COBRE-PSF Mentoring Program - Phase III

COBRE-PSF Mentoring Program. Much of our Center's success in regard to launching junior investigators on successful career paths during Phase I and Phase II is attributable to our mentoring program. Each COBRE Investigator was mentored by at least one senior faculty Mentor selected on the basis of his/her experience and a genuine interest in the success of the mentee. In some cases two Mentors were appointed for a given mentee to obtain an appropriate balance between local campus knowledge and specific scientific expertise. Mentors were compensated for their effort through the Administrative Core. Each Investigator had a personal mentoring plan that was prepared in collaboration with the Mentor. The COBRE program director met with each new COBRE Investigator and his/her Mentor at the start of their program to review COBRE objectives and the elements of the individual mentoring plan for that Investigator. At that meeting each new Investigator was provided with a copy of the book "At the Helm" by Kathy Barker as one avenue of preparing him/her for the challenges they might encounter on the road ahead. Finally, the Mentor and Mentee together prepare a written mentoring progress report as part of our overall Annual Progress Report to NIH.

In view of the success we have had developing outstanding junior faculty investigators, we will continue many elements of our established mentoring program while adding one important new feature, the COBRE Writing Program (see below). During Phase III the mentoring program will be overseen by Leadership Committee member Scott Hefty and Program Director Robert Hanzlik.

Mentoring Program Goals. The Mentoring Program incorporates numerous components long known to be critical for helping junior scientists develop successful academic careers. Our overall goals for junior faculty development remain the same as in Phase I and Phase II:

- Each COBRE pilot project leader will develop an excellent program of rigorous research related to the theme of Protein Structure and Function that will form the foundation for his or her academic career and eventual contributions to the biomedical sciences;
- Each COBRE pilot project leader will submit at least one major NIH R01 grant or the equivalent as an outgrowth of their pilot project and writing program participation;
- Each COBRE pilot project leader will meet all the career development criteria required for the successful attainment of academic promotion and tenure, including research, teaching, and service;
- COBRE pilot project leaders will become part of an expanding critical mass of faculty in the State of Kansas who are developing individual and collaborative research programs on protein structure and function.

Long-term, high quality collaborative research involving both early career and senior investigators will be developed through interactions promoted by the COBRE-PSF and its enhanced infrastructure, leading to substantially enhanced competitiveness for NIH funding. The emphasis on recruiting, supporting and mentoring junior faculty that characterized COBRE Phases I and II is broadened in Phase III to focus on supporting both junior and senior researchers with shorter-term pilot projects rather than longer term research projects. Pilot projects generally will be of one year in duration.
Specific Components of the Mentoring Program:

**Individualized Mentoring.** Each junior faculty member will be paired with a primary senior faculty mentor on his/her campus who is an established investigator with a history of NIH funding. As appropriate, COBRE graduates may be identified to serve as mentors and leverage their experience with the Program. Mentors must be willing to interact frequently with the investigators to facilitate their progress and provide feedback to the program director and the Leadership Team to ensure that progress toward all goals is being achieved. The first component of each plan is usually the development of a strategic mentoring plan with reasonable timelines for meeting important career milestones. This plan serves as the basis for continued interaction and for assessing progress. Individual focus items frequently include: establishing and maintaining a lab group; strategies for developing a growing research program; manuscript and proposal development, and overall advice on all aspects of professional development. Although department chairs often work with new faculty to help them navigate the demands of their positions, COBRE mentors also become a significant source of more regular “practical” information and advice. Finally, mentors are expected to help the junior faculty make contact with established scientists in relevant areas of protein structure and function and begin developing an effective professional network. Each application for a COBRE pilot project will include a letter of agreement from the proposed mentor. (Note: A Mentor will receive compensation through the Administrative Core, NOT through the Pilot Project budget.)

**The COBRE Writing Program.** Each junior faculty pilot project awardee will be expected to participate in the comprehensive Scientific Writing Program, one outcome of which will be the preparation and submission of an NIH R01 or similar grant application. (See [http://psf.cobre.ku.edu/writing-program](http://psf.cobre.ku.edu/writing-program))

**Monthly Center Research Meetings.** The essence of a Center is a group of investigators with overlapping interests interacting synergistically and productively around shared facilities (i.e., Core Labs). Our monthly meetings bring together all pilot project investigators, mentors, Core directors, the program director, previous COBRE graduates and others. These meetings were fundamental to our success in Phases I and II and they will continue in Phase III. Junior (and senior) faculty share current research progress and plans with a diverse set of engaged scientists who provide helpful criticism, technical advice, and in many cases offers of assistance. These meetings also foster the development of new collaborations among the participants, cooperation between the four participating institutions, and they contribute to the sense of a vigorous, thematic Center of Excellence. **Pilot project leaders are expected to participate as fully as possible in these meetings.**

**Seminar Programs and Workshops.** In line with our goal of enhancing the overall professional development of junior faculty, COBRE investigators are asked to identify well-known scientists in their field whom they would like to get to know personally, and then work with the Administrative Core to invite them for a seminar visit. In addition to their seminar, visitors may spend part of their visit meeting with COBRE participants, and with the investigator who invited them and who serves as the host, providing the investigator an extended opportunity to discuss research topics of mutual interest. Thus each hosting junior investigator has, in effect, an opportunity for an individual consultation with a recognized expert in his or her field. During the past decade our COBRE center also has sponsored 22 regional workshops and symposia, many on **topics suggested by one or more COBRE PIs**, who then work with the Administrative Core to organize and conduct the event. COBRE investigators benefit greatly not only from the scientific and technical perspectives of the workshop but also in terms of professional networking, and the experience of planning a larger-scale event like a regional workshop. The GRASP Regional NMR meeting that a COBRE investigator started in 2006 is
just one example of this. The symposium series succeeded so well it became a free-standing annual event.

**Individual Consultations.** Each COBRE investigator and his/her mentor will meet with the program director and the Leadership Committee twice annually to discuss progress in achieving their individual goals as well as the goals of the COBRE program. This is concurrent with updating their entry on the Career Progress Table that we use to track progress and accomplishments of our junior investigators (i.e., formative assessment). Evidence of good progress in meeting the milestones set out in the individual mentoring plans will be necessary for continued support.

**Interactions with the External Advisory Committee (EAC).** Our EAC is comprised of four outstanding protein scientists ([http://psf.cobre.ku.edu/people/eab](http://psf.cobre.ku.edu/people/eab)) representing both academic and industrial settings. As a group, they visit the COBRE Program annually. During these visits, our EAC members hear formal presentations of research progress from all our investigators. Times are also scheduled to allow private one-on-one meetings of COBRE investigators with one or more of our EAC members. These meetings are extremely popular with both the EAC members and our investigators. They provide an additional opportunity for junior faculty to interact with highly successful individual scientists and learn from their feedback and example.