

## **K-State ADVANCE Distinguished Lecture Series**

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**Abstract** — One of the initiatives recently implemented as part of the ADVANCE Institutional Transformation Project at Kansas State University (K-State) is the ADVANCE Distinguished Lecture Series. This unique program allows tenure-track women faculty members in science and engineering to invite national leaders (male or female) in their research disciplines to campus for one to two days of interaction, culminating in widely advertised lectures. The program will foster development of a professional network for these women. Members of this network can contribute to the junior faculty member's career by providing guidance on research directions, assisting with data analysis, demonstrating and helping the faculty member develop new research techniques or teaching methods, collaborating on research projects, critiquing manuscripts and grant proposals, or serving as references for tenure and promotion. Eligible women submit a short application to the ADVANCE program, identifying the proposed speaker and describing how interaction with the speaker will benefit their careers. Funds from the ADVANCE program partially support the travel expenses and provide honoraria for the speakers. In the first year of this program, thirteen awards were made and ten campus visits have taken place. A second call for proposals has been issued and another round of speakers will be invited during the second year of the project. After the campus visit, each host faculty member provides a report to the ADVANCE program that describes the types of interactions that occurred during the visit and planned future interactions. We will continue to collect follow-up information from the host faculty members on additional interactions with their guest speakers to assess the longer-term impact of this program. This presentation will provide information about outcomes of the program to date and suggestions for replicating or extending this program to other campuses.

### **Introduction**

Kansas State University (K-State) is in the second year of a five-year NSF ADVANCE Institutional Transformation award. The K-State project features project-wide, college-level, and department-level initiatives that seek to enhance recruitment and retention as well as foster the careers of tenure-track and tenured women faculty members. One project-wide initiative is the ADVANCE Distinguished Lecture Series. Tenure-track women faculty in all of the twenty-seven science, engineering and mathematics (SEM) departments that are part of the K-State ADVANCE Project are eligible to participate. We hope to enhance the retention and tenure/promotion success of SEM women at K-State as a result of this initiative and others that comprise our ADVANCE program.

Women constitute only 13-14% of the SEM faculty at K-State, with the majority of these women occupying the assistant and associate professor ranks. Only 5% of full professors in SEM are women. An examination of tenure/promotion and retention data for men and women in SEM at K-State does not reveal statistically significant differences in tenure success or retention, but overall, these percentages are slightly lower for women than for men, and the statistical nonsignificance may be influenced by the small number of women in these disciplines. A study of faculty cohorts in SEM departments hired in the years 1992-93 through 1996-97 showed that 63% of the women and 70% of the men hired in those years achieved tenure (Dyer and Montelone, 2004). The population of individuals who did not earn tenure includes those who left the university prior to the tenure decision as well as those who were denied tenure or reappointment. Longer term retention rates, as of fall 2003, for SEM faculty are 52% for women and 58% for men for faculty cohorts hired between 1988-89 and 1996-97 (Dyer and Montelone, 2004). To see a dramatic increase in the percentage and demographics of women in SEM over the life of our ADVANCE project would necessitate large increases in the numbers of women recruited and retained through tenure and promotion relative to men. This is unlikely to occur in such a short time period for a number of reasons, but we hope that these programs will result in some short-term improvement in these numbers and have a longer term effect.

The purpose of the ADVANCE Distinguished Lecture Series program is to assist junior faculty women in creating a network of colleagues in their professional disciplines who can provide guidance and mentoring in the establishment of their careers. A number of studies have emphasized the importance of such professional networks in the success of faculty members (CAWMSET, 2000; Pattatucci, 1998; Sonnert, 1995; Trower, 2002). "The benefits of being in a strong network of contacts are the mirror image of the problems of isolation. Early inclusion in a strong network provides a 'jump-start' to a scientific career" (Etzkowitz et al., 2000). We are using the vehicle of encouraging junior women faculty members to ask a series of leaders (male or female) in their research disciplines to present invited lectures. While these lectures are typically part of a standing lecture series for faculty and students within the department or college, the speakers also are designated as ADVANCE Distinguished Lecturers, and the K-State ADVANCE Project advertises the lectures throughout the university. During each visit to campus, the speaker may interact with the host faculty member in a variety of ways. These include such things as visiting the host's research lab, refining research techniques, giving a guest classroom lecture, and planning future collaborations. The speaker also interacts with other faculty members and students to discuss common research interests.

