will help to introduce the new hire to potential collaborators and colleagues across the university.

Assessment: Is the new hire meeting people across schools and programs? Are they forming collaborations?

ACTIVITIES

Drs. Lavik and Zhang:

- Met with key members of the CSE Strategic Hiring Initiative to solicit input for the design of the launch committee.
- Interviewed several young and recent hires to determine their experiences with starting and their perceived challenges and established launch committees for four new/recent hires.
- Provided committees with the basic directives, and coordinated their activities and their understanding of the goals.

KEY ACCOMPLISHMENTS

There are a number of challenges many faculty face when they are starting a new faculty position at CSE. By having a short term, focused committee that addresses these basic challenges of getting started, we anticipate that new faculty will obtain lab space more quickly, secure grants earlier in their careers, and be more integrated in the community more quickly than has been usual.

A key accomplishment of this project was the development of the *"The Launching Committee: A How to Guide"* (LCG), that outlined how the launch committee will work with the new hire from the day they sign their contract until the end of the hire's first year. The LCG specifies goals, committee composition, committee meetings and expectations as well as the assessment measures. *(see IDEAL website for LCG)*

Change leaders GQ Zhang and Erin Lavik reporting on the CSE launch project.

WEATHERHEAD SCHOOL OF MANAGEMENT

CHANGE PROJECT DESCRIPTION

Implement a pilot mentoring program for junior faculty at the Weatherhead School of Management (WSOM).

GOALS

- Set up a voluntary mentoring program for junior faculty at WSOM.
- Implement a pilot mentoring program for current junior faculty, conduct evaluation of the pilot program, and generate a report summarizing the experiences and recommendations for future continuance.
- Build participation and support across the school for continuation of the program beyond the pilot stage.
- Propose recommendations for the creation of institutional mechanisms for a sustainable and wide spread faculty mentoring program at WSOM.

ACTIVITIES

A five-page survey was developed to obtain feedback and outcome evaluations of both mentors and mentees involved in the pilot program. The survey allowed structured as well as open ended responses from participants. Each participant was asked to complete the survey independently and ensured strict confidentiality of individual response. The data from the survey was analyzed and used in addition to the program review session to develop an assessment of the positives and negatives of the pilot mentoring program.

Change leaders Anurag Gupta and Jagdip Singh reporting on the WSOM mentoring project.

Three distinct activities were carried out as part of this project:

1. Planning: Substantial energy went into planning, learning from similar mentoring programs and reviewing the mentoring literature. We attempted to understand the fundamental practices and principles of effective mentoring so as to adapt them to our context and sought input from department chairs and faculty council at WSOM. These activities led to a "final" plan for a pilot mentoring program that we presented to different constituencies for implementation.

2. Implementation: To ensure a positive start, we organized the first mentor-mentee meeting and participated in helping each team to develop initial expectations, set meeting times, and outline an agenda for mutually desired outcomes.

3. Assessment: Three assessment sources were utilized. First, a detailed survey was developed to obtain individual assessments of mentors and mentees using a confidential response format. Second, we organized a review meeting of all mentors-mentees and faculty involved in planning the pilot program to assess the program and to identify useful learnings that could be applied to broad launching of the mentoring program at WSOM. Third, we solicited informal feedback from individuals involved in the pilot program to understand what worked well, what didn't, and how it can be tweaked to generate effective outcomes.

KEY ACCOMPLISHMENTS

1. Expectations, process and outcomes:
Mentees:
- View mentoring as very important for their career development and achieving professional objectives.
- Key advice solicited was better understanding the P&T process, and how best to "navigate the hoops."

Mentors:
- Emphasized the need to make the mentoring process and expectations even more explicit and specific for the mentors and the mentees.
- Needed a longer time period of engagement to assess outcome.

2. Overall satisfaction with program and WSOM:
- Mentees extremely satisfied with the program, viewed it as very effective.
- Mentors considered it an outstanding initiative.
- Mentors advocate broader and more visible adoption starting when new faculty join WSOM.

SCHOOL OF MEDICINE

CHANGE PROJECT DESCRIPTION

To improve retention of tenured women faculty in the School of Medicine (SOM) Basic Science departments by improving the overall climate.

GOALS

- Build participation and support for the development of institutional mechanisms for climate improvement and increased recognition.
- Improve recognition of women faculty in service, teaching and research.
- Improve transparency and equity of decision making by the Dean and department chairs
- Generate a report to identify the needs, opportunities and strategies.
- Propose recommendations for institutional mechanisms to dean.

ACTIVITIES

Using SOM results of the university-wide Faculty Climate Survey the change leader team developed goals and proposed a series of faculty discussion groups with tenured basic science faculty in order to recommend activities for career development and climate improvement. The following four questions were asked at each faculty discussion:

1. *What do you like best about the research climate at SOM?*
2. *What changes would greatly improve the research climate?*
3. *What types of faculty activities deserve recognition and how might that happen?*
4. *What steps could you and the administration take to promote collaborative research activities?*

The focus group comments were distilled into a report of concerns and suggestions and then shared with key stakeholders (basic science department chairs, Faculty Council, Climate Task Force Committee, Research Committee).

The feedback provided by stakeholders assisted in ordering the priorities and developing additional suggestions for implementation. The report, and an additional document of implementation suggestions, was presented to and discussed with the dean of the school and the governing body of SOM, the Faculty Council.

The report and implementation suggestions are available on the SOM Faculty Affairs website and the IDEAL website.

KEY ACCOMPLISHMENTS

Expanding on the university-wide Faculty Climate Survey, senior administration is now more fully informed of basic science faculty concerns, has made all documents public and openly acknowledged a need for action in an all-faculty email. Additionally, the focus groups provided an avenue for faculty to voice their concerns candidly and without fear—no such forum or avenue existed before this project, and some department chairs took active interest in reading 'raw' faculty comments to better understand and take action within their departments. The SOM Faculty Council voted unanimously to endorse the IDEAL team report and formed an ad hoc project report committee to implement recommendations.

School of Medicine change leader Alison Hall with Associate Deans Ica Manas-Zloczower and Fred Collopy.

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engagedlearning™

Institutional Transformation Theme

"Encouraging S&E women and under-represented minority faculty to actively participate in institutional policy-making committees." Change leaders were drawn from the College of Engineering and six departments in the College of Sciences and Health Professions, Biology, Chemistry, Health Sciences, Mathematics, Physics, and Psychology where all of the initiatives took place.

CHANGE PROJECT DESCRIPTION

CSU conducted a cumulative three-year project focused on developing S&E women and minority faculty to assume formal leadership and faculty governance roles.

