## **Examples of Mentoring for Faculty Retention and Development**

Dr. Sylvia Bozeman, Spelman College

# <u>The Center for Scientific Applications of Mathematics (CSAM) - Spelman College</u>

Six Faculty Fellows selected per year from across five sciences (primarily junior faculty) to support. Program impacted 60% of faculty in associated departments over 5 years.

### **CSAM** supported Faculty Fellows in

- Strengthening the research infrastructure
- Improving research productivity
- Providing a research environment for undergraduates
- Establishing collaborative relationships
- Developing interdisciplinary courses and programs

## Faculty development component included

- Support of individual research efforts
- Bi-weekly faculty seminars for research exchange across departmental lines
- Grant-writing workshops co-sponsored with other entities
- Opportunities for travel to collaborate or to upgrade skills
- Assistance with administrative details related to research

**Outcomes -** Increases in presentations, publications, external funding, national curricular reform involvement, student research and interdisciplinary courses (e.g., Lasers, Optics and Spectroscopy)

## <u>Center for Biomedical and Behavioral Research Junior Faculty Mentoring</u> <u>Program – Spelman College</u>

A mentoring program designed by junior faculty from four science and mathematics departments (in addition to internal awards program). The program was initiated in Spring 2005. Each junior faculty selects three faculty mentors – inside the department, outside the department, and externally at a research institution.

#### The program included

- Seminar series for sharing research plans and latest findings
- Workshop series on internal opportunities, internal support, grant writing, integrating research and teaching, etc.
- New faculty orientation on internal resources to support research

Outcomes from mentoring, seed awards program, and other internal support included

- Increase in research productivity (publications, presentations, external funding)
- Serves as tool for faculty retention and recruitment

Role of the three mentors is to provide advice and serve as an advocate in areas that include

- Preliminary review of research proposals
- Balancing teaching, research, and service
- Solving administrative problems

- Supervising research students, hiring and training technicians/post-docs, etc.
- Developing productive collaborations, developing competitive research proposals
- Career goals, ethical behavior, handling departmental politics and personal issues
- Preparation for promotions and tenure
- Frequent accurate feedback to improve short-term and long-term goals

# **Regional Mentoring Clusters (for Graduate and Faculty Women in Mathematics)**

Program initially funded by NSF ADVANCE Grant to Spelman College

## **Program Design**

A three-tiered mentoring cluster network designed to advance women in academia; consists of senior and junior faculty and graduate students

## **Program Objective**

To provide support and advice on issues that affect professional advancement

#### **Sample Topics Addressed**

<u>Graduate students:</u> passing qualifying exams, balancing graduate study and family life and rearing young children, the treatment of females in various departments, the visibility of female faculty, time management, the formation of study groups, choosing advisors, and operating as a member of a minority group.

<u>Junior faculty</u>: issues related to finding the first post-graduate position and negotiating the responsibilities of the early years, including job searches, maintaining a research program after graduate school, negotiating departmental politics, attendance at specialized conferences, post doctoral opportunities, applying for grants, teaching concerns, and mentoring each other.

#### **Cluster Locations and Participants**

#### Southern California

- o Leader: Ami Radunskaya, Ph.D. (Pomona College)
- Co-Leaders: Ulrica Wilson, Ph.D. (Claremont-McKenna College) and Cymra Haskell,
  Ph.D. (University of Southern California)
- o 12 participants (1 senior faculty, 5 junior faculty, 5 graduate students and 1 undergraduate)

#### Georgia

- o Leader: Nagambal Shah, Ph.D. (Spelman College)
- o 12 participants (4 senior faculty, 4 junior faculty, and 4 graduate students)

#### Indiana

- o Leader: Donatella Danielli, Ph.D. (Purdue University)
- o 10 participants (1 senior faculty, 9 graduate students)

## North Carolina

- Leaders: Ellen Kirkman, Ph.D. (Wake Forest University) and Janis Oldham, Ph.D.
  (North Carolina A&T State University)
- o 9 participants (2 senior faculty, 3 junior faculty, and 4 graduate students)

## Mid-Atlantic (new)

- o Leader: Helen Grundman, Ph.D. (Bryn Mawr College)
- o 6 participants (1 senior faculty, 5 graduate students)