As part of the visit, the junior faculty member also hosts the guest speaker at a dinner attended by her dean and department head. Funds for these dinners are provided by the college deans. The ADVANCE Project provides partial support (\$800 to \$1,000) for honoraria and travel expenses for the speaker. The remainder of the support is provided by the host faculty member's department.

Each host faculty member submits a report to the ADVANCE Project describing the activities in which the speaker participated during his or her visit, benefits accruing to the host as a result of the visit, and plans for future interactions with the speaker.

## **Eligibility, Application Process, and Outcomes**

Eligibility. Tenure-track women assistant professors who are within five years of hire are eligible to participate in this program. Each faculty member can invite one speaker per year and can participate a maximum of five times. A call for proposals is distributed each fall and spring for seminars occurring during the next six-month period. The call for proposals is sent to eligible women faculty members and SEM department heads and is posted on the K-State ADVANCE website (<http://www.ksu.edu/advance>).

Application and Review Process. The application process is deliberately simplified. Each application must include the name and department of the woman applicant, the name and affiliation of the proposed speaker, and a description of how the interaction with the speaker will potentially benefit the woman faculty member's career.

The K-State ADVANCE Steering Committee reviews the applications and requests additional information, if necessary. Applicants are notified of acceptance approximately two weeks after the deadline for submission of proposals. This rapid turnaround allows the women hosts to contact their speakers and arrange the visits in a timely manner.

Quantitative Outcomes. We have received a total of nineteen applications to date, all of which have been approved. In the first year of the program, there were 23 eligible women faculty members in 15 of the 27 SEM departments. Thirteen women (57%) from nine departments submitted applications. This group consisted of two faculty members of Asian origin, two Hispanics, and the rest White. In the second year of the program, there were 24 eligible women faculty in 12 SEM departments, of whom six (25%) have submitted applications to date. These applicants represented five SEM departments; two are Asian, one is Hispanic, and three are White. We have another call for proposals currently open and will be encouraging those who have not yet participated to apply.

Ten of the lectures have taken place and nine more will occur within the next six months. Of the ten speakers who have visited our campus to date, the gender breakdown is six men and four women. The majority of these speakers are from large research universities, including Stanford University, the University of Georgia, the University of Maryland, and the University of Michigan. Other speakers come from a research hospital, a federal research laboratory, a consulting engineering firm, and a professional organization. Most of these individuals are full professors, some of whom hold named chairs or administrative appointments. Of the nine seminars scheduled to occur in the Spring 2005 semester, six will be given by men, and three by women. All but one of these speakers are full professors at research universities. A list of completed and upcoming lectures is available on the K-State ADVANCE website.

## **Reported Interaction with Speakers and Benefits to Host**

Each faculty member who hosts a speaker provides a written report to the ADVANCE program that describes the types of interactions that occurred during the visit and planned future interactions. We have received ten written reports to date, along with verbal communication about the success of the visits from the hosts' department heads and deans. These reports are

uniformly positive and identify an extensive range of activities in which the speakers have participated. Specifically, these include discussions of current research, suggestions for future research projects, review of the host faculty member's curriculum vitae and grant proposals, and demonstration of research techniques.

One host faculty member reported that the seminar and the speaker's discussions with her colleagues excited them about the potential of her research specialty and have resulted in the formation of a number of new collaborations for her with her on-campus colleagues. Another host indicated that her speaker, a clinician, led rounds describing unusual cases for a number of veterinary medical residents. Two women reported hands-on interaction with their guests in learning new techniques, one in the area of teaching and the other in the area of research. All of the hosts noted that the speakers met with students in the department, as well as with students working on the host's research projects.

In addition to benefitting from the on-campus visit of the speaker, host women faculty members also are continuing to interact with their invited guests in a variety of ways. These include planning for future meetings and collaborations, writing joint grant proposals, preparing and submitting publications, and arranging reciprocal visits to the speaker's institution. Some of the speakers also have provided letters of support for grant proposals, nominated the host women to serve on committees of national professional organizations, introduced them to other professional colleagues, and recommended graduate students to work with the host woman faculty member at K-State. One of the speakers plans to return to K-State in Spring 2005 to present a more extensive hands-on clinic for students. Two of the women mention plans to meet with their speakers at upcoming national professional conferences. These planned meetings will create opportunities for the women to be introduced by their guest speakers to senior leaders in their fields. Such meetings will be potentially catalytic for a rapid expansion of the women's professional networks.