Year 1 Change leaders gathered data on the representation of women in leadership roles at CSU, collected specific gender equity indicator data, and conducted focus groups of women faculty in S&E in order to identify the factors that pose barriers to their participation in leadership roles at CSU. The team then focused on infrastructure (policies, practices, and structures) improvements to make engagement in leadership more attractive and feasible.

Change leader Mekki Bayachou at the 2010 plenary.

Life Events and the Academic Career panel with Amanda Shaffer, Connie Hollinger and Lynn Singer.

1

YEAR ONE GOALS

- Identify factors that are barriers to participation in leadership for women and URM faculty.
- Focus on infrastructure (policies, practices, structures) to make engagement in leadership more attractive and feasible.

YEAR ONE ACTIVITIES

- Gathered data on representation of women in leadership roles at CSU.
- Gathered CSU NSF indicator data and analyzed.
- Conducted focus groups of women faculty in S&E.
- Raised awareness of barriers to women in leadership in CSU community.

2

YEAR TWO GOALS

- Solicit input regarding creation of a Center for Faculty Development and Leadership.
- Plan faculty development sessions.
- Explore ongoing faculty development sessions.

YEAR TWO ACTIVITIES

- Held stakeholder meeting to discuss a faculty development center.
- Presented two faculty development sessions in April 2011.
- Raised awareness of issues related to inclusive environments and faculty development.
- Collected data regarding sessions and faculty interest in faculty development.

3

YEAR THREE GOALS

- Institutionalize faculty development and leadership at CSU.

YEAR THREE ACTIVITIES

- Presented two faculty development seminars, November 2011 and March 2012.
- Prepared proposal for Center for Faculty Development and Leadership.
- Submitted proposal to Provost and received funding request.

Year 2 change leader team presenting at the 2011 plenary.

In year 2 the primary goal was to explore the possible development and implementation of a Center for Faculty Development and Leadership. Such a Center would serve as the hub for faculty development across the career, mentoring, and university initiatives aimed at creating inclusive academic environments. Two faculty development workshops were presented "Life Events and the Academic Career" and "Creating Inclusive and Productive Academic Environments." For each event, the number of participants ranged from 15 to 20 with evaluation scores of 4.5 out of 5 on average.

In year 3, to ensure sustainability of the faculty development activities, a new Faculty Development Center was proposed in collaboration with the Center for Teaching Excellence. Seed funding was requested from the Provost to support a half-time director and begin to initiate campus-wide faculty development activities.

PROJECT ACTIVITIES

A variety of CSU stakeholders related to diversity management and faculty development were invited to attend a 'stakeholder' meeting in January 2011 to explore the possibility of developing a Center for Faculty Development and Leadership at CSU.

Such a Center would serve as a hub for faculty mentoring and university initiatives aimed at creating inclusive environments. Five participants representing administration and faculty joined the IDEAL team in a discussion of the need and required resources for a hub for faculty mentoring and university initiatives aimed at creating inclusive environments. Because of budgetary concerns, the group recommended offering faculty development in collaboration with the existing Center for Teaching Excellence in order to: 1) Raise awareness of issues related to inclusive environments and faculty development; 2) Collect data about faculty interest and satisfaction; and 3) Craft recommendations for future activity.

KEY ACCOMPLISHMENTS

The Provost's commitment to the creation of the new "Faculty Enrichment and Leadership Center", with a Center Director and Faculty Advisory Committee, institutionalizes the IDEAL goal of helping faculty to be successful in their careers, creating inclusive academic environments and providing coordination and support for faculty development and leadership.

CSU IDEAL Faculty Development Sessions

Life Events and the Academic Career – April 14, 2011

This session raised faculty awareness about the impact of life events (childbirth, adoption, illness, eldercare, etc.) on the academic career, informed faculty of best practices from other universities, and engaged participants in a discussion of possible strategies and policies for CSU faculty. The panel included Dr. Constance Hollinger, Psychology, CSU; Dr. Lynn Singer, Deputy Provost and Vice President for Academic Affairs, CWRU; and Amanda Shaffer, Project Director of IDEAL, CWRU.

Creating Inclusive and Productive Academic Environments – April 26, 2011

This session presented a study which found that the faculty in inclusive academic environments thrived and turned out to be more productive. In addition to the presentation, the faculty participated in an open discussion with the presenter. The presenter was Dr. Diana Bilimoria, Key Bank Professor of Organizational Behavior, CWRU.

Best Practices in Faculty Mentoring – November 29, 2011

This session discussed different forms and benefits of faculty mentoring describing best practices in mentoring at CWRU and other universities, and discussed steps in implementing an effective mentoring program. This was followed by an open discussion. This session was particularly important and useful to the CSU's IDEAL team process of proposing a Center for Faculty Development to the University. The presenter was Dr. Diana Bilimoria, Key Bank Professor of Organization Behavior, CWRU.

Is Academic Administration the Right Career for me? – March 6, 2012

This session was aimed at academic leadership development. The speaker covered topics on (1) what to know about becoming an academic administrator; (2) the pros and cons of becoming an academic administrator; (3) on-campus versus off-campus opportunity; and (4) what factors to consider in relocation and job search. Following the presentation was an open discussion. Presented by Dr. Chin Kuo, Interim Dean of Engineering and Professor, CSU.

Change leaders Susan Bazyk and Paul Lin.

IDEAL CO-DIRECTOR

Mary Louise Holly, PhD
Professor of Teaching, Learning, and Curriculum Studies; Co-Director, Igniting Streams of Learning in Science

YEAR ONE TEAM

Carmen Almasan, PhD
Professor, Physics

Marilyn Norconk, PhD
Associate Professor, Anthropology

Andrew Tonge, PhD
Professor and Department Chair, Mathematical Sciences

Michael Tubergen, PhD
Professor and Department Chair, Chemistry and Biochemistry

YEAR TWO TEAM

Verna Fitzsimmons, PhD
Associate Professor, College of Technology

Daniel Holm, PhD
Professor and Department Chair, Geology

Marilyn Norconk, PhD
Associate Professor, Anthropology

YEAR THREE TEAM

Carla Goar, PhD
Associate Professor, Sociology

Daniel Holm, PhD
Professor and Department Chair, Geology

Jennifer Marcinkiewicz, PhD
Associate Professor, Biological Sciences

Mandy Munro-Stasiuk, PhD
Professor and Department Chair, Geography

TEAM COACH

Susan Friemark

KENT STATE UNIVERSITY

Excellence in Action

Institutional Transformation Theme

"Enhancing the climate for scholarly and collegial community in the College of Arts and Sciences."
Change leaders were drawn from eight departments in the College of Arts & Sciences (Anthropology, Biological Sciences, Chemistry & Biochemistry, Geography, Geology, Sociology/Justice Studies, Mathematical Sciences, and Physics) and the College of Technology. Activities and initiatives were focused on these departments and also made available to the wider campus community.

