Association Report: CUR -

edited by Kerry Karukstis Harvey Mudd College Claremont, CA 91711

Faculty Mentoring Faculty: Lending Support within the Undergraduate Research Community

by Lisa N. Gentile, Nancy S. Mills, and Kerry K. Karukstis

The Value of Mentoring

The need for mentoring in the professional lives of graduate students, postdoctoral associates, and new faculty members cannot be underestimated. This is especially important for faculty at small institutions where the guidance of more senior faculty members, or faculty members in one's area of research, is not available. It is also critical for graduate students and postdoctoral associates who are considering a career at a primarily undergraduate institution (PUI) whose current advisors may have little knowledge of these types of institutions. While mentoring is traditionally viewed as essential early in one's career, the changing responsibilities of faculty members as they advance in the professoriate suggest that mentoring relationships would also facilitate mid-career and senior faculty. Many faculty members (for example, from 81% of the institutions reporting in ref 1) could benefit from strategies that enable them to generate new research ideas, create time for research, establish successful collaborations, and maintain their level of expertise as well as enthusiasm. The advice of experienced mentors would be valued resources to assist all faculty members—prospective, new, and established—in achieving their career goals.

CUR Chemistry Mentoring Network

The Council on Undergraduate Research (CUR) focuses on faculty development to improve undergraduate student learning through research; CUR's programs and services are designed to share successful models and strategies for establishing, sustaining, and institutionalizing undergraduate research programs. The expertise and dedication of CUR members enable the organization to provide the support and assistance that individuals need to advance their undergraduate research activities and develop their campus research culture.

During the period of 1993–2006, the CUR Chemistry Division ran a mentoring network under the tutelage of Nancy Mills at Trinity University. The purpose of the network was to match individuals seeking information about starting, sustaining, or re-initiating undergraduate research programs with faculty who had successfully done so (2).

The CUR mentors provided assistance in a variety of ways. For example, new or established faculty members could obtain advice on the types of projects that are often successful in undergraduate environments; professional development goals; preparing tenure and promotion dossiers; appropriate funding agencies for research ideas; preliminary grant proposals; selection of external reviewers for grant proposals or manuscripts; or successful strategies for managing undergraduate research students. Graduate students or postdoctoral fellows could also obtain valuable information in a number of areas such as advice concerning the job application process and timing; review of job application materials, including cover letter, vita, teaching and research descriptions; or consultation about choosing a career at a PUI.

A quick glance through the mentor pairings shows that the Mentor Network has been effective. Faculty requesting mentors have turned into department chairs, have obtained external funding and, as importantly, have been granted tenure. Conversations with these "mentees" indicate that the mentors provided useful guidance but also reality checks. An independent sense of perspective outside of one's own department or institution can be quite beneficial for new faculty members. Graduate students have reported back about successful job searches and have offered to be a mentor themselves after getting tenure.

Call for Participants

Due to the success of the original network and the continued need for high quality mentoring, the Chemistry Division of CUR is continuing this program. Members who wish to serve as mentors should contact CUR chemistry councilor Lisa Gentile (lgentile@richmond.edu) and provide information about their area of chemistry, research expertise, and any specific areas of professional development expertise that they wish to share. Members who wish to be matched with a mentor should also contact Gentile at the above address. Upon receiving a request for mentoring and a brief description of research interests, two to four prospective mentors will be identified on the basis of similarity of research interests and career experiences. The requester would then choose the mentor who seems to fits his/her needs most effectively and contact him/ her to define the mentoring relationship.

With expertise in all areas of chemistry and in conducting research with undergraduates at many different types of institutions, CUR mentors have the experience to help graduate students, postdoctoral associates, and faculty at all stages of development.

Literature Cited

- 1. Kellman, R. Institutional Commentary: Narrative Institutional Perspective on Resource Allocation Trends and Needs. In Academic Excellence: The Sourcebook; Research Corporation: Tucson, AZ, 2002.
- 2. CUR mentoring service is only available to CUR members; there are reduced membership rates for graduate students and postdocs. See http://www.cur.org/membership.html (accessed Sep 2006) for information about CUR and becoming a member.

Lisa Gentile is a member of the Chemistry Department, University of Richmond, Richmond, VA 23173; lgentile@ richmond.edu. Nancy Mills is a member of the Chemistry Department, Trinity University, San Antonio, TX 78212; Nancy.Mills@trinity.edu. Kerry K. Karukstis is a member of the Chemistry Department, Harvey Mudd College, Claremont, CA 91711; kerry_karukstis@hmc.edu