Future Assessment Plans. We plan to continue to collect follow-up information from the host faculty members to assess the longer-term impact of this program. Specifically, we will be following up with the women each year until their tenure decision to determine the impact that hosting these speakers has had on their careers, whether the speakers are serving as outside references as part of their tenure package, and what additional interactions with their speakers have taken place. We also plan to request information from the speakers as to the benefits they have derived from participation in this program and any suggestions they may have for future program directions.

## **Discussion**

We have created a unique seminar series that allows tenure-track women faculty to identify a leader (male or female) in their research areas to invite to campus. It offers women the chance to showcase their research programs to disciplinary leaders who may in the future serve as external evaluators of their grant proposals, journal articles, or tenure packages. The campus visits feature one-on-one time for the faculty member with the speaker, and when possible, visits by the speaker to the faculty member's classes and other professional interactions.

Junior faculty women from all four SEM colleges have served as hosts during the first year of this program. In the reports they have provided as well as through conversations with the ADVANCE project leaders, these women were enthusiastic about their experiences and their interactions with their guests. Of the ten women who have hosted speakers to date, two have already applied to host a second speaker as part of this program, while two others are no longer eligible for participation because they are being considered for tenure this year.

While this program is in the early stages of its implementation, and we have data from only one year's participation to report, this initiative is already producing positive outcomes. We are particularly encouraged that the women who have participated to date are selecting very prominent individuals in their fields to invite to campus for this seminar series. Of the academicians who have been invited to give seminars, all but two are full professors, with two holding named chairs, one serving as a dean and another serving as associate chair of the department. All are nationally recognized leaders in their research specialities. We have found that several of the visits have resulted in establishment of research collaborations between the K-State faculty and their guests, an outcome that is even more positive than we anticipated.

Our junior SEM faculty women may not have considered hosting such prestigious guests without the impetus of this lecture series. Furthermore, these distinguished guests might not have come to our campus otherwise. All members of the host's department benefit from the opportunity to interact with such leaders, which reduces the isolation produced by our geographic location.

Challenges. We are not completely satisfied with the level of participation of eligible women to date. In early Fall 2004, we hosted a lunch meeting with SEM women faculty members to share information about the K-State ADVANCE project-level initiatives. At that meeting we learned that some of the junior women faculty members felt somewhat intimidated at the prospect of inviting leaders in their research disciplines to participate in the lecture series. We expect that this concern may be partially responsible for the fact that not all eligible women participated in the first year. Another contributing factor may have been the lack of encouragement by their department heads to take advantage of this opportunity.

We will be addressing these challenges by (1) working with department heads to be advocates for this initiative and to take a proactive role in promoting this opportunity for eligible women in their units; (2) asking the ADVANCE Steering Committee members from each of the four colleges to contact the eligible women in their college, encourage them to participate, answer any questions they may have, and assist them, if necessary, in identifying appropriate speakers; and (3) meeting with groups of SEM women faculty to share the experiences of those who have already hosted speakers and the benefits that they received from their participation.

Expansion and Institutionalization. We will be seeking financial support from individuals and corporations to sustain this program in its present form for SEM junior women faculty members beyond the NSF grant period. However, it is our goal to encourage each SEM department to adopt this lecture series model as a part of the culture of the unit in promoting the success of all junior faculty members. We recognize that departmental resources may not be sufficient to allow each junior faculty member to host a seminar speaker each year during the probationary period. Nevertheless, we want to encourage departments to give junior faculty members priority

for issuing seminar invitations to guest speakers who could become important members of the junior faculty member's professional network.

We also want to share this model with departments on our campus outside of SEM disciplines and with other universities. The concept of using the vehicle of a lecture series to develop the professional network of a junior faculty member is easily transferrable to other disciplines and other institutions. The description of the lecture series, application process, and reporting forms are available on the K-State ADVANCE Project website.

We believe that participation in this initiative will accelerate the development of networks for our new faculty members; include women in decision-making roles; and create links between women faculty and disciplinary leaders.

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