INSTITUTIONAL TRANSFORMATION VISION

A university system that embraces widespread collegiality across a diverse faculty and administration, with an environment that promotes and supports a vibrant community of scholars in pursuit of academic excellence.

CHANGE PROJECT DESCRIPTION

Kent State's change projects were, by design, cumulative. Each change project built strategically on the foundation established during the prior year. During **year 1** a foundation for KSU-IDEAL was developed. Change leaders worked on three areas: (1) Identifying issues, resources; coalition building, (2) Constructing and conducting a climate survey administered to all tenured and tenure-track faculty in the College of Arts and Sciences, and (3) Constructing an informational KSU-IDEAL website with resources including a chair handbook. Framing and extending the KSU-IDEAL conversation in **year 2**, change leaders supplemented survey findings with focus group exploration of issues (such as faculty advancement) to clarify common themes and findings. Expanding work to the larger university community, a plenary session with Dr. Bernice Sandler was followed by workshops designed around issues raised in the climate survey and focus groups. In collaboration with Dr. Alfreda Brown, Vice President for Diversity, Equity, and Inclusion, the year 2 team produced a report and met with KSU President Lester Lefton to discuss the IDEAL program and to propose a Commission on Women. From this meeting evolved the ad hoc Task Force on Women in STEM Education and Research, one of four university priority areas presented by President Lefton in his September 2011 State of the University Address.

The decision to submit a Fall 2011 NSF-*ADVANCE* IT proposal, made during Spring 2011, became, along with the Task Force, a bridge into **year 3** and beyond.

KSU change leaders, co-director and coach at the 2011 plenary poster session.

1

YEAR ONE GOALS

- Conduct climate survey in College of Arts and Sciences (CAS).
- Begin a campus-wide conversation about the Women in Science Committee Report (2009).
- Develop a chair handbook and resources for a more collegial CAS available on website.

YEAR ONE ACTIVITIES

- Undertook coalition building with key administrators.
- Created IDEAL website with resources for chairs and faculty.
- Designed, administered and analyzed climate survey of tenured and tenure track CAS faculty.

2

YEAR TWO GOALS

- Increase visibility of IDEAL program.
- Provide strategies and techniques for addressing both subtle and overt bias.
- Develop workshops based on climate survey and focus group discussion.

YEAR TWO ACTIVITIES

- Continued meetings with key administrators.
- Disseminated Climate Survey data and held faculty focus groups.
- Campus workshops with Bernice Sandler.
- NSF-*ADVANCE* IT proposal initiative.

3

YEAR THREE GOALS

- Continue to increase visibility of IDEAL program.
- Conduct follow up climate survey in CAS.
- Institute pilot faculty mentoring program in the College of Education and Research.

YEAR THREE ACTIVITIES

- Submit NSF-*ADVANCE* IT Proposal.
- Active involvement in the KSU Presidential Task Force on Women in STEM Research and Education.
- Analyze data from follow up climate survey to CAS and disseminate findings.

Continued programs (workshops, focus groups, plenary presentations), and meetings with key administrators – vice presidents, provosts, deans, chairs, directors and other campus leaders during year 3 helped to build momentum for the institutional transformation described in the KSU-NSF-*ADVANCE* IT proposal. Focus on the signature area: advancement of women in STEM from associate to full professor, is moving forward as initiatives within the proposal are being planned and implemented (e.g. mentor program, equity analyses, study of unique contexts, attributes, gifts, and needs of each KSU campus, and of AALANA women in STEM). Analysis and interpretation of the year 3 Climate Survey has begun and will be foundational for a larger and institutionalized university-wide survey to begin fall 2012 by the Division of Diversity, Equity, and Inclusion.

PROJECT ACTIVITIES

The KSU-IDEAL project has provided an avenue for identifying the need for change, bringing the opportunity for change to the awareness of the university community and supporting the institutionalization of revised practices and policies. Needs for change and progress have been found in some very different places ranging from presidential directives to department level discussion and revision of procedures.

Task Force on Women in STEM Education and Research

The creation of the Task Force was the direct response to the KSU-IDEAL recommendations for a Presidential Commission on Women that we presented in May 2011. The Task Force was carefully conceptualized, members identified and 43 members served. Based on a retreat and meetings during Spring 2012, the IDEAL team synthesized and crafted recommendations which were then presented to President Lefton in July 2012.

Development and submission of the KSU NSF-*ADVANCE* IT proposal

KSU-IDEAL initiated and prepared the institutional groundwork for the NSF-*ADVANCE* IT proposal by conceptualizing and involving key faculty and administrators in developing the proposal By studying the issues identified in the climate survey and focus group data and bringing together a diversity of people through IDEAL programming, change leaders were able to make distinctions among the various elements and factors affecting career development of women in STEM which became KSU's signature proposal project.

LEAP initiatives being planned and implemented

Studying the issues, obstacles, and challenges faced by women in STEM lead to: 1) making connections across campuses and to other IDEAL and NSF-*ADVANCE* IT institutions and 2) the development of the conceptual framework and paths to address obstacles and challenges. Research and resources available through NSF-*ADVANCE* IT institutions became instrumental in planning and implementing programs at KSU. Studying each strand of LEAP – Leadership, Equity, Advancement, and Policy – the IDEAL team developed a framework to address the network of factors that can help to mitigate obstacles and unlock opportunities. In short, addressing LEAP elements can support institutional transformation. Three issues included in LEAP and relevant here are the faculty Mentor Program, current Equity Analysis, and further data analysis of the Climate Surveys (years 2010; 2012).

- **Mentor Program.** Elements of a mentor program were piloted during years 2 and 3 of the IDEAL program for women in STEM seeking promotion from associate to full professor.
- **Equity Analysis.** KSU change leaders have begun analysis of NSF Indicator variables, starting with current faculty salary by gender and rank. Analysis of the data will be complete by September 2012.
- **Climate Survey Institutionalization.** The KSU-IDEAL Climate Survey, administered during years 1 and 3 of

KSU Dean Timothy Moreland at the 2011 plenary.

IDEAL could now be conceptualized as part of a larger survey created and distributed annually university-wide by DEI, and integrated into an institutionalized process linked with the national Diversity and Equity Scorecard.

PAID proposal in development. A proposal to study and advance policies and practices particularly around AALANA women in STEM is currently under development for submission to NSF in Fall 2012. The proposal is to study the unique perspectives and professional development support necessary to be responsive to AALANA women in STEM.

Center for Excellence in STEM Research and Education.
During the IDEAL period, a new Center for Excellence in STEM Research and Education has come into existence, funded jointly by the College of A&S and the College of Education, Health, and Human Services. Links between the IDEAL program (KSU NSF-*ADVANCE* IT proposal, Task Force Recommendations with Faculty and Student sections) and the new Center will continue to strengthen the potential impacts of opportunities on women in STEM Education and Research, both faculty and students, and thus, on institutional transformation.

PROJECT ACCOMPLISHMENTS
The general themes that emerged from the focus groups were mainly issues that related to campus and departmental climate, promotion and tenure, possible mentoring programs, faculty leadership development, and work/life balance. Taking into consideration the climate survey data and focus group data, IDEAL team members drafted a proposal for a KSU Presidential Commission on Women. Dr. Mary Louise Holly and the year 2 IDEAL team met with the Dr. Alfreda Brown, Vice President of Diversity, Equity, and Inclusion and KSU President Lester Lefton.

President Lefton subsequently formed The Women in STEM Education and Research with the charge:

"The task force will recommend actions to promote the participation and success of underrepresented groups at all level of STEM education and research."

Additionally, IDEAL team members agreed to take action to submit a proposal for an NSF-*ADVANCE* IT grant for fall 2011. IDEAL members met with NSF-*ADVANCE* IT project directors and also attended a webinar regarding writing NSF-*ADVANCE* IT proposals with the support of the Office of the Provost.

IDEAL invited Dr. Bernice Sandler to campus to deliver a keynote address and facilitate workshops with faculty and administrators. Dr. Sandler held workshops and consultation sessions that were attended by well over 100 KSU faculty, administrators, and students. Additionally, renowned speakers Dr. Brenda J. Allen and Dr. Julie Des Jardins were invited to deliver keynote addresses and facilitate workshops and discussions with KSU faculty and administrators.

KEY ACCOMPLISHMENT
The key three-year accomplishment of KSU-IDEAL was to bring substance and life to the Institutional Transformation Vision articulated by the year 1 team which preceded the many workshops, reports, plenaries, commissions, and directives.

Bringing substance and life to the vision meant that the change leaders had success in igniting, cultivating, and coordinating conversations around issues related to women in STEM throughout university, at all levels. Issues related to women in STEM education and research are now viewed as one of four university priority areas. Bringing issues to the forefront was accomplished by multiple means, but most importantly by collaboration on the KSU NSF-*ADVANCE* IT grant proposal and with the Task Force on Women in STEM Education and Research. Bringing together major divisions of the university around common themes articulated in the NSF-*ADVANCE* IT proposal and Commission helped to make Women in STEM a University priority.

Year 2 change leaders Michael Tubergen and Carmen Almasan at the 2010 plenary.

"Living the vision meant people seeing and talking differently – being aware of issues: the challenges of women in STEM at the associate to full level, on all KSU campuses. Living the vision meant putting a spotlight not only on issues, but also on relationships and ways of working with others to address the issues."

— Dr. Mary Louise Holly, *Professor of Teaching, Learning, and Curriculum Studies; Co-Director, Igniting Streams of Learning in Science.*

IDEAL CO-DIRECTOR

Helen Qammar, PhD
Director, Institute for Teaching & Learning; Co-Principal Investigator, IDEAL

YEAR ONE TEAM

Edward A Evans, PhD
Associate Professor, Chemical and Biomolecular Engineering

Linda M. Subich, PhD
Professor and Assistant Chair, Psychology

Claire A. Tessier, PhD
Professor, Chemistry

YEAR TWO TEAM

Amy Milsted, PhD
Professor, Biology

Judit Puskus, PhD
Professor, Polymer Science and Integrated Bioscience

Mary Verstraete, PhD
Associate Professor, Biomedical Engineering

YEAR THREE TEAM

Kathy Liszka, PhD
Professor, Computer Science

Richard Londraville, PhD
Professor, Biology

Ajay Mahajan, PhD
Associate Dean of Research, College of Engineering

TEAM COACH

Helen Williams, PhD

The University of Akron

Institutional Transformation Theme

"Faculty Hiring that Makes a Difference". Change leaders were drawn from 11 STEM departments Biomedical Engineering, Chemical & Biomolecular Engineering, Civil Engineering, Electrical & Computer Engineering, Mechanical Engineering, Biology, Chemistry, Geology & Environmental Science, Math, Computer Science and Psychology. The interventions piloted in the eleven departments are being made available campus wide.

INSTITUTIONAL TRANSFORMATION VISION

Our science, engineering and mathematics departments will be recognized on The University of Akron campus for championing the value of diversity in both students and faculty.

CHANGE PROJECTS OVERVIEW

The efforts of each annual change project team have led to enhanced faculty diversity in STEM fields, specifically, women faculty. The initial data collection and analysis phase (year 1) resulted in the university president issuing an important and clear message on the importance of faculty diversity. From the second year, improved presentation of department faculty composition data, more frequent campus conversations on diversity hiring as well as enhanced search committee workshops led more search committees to implement best practices. The culminating impact (year 3) has been the inclusion of

a significant emphasis on diversity hiring within the University's Achieving Distinction initiative. Proposals related to new faculty hiring within this initiative will be judged based in part on the "contribution to the diversity of people, thoughts, and ideas including connections to globally relevant academic programs."

ANNUAL CHANGE PROJECT DESCRIPTION

In year 1, change leaders developed a profile of the current status of faculty diversity within the STEM departments as well as current hiring practices. The team created a snapshot of recruitment and hiring by using institutional research data as well as interviewing search committee chairs and women candidates, hired and declined, from three years prior. The team also produced a video promoting the importance of diverse faculty hiring featuring UA President Luis Proenza who presented the
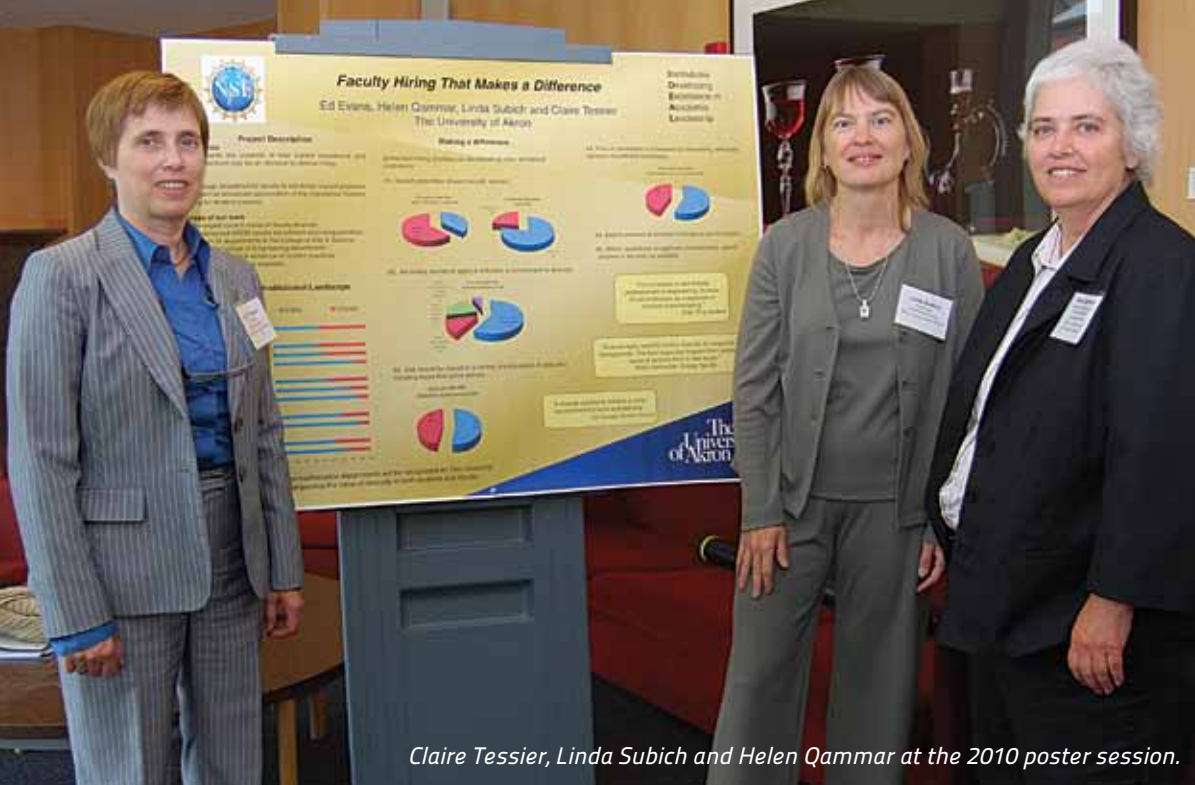
Claire Tessier, Linda Subich and Helen Qammar at the 2010 poster session.

UA-IDEAL project and challenged the campus to achieve the goal of diverse hiring. See the video at www.uakron.edu/itl/IDEAL/ideal-at-ua.dot

In year 2, working with Human Resources, the team initiated improvements in faculty hiring gleaned from NSF-*ADVANCE* IT and national best practices. These hiring resources were included on the UA-IDEAL website. Additionally, gender demographics of undergraduate and regular faculty in STEM departments were compiled and STEM faculty potential retiree data was collected indicating the future potential for increased hiring opportunities. *(See Biology Faculty Charts on page 24 for example)*

In year 3, the UA 10-year roadmap of strategic planning was announced which expands the mission of the university and deals with the practical realities of a wave of anticipated retirements,

1
YEAR ONE GOALS

- Use Institutional Research data to create a snapshot of recruitment, hiring and retention.
- Benchmark University NSF indicator data.
- Interview search committee chairs, women candidates hired and declined from three years prior to create a profile of UA hiring practices.

YEAR ONE ACTIVITIES

- Conducted search committee chair and candidate/recent hire interviews. Proposed improvements from national best practices on IDEAL website.
- Compiled gender demographics of undergraduate students and regular faculty in STEM departments.
- Developed promotional video message about the value of diversity activities in recruitment.

2
YEAR TWO GOALS

- Reorganize search best practices on website.
- Augment HR STEM department search committee training with research results and best practices.

YEAR TWO ACTIVITIES

- Met with new Provost, Deans and Associate Deans of Engineering and Arts & Sciences about low numbers of female faculty in STEM departments.
- Collected STEM faculty potential retiree data; continued hiring data collection.

3
YEAR THREE GOALS

- Develop and implement best practices aimed at increasing diversity in the candidate pools for approximately 150 strategic hires and others at the University.

YEAR THREE ACTIVITIES

- Work with Provost to develop "Expectations for Faculty Searches" guidelines for strategic hiring initiative.
- Create a poster and a PowerPoint slide for faculty to use at conferences to advertise UA's intention to hire and to increase diversity in faculty hires.

Change leader Judit Puskus and George K. Haritos, Dean of the College of Engineering at UA.

resulting in the Provosts Strategic Investment Program (www.uakron.edu/provost/achieving-distinction) to hire up to 150 new faculty over 10 years. In response, the IDEAL team worked with the Provost to develop a set of action items to implement best practices aimed at increasing diversity in the candidate pools. The team assisted in the development of the Expectations for Faculty Search guidelines, created both a poster and a PowerPoint slide for faculty giving seminar presentations at conferences and other institutions to use to advertise UA's intention to hire and to increase diversity in faculty hires.

PROJECT ACCOMPLISHMENTS

Two foundational elements define the key accomplishment from the three-year IDEAL project: 1) The University of Akron now has people, i.e. IDEAL change leaders, who are quite knowledgeable on best practices and 2) a process for continued data collection and analysis. These components create the essential elements for continued evaluation of diversity within STEM departments and will be critical to the success of The University of Akron's Strategic Investment Program, Achieving Distinction, a 10-year blueprint for increasing multidisciplinary research at the university by hiring over 150 faculty members in the next 10 years. Beyond enhanced multidiscipline scholarship, this strategic initiative quite specifically requires that "Diversity of people, thoughts, and perspectives must be enhanced." The success of this component of the Achieving Distinction initiative will require evaluation metrics of the kind already developed during the annual IDEAL change projects to ensure that the diversity criteria is not overshadowed by the criteria for multidisciplinary scholarship. *Examples of metrics include:*

- Trends in faculty diversity by gender and rank.
- Patterns in new hires by gender and department.
- Comparison with national data on research faculty

compositions by gender and department.
- Qualitative assessment of search plans resulting from successful "Achieving Distinction" proposals including evidence of best practices.

Senior academic leadership and Human Resources have agreed to allow IDEAL change leaders access to the needed information to begin this evaluation. It is expected that additional evaluation measures will be developed after the initial phase.

SUSTAINABILITY

Stereotyping can affect the behavior of even well-meaning faculty and administrators, and can penalize women in general, as well as mothers and others with care giving responsibilities. To embrace the future of STEM and remain competitive, it is essential that all faculty,
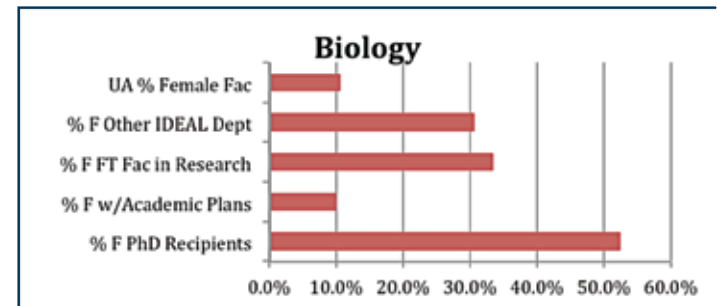
Percentage of UA Female Biology Faculty 2011-12.
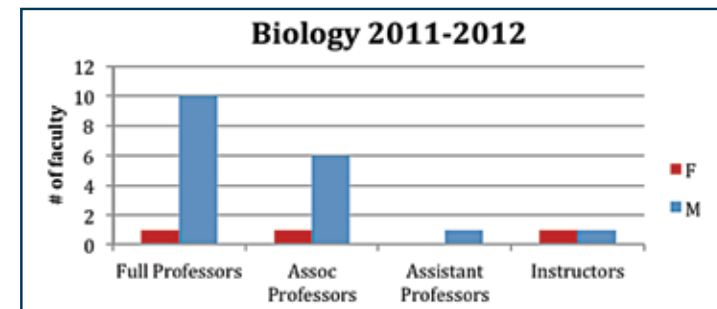
Number of Biology Faculty by Gender 2011-12.

especially department chairs and deans, recognize and prevent gender bias in faculty hiring. Academia is unusual in that most human resource decisions are made by professors who receive little or no training on how to avoid potential lawsuits or gender and racial bias.

IDEAL, in conjunction with Institutional Marketing, produced a professional quality video presenting the importance of a diverse faculty for the university. The video begins with President Proenza presenting our IDEAL project, includes the voices of students, faculty and employers on the imperative of diversity and ends with President Proenza challenging the campus to achieve the goal of diverse hiring. In addition to signaling campus-wide commitment to these issues, the following practices are now in place:

- Institutional Research will regularly collect NSF indicator data to provide continued updates on faculty diversity in STEM departments.
- The Institute for Teaching and Learning will maintain the IDEAL website displaying trends in faculty composition, NSF Indicator data and continue to periodically analyze other metrics such as salary equity and promotion statistics.
- A customized Human Resources workshop is available for departmental search committees. Trends in diversity hiring and comparative data published on our IDEAL website for that discipline are available for inclusion in these workshops.
- Human Resources has implemented an electronic database to document each faculty hiring process including search plans, advertisements and applicant demographics. It is now possible to analyze trends on diversity of applicants and interviewees with respect to faculty hiring search processes.

- Faculty composition and comparison data will be regularly disseminated through an annual report to the Office of Academic Affairs. Individual charts for each STEM department are provided via links from three university websites, the IDEAL project in the Institute for Teaching and Learning, the Office of Inclusion and Equity and Human Resources *(See Biology Charts, p. 24).*
- Each summer there will be a complete comprehensive qualitative analysis of search committee practices using information from the new HR database that will include demographics of candidate pools by department.
- There will be a series of Faculty Thinking Community workshops to allow STEM faculty to think through best diversity hiring practices and strategies for diversity hiring in a multidisciplinary framework as part of the Achieving Distinction initiative. Discussion topics will include the following:

  - *What makes a search process an effective diversity search? What can department faculty do to yield a diverse candidate pool and on what timeline?*
  - *What are the different opinions between departments on the merit and value of diversity hires? Who does it benefit and why is it a laudable goal for a search process?*
  - *What level of diversity do you need to achieve to surpass the goals of Vision 2020? What measures would you want to track to make sure your hiring process is effective and minimizes bias?*
  - *What components are needed to enhance your Achieving Distinction proposal to meet the diversity criteria for this initiative? How can the department be more attractive to a diverse candidate?*

- A poster and a PowerPoint slide are available for faculty to use when giving seminar presentations at conferences and other institutions to advertise UA's intention to hire and to increase diversity in faculty hires.

Change leader Mary Verstraete presenting at the 2011 IDEAL plenary.

IDEAL CO-DIRECTOR

Penny Poplin Gosetti
Vice Provost for Assessment, Accreditation, & Program Review

YEAR ONE TEAM

Karen S. Bjorkman, PhD
Dean, College of Natural Sciences & Mathematics

Nancy H. Collins, PhD
Professor, Medical Microbiology & Immunology

Timothy G. Fisher, PhD
Professor and Chair, Environmental Sciences

YEAR TWO TEAM

Maria Coleman, PhD
Professor, Chemical & Environmental Engineering

Isabel Escobar, PhD
Interim Assistant Dean for Research Development & Outreach College of Engineering; Professor, Chemical & Environmental Engineering;

Cyndee Gruden, PhD
Associate Professor, Civil Engineering

Brian Randolph, PhD
Associate Dean of Engineering Undergraduate Studies, Honors Program Director & Professor, Civil Engineering

YEAR THREE TEAM

Robert Blumenthal, PhD
Professor, Medical Microbiology & Immunology

Patricia Hogue, MD, PhD
Associate Professor & Chair, Physician's Assistant Program

Bina Joe, PhD
Professor, Physiology & Pharmacology; Director, Center for Hypertension & Personalized Medicine

Sheryl Milz, PhD
Associate Professor & Chair, Public Health & Preventative Medicine

TEAM COACH

Margaret Hopkins, PhD

THE UNIVERSITY OF TOLEDO
1872

Institutional Transformation Theme

"Creating a climate for successful retention, tenure, and promotion." Change leaders were drawn from the College of Engineering, five departments in the College of Natural Sciences and Mathematics, formerly the College of Arts and Sciences, (*Biological Sciences, Chemistry, Environmental Sciences, Mathematics, and Physics and Astronomy*) and are referred to collectively as Main Campus (MC), and the UT College of Medicine and Life Sciences (COMLS), comprised of 22 academic or clinical departments with basic research scientists in either type of department. Interventions took place on a school-by-school basis.

CHANGE PROJECTS DESCRIPTION

The focus of the UT change projects was filling professional faculty development needs on a college-by-college basis. Amidst a reorganization of departments and colleges, the **year 1** change leader team undertook a climate survey administered through its Office of Institutional Research, as well as coalition building with key campus administrators.

In year 2, the College of Engineering created and trained peer-advising teams for mid-career (associate) professors. Group workshops were held and tenured women faculty were paired with an advocate (i.e., a woman STEM full professor from within the university). The project initiated from the results of the survey was entitled Program for the Advancement of Women in STEM (PAWS).

Year 3 focused on basic science faculty in the College of Medicine and Life Sciences (COMLS) by the year 3 change leaders along with a Committee on Promotion and Tenure training initiative with former CAPT members. A proposal for an NSF-*ADVANCE* IT grant was developed by a team that included year 1 and year 2 change leaders and was submitted to sustain the initiatives developed through IDEAL.

Year 2 change leaders, Co-Director and Coach at the 2011 poster session.

1

YEAR ONE GOALS

- Develop and administer a faculty climate survey.
- Raise awareness of the grant change project and garner support from alliances listed below.
- Identify at least three initiatives to address findings from the survey.

YEAR ONE ACTIVITIES

- Administered climate survey through Office of Institutional Research, Spring 2010.
- Undertook coalition building and steady communication with key administrators on campus.

2

YEAR TWO GOALS

- Design a formal "Program for the Advancement of Women in STEM (PAWS)."
- Develop peer advising and reward system for faculty advisors.
- Engage STEM deans and chairs about clear expectations for tenure/advancement of all faculty.

YEAR TWO ACTIVITIES

- Faculty outreach and networking events in School of Medicine and College of Engineering.
- PAWS implementation discussed with dean of Engineering.
- Peer advising team assignments.
- Mentor/mentee presentation for peer advising teams.

3

YEAR THREE GOALS

- Mentor female faculty in the tenure process.
- Develop means to minimize negative career effects of FMLA departures in COMLS.

YEAR THREE ACTIVITIES

- Established IDEAL presence on Office of the Chancellor website.
- Provided P&T materials at pilot "speed mentoring" program.
- Established standardized letter for FMLA leaves of absence.
- Initiated stop the clock policy discussion.

Change leader Isabel Escobar at the 2011 plenary.

PROJECT ACTIVITIES

Three accomplishments from the three years of the IDEAL grants intertwine to become the key accomplishment.

Climate survey

The climate survey that was conducted by the year 1 change team has provided not only a foundation for continued data collection, but, more importantly, a foundation for the use of data in determining new projects. The data collected from the 2010 administration of the survey served as a springboard for the year 2 change project. The data from the survey were fresh at the time the team was choosing its change project and the need for mentoring was clear across campus, but especially in engineering. The year 3 change team reviewed the data from the 2010 administration and, noting that the data were one year old and the respondent distribution was not a fair representation of the population being served

by the grant, decided to conduct a focused conversation over lunch with COMLS faculty either to confirm the data or to make adjustments based on the needs that emerged. Mentoring continued to be an expressed need in addition to concerns about the impact of FMLA leaves of absence on tenure, promotion, and research activity.

Mentoring

Mentoring initiatives became the focus for the years 2 and 3 change projects. Developed for the specific needs of their college faculties, Engineering's mentoring connected untenured faculty and those seeking promotion to professor with senior-level mentors in long-term peer advising groups, while Medicine and Life Science's mentoring connected its faculty with "alumni faculty" from the Advancement, Promotion, and Tenure committee in a speed mentoring format. The year 1 change team, which was comprised from Arts and Sciences faculty (now College of Natural Sciences and Mathematics), did not benefit immediately from the climate survey for a change project; however, the College of Engineering has shared its mentoring guidelines as a precursor for the development of a mentoring program in the College of NSM.

Involvement of deans from IDEAL colleges

Through the change projects, attendance at the plenary sessions, and meetings with change team members, the deans from the IDEAL colleges are showing resource support for the change team projects as well as for addressing our transformation theme – creating a climate for successful retention, tenure, and promotion.

- The deans from the Colleges of Engineering and of Medicine funded an additional change team member in years 2 and 3.

"IDEAL provided me the opportunity to develop new tools and perspectives on leadership that have been a great help... As a recent appointee to a Dean's position, I am finding what I learned from IDEAL, and from the other participants in the program, to be especially helpful. Our IDEAL change project was useful in informing me about issues at my university, and in helping me to think about ways that I might affect some changes through my new role."

—*Karen S. Bjorkman, PhD, Distinguished University Professor of Physics and Astronomy; Dean, College of Natural Sciences and Mathematics, University of Toledo.*

- The deans from the all three IDEAL colleges are partially funding the "To Tenure and Beyond" workshop sponsored by Case Western Reserve University in August 2012.
- The dean from the College of Medicine and Life Sciences has provided verbal approval of a policy that addresses the promotion and tenure ramifications of using FMLA and has offered a permanent home for the year 3 change project on mentoring.

KEY ACCOMPLISHMENTS

The Campus Climate Survey will be conducted in two-year cycles of administration, housed in the Office of Equity, Diversity, and Community Engagement and the Eberly Center for Women has been added into the portfolio of the office's Associate Vice President of Equity, Diversity, and Community Engagement. Faculty Development has progressed in two ways: (1) the reorganization of the Office of the Provost office places renewed emphasis on faculty development and includes (2) a strategically focused Advisory Committee on Faculty Development.

The UT-IDEAL website, linked from the Chancellor's website, continues to be expanded to provide links to important resources, campus climate findings and recommendations, and leadership development opportunities. www.utoledo.edu/offices/chancellor/ideal/index.html.

And finally continued conversations among IDEAL deans on ways to fund and otherwise support IDEAL initiatives provides ongoing attention to issues such as stop the clock policies, spousal hires and diversifying the faculty candidate pool.

Change leaders Timothy Fisher and Cyndee Gruden at the 2011 poster session.

IDEAL Project Outcomes

The impact of the IDEAL program was evaluated by employing mixed designs of qualitative and quantitative data collection and analysis. This evaluation, encompassing a variety of metrics including changes in the representation of women faculty and women in leadership positions in the targeted departments engaged with IDEAL, highlights the positive contributions of IDEAL.

Changes in the Representation of Women and URM Faculty

As seen in Figure 1, comparing pre-grant IDEAL full time faculty levels (2008-09) with the counts during the final year of IDEAL (2011-12), the numbers of female and underrepresented minority (URM) faculty grew modestly, while comparable numbers of male and non-URM faculty declined. While the ratio of male to female S&E faculty is still nearly 4:1 at the six IDEAL campuses, 2009-12 saw an increase in the numbers of female (+14.5) and URM (+2.5) tenure-track faculty. From 2008-9 to 2011-12, the number of female faculty grew by 6.9%, while URM counts increased by 5.1%. In comparison, the number of male faculty declined by 7.6% during these same four years, while non-URM faculty went down by 5.3%.

By campus, half of the IDEAL universities demonstrated increases in the number of female pre-tenure-track faculty, while one showed no change and two

campuses reported slight to moderate losses. (All campuses were experiencing hiring freezes or a general reduction in hiring from pre-recession levels, which may have limited potential movement into tenure-track.) Across campuses, stronger gains for women were made in the tenured ranks, while for URMs, higher rates of increase occurred in the pre-tenure stage.

Changes in the Representations of Women and URM Leadership

Comparing pre-grant levels with the final year of IDEAL, there were positive increases in the number of female full professors, endowed chairs, department chairs, and associate deans in IDEAL units. However, for high-level administrative positions – deans, presidents, provosts, and vice/associate/deputy provosts – there were small losses or no change in representation. Given the "grassroots" nature of the IDEAL grant projects, it is not surprising that most changes were located at the department level. For URM leadership, there is a more complex picture, with gains seen at the level of full professor but limited gains at other ranks.

A total of 25 of the 62 IDEAL participants, (56 change leaders and six co-directors) have been promoted or appointed to roles of leadership within their institutions during or after their involvement with IDEAL.

Figure 1: Number of Pre-Tenure and Tenured Faculty in IDEAL Units, Pre- and Post-Grant, by Gender and URM Status

	2008	2011-12
URM	49	51.5
Non-URM	1060	1003.5
Male	898	829.5
Female	211	225.5
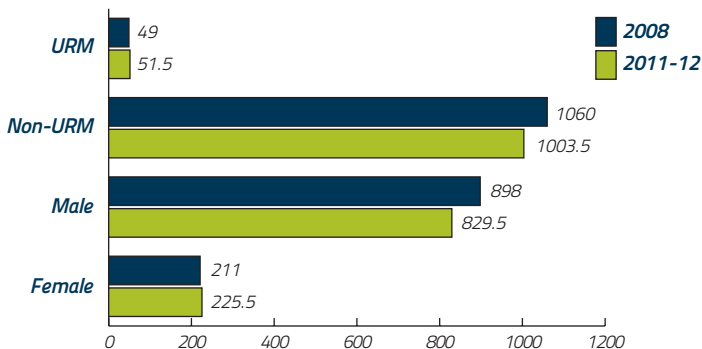
PROGRAM EVALUATION

Individual program components were evaluated by participant evaluations completed after the program. Leadership development sessions and plenary conferences received high evaluations (3.41 – 3.92 on 4 point scale) and were valued by change leaders and university administrators for both effectively creating a regional learning community and disseminating best practices. Illustrative comments regarding the key learnings of participants included:

"[I learned] more about barriers to women, leadership styles, …what others are doing in their program, …ways of creating more alliances on our campuses."

"I will continue to be aware of and committed to advancing women and minorities in STEM. I will actively advocate for [an] inclusion environment in multiple capacities."

outcomes

"Most helpful are the "management" type strategies for effecting change, dealing with administrators. As a woman in STEM, I know something already about diversity issues, but have no background in the "people skills" needed to negotiate with higher levels"

"Deeper understanding of the issues and research... Tools to change myself and others."

"Gender equity issues continue to be significant if subtle. There are means of improving the situation, and it was interesting and empowering to learn about them and employ some."

IDEAL has successfully adapted the academic leadership development methods developed during the five-year NSF-*ADVANCE* IT initiative ACES at CWRU creating a cohort of regional leaders cognizant of institutional factors that slow women's advancement in S&E. Encouraged through the training sessions to harness resources and build alliances, change teams have made unconscious and systemic factors that preferentially disfavor and accumulate disadvantage for underrepresented groups a topic of campus-wide conversations. All six of the partner universities have established websites for the dissemination of IDEAL activities, NSF-*ADVANCE* IT best practices and resources, and community engagement and remain committed to enhancing gender and underrepresented minority equity and participation in academic science, technology, engineering and mathematics (STEM).

Finally, emerging from the IDEAL project, a new initiative "To Tenure and Beyond: Building an Intentional Career in STEM "was launched in 2011 to complement the transformative activities of the change leader teams and engender further collaboration among the partner universities. A regional career development series for pre-tenure women professors in STEM from the six research universities collaborating on IDEAL, the series consisted of three skill building workshops, three one-hour coaching sessions and networking with regional peers. Combining skill building presentations, expert panels and group discussions, the series provided tools and motivation for developing a long-term career plan that included post-tenure goals. Workshop topics were customized to the skill/knowledge gaps identified through participant surveys. Participant feedback about the series was overwhelmingly positive as reflected in the comments below:

"[This was] a very personal and useful workshop developing important skills for attaining tenure and identifying and achieving goals after tenure. You'll meet amazing women at all stages pre-tenure and post-tenure and learn from their experiences – what worked for them and what didn't work for them. It's a great opportunity to spend time talking about and thinking about your career (and life) with some amazing colleagues and coaches."

"An interesting and important opportunity to consider your career path in a more structured way with a small group of women struggling with similar challenges"

"I have concrete plans to share some of the lessons and exercises w/ colleagues at my local institution."

The "To Tenure and Beyond" workshop series will be offered twice in 2012, once for Northwest Ohio partner universities BG and UT, and once in Northeast Ohio for CSU, CWRU, KSU and UA.

CONCLUSION

The IDEAL project has successfully brought together six research universities to address issues of gender equity, diversity and inclusion relevant to increasing the workforce participation of women and minorities in science and engineering. Evaluation results indicate the positive value derived from the project's three components: the leadership development program, the annual institutional change projects, and the plenary conference. The NSF IDEAL grant has achieved the key objectives set forth in the original proposal to the National Science Foundation.

ADVANCE: *Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers*

"The goal of the NSF-*ADVANCE* program is to develop systemic approaches to increase the representation and advancement of women in academic science and engineering careers, thereby contributing to the development of a more diverse science and engineering workforce. Creative strategies to realize this goal are sought from women and men. Members of underrepresented minority groups and individuals with disabilities are especially encouraged to apply. Proposals that address the participation and advancement of women with disabilities and of women from underrepresented minority groups are encouraged."

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