Teaching/Undergraduate and Graduate Education Symposium: Mentoring in Dairy Science

123 Mentoring undergraduate students in dairy science. L. Berning*, California Polytechnic State University, San Luis Obispo, CA.

Shifting demographics in American higher education has created opportunities and challenges relative to mentoring undergraduate students. The changing background of the greater student population is reflected in dairy science as well. Increasing diversity in the student population has created an environment where cultural factors impact the professor-student relationship. In addition, a shift of population away from the rural lifestyle means that fewer students are coming into the university with dairy/agricultural experience. The current makeup of the student population and their prior knowledge base has created the need for different approaches to student mentoring. In the current environment, what is the essence of an effective mentoring relationship? To gain insight into this issue from the student perspective, dairy science and various agriculture majors were asked to think about people they considered their most significant higher education mentors. They were then asked to summarize what qualities they valued most highly in a mentoring relationship. This presentation will highlight the traits that characterize an effective mentor and the ingredients of a positive mentoring environment for undergraduate students.

Key Words: advising, mentoring


Dairy and Animal Sciences together are popular majors in the agricultural sciences in the US. Currently, minorities make up a small but growing student population in higher education. Today’s student population represent our future leaders in this field. With the complex challenge of providing food security for 10 billion people by the year 2020 on current or less natural resources in the future, it is imperative that an educated and diverse work force is prepared by our land grant institutions to resolve this problem. To ensure interested students from all populations matriculate through our dairy and animal sciences’ programs, mentoring is believed to be one area to support student success, especially among minorities. One such organization was undertaken at North Carolina A&T State University. An 1890 land grant institution in Greensboro that also is the largest HBCU in the country and has the largest enrollment among the 1890s in the College of Agriculture. The organization was called “Men-on-the-Move (MOTM).” Focusing on mentorship, leadership and engagement by minorities, especially African American males, an effort was taken to see what impact MOTM would have on retention (RR) and graduation rate (GR). Started by open enrollment in the Department of Animal Sciences with 15 students, the organization has grown to over 35 members in 10 department and 5 colleges/school campus wide. Leadership training has impacted elected executive officers among 5 organizations which has grown from 1 to 5 AA males. Peak mean values tended to grown, but not significant (P > 0.05) in RR (86% vs. 80%) and GR (35% vs. 45%) between AA males in MOTM when compared with those in the Department of Animal Sciences. Mentorship, leadership and peer support played a vital role in successful engagement and achievement of the AA males at North Carolina A&T State University. The organization has been recognized for its achievement in the region, and student success continues to improve.

Key Words: minorities, mentorship, dairy/animal sciences

125 Mentoring graduate students as a young faculty: Challenges and opportunities. A. Faciola*, University of Nevada, Reno, NV.

The objective of this presentation is to highlight challenges and opportunities associated with effective mentoring as a young faculty. Effective mentoring, at any stage of one’s career, is challenging. However, effective mentoring while on the tenure-track is crucial for the success of the mentor and the mentee. The current academic environment is fast-paced, highly competitive, and expectations are higher than ever before. Young faculty are expected to excel in teaching, research, and service. High quality teaching and service are very important, but time consuming and often undervalued by administration. High quality research, evidenced by publications and extramural funding, is generally the most important criterion for tenure and promotion. This environment leaves little room for mentoring, and young faculty may feel the need to choose between mentoring or writing papers and grant proposals. Effective mentoring is widely recognized as important for student success; however, I would argue that it is also important for the success of young faculty members: whether one receives tenure is highly dependent on the productivity and success (or lack thereof) of his/her graduate students. Considering this, I have developed a mentor-mentee agreement that aims to (1) provide students with clear information on what resources and support the lab can offer them, (2) explain what the lab will expect of them, and (3) give students an opportunity to share their previous experiences and future goals, so that a tailored mentoring plan can be made. The goal of this agreement is to achieve the best lab environment possible – one that fosters high productivity and student satisfaction by providing a healthy work environment where everyone feels valued and committed to the success of the group. The current academic environment may seem counteractive to effective mentoring; however, allowing time to clearly lay out expectations, tailoring development plans for each student, and following up on a regular basis can increase the likelihood of student success, which will contribute to young faculty success.

Key Words: individual development plan, student success, tenure

126 Mentoring and empowering women in dairy science. K. M. Schoenberg*, Elanco Animal Health, Greenfield, IN.

Women in dairy science face similar challenges as women in fields such as engineering and technology where women are under-represented. While 80% of veterinary students in the US (77% in the UK) are female, they are grossly under-represented as practice owners, association leaders, and managers. In the United States, 54% of all practicing veterinarians are female, and 19% of food animal veterinarians are female. Research shows that these women are judged and assessed differently due to unconscious biases, are provided different opportunities, and face additional pressures outside of their career. While generations before us fought for equal access to these careers, women now face differing, often confounding, challenges which result in them having dissimilar experiences from their male counterparts. As more women continue to
enter dairy science fields in academia and industry, the need for support in the form of effective mentoring will grow. With added awareness of the challenges and mitigation strategies we can all minimize the potential negative impact on careers for women in dairy science. In particular, for young females starting their career in dairy science, there may be a dramatic shift in their awareness of challenges they may face. Mentors can provide tools to navigate these transitions. First, for women at all levels, mentorship and coaching in the areas of confidence, a thriving inner mentor, and tips to navigate times of change and uncertainty are key. Second, the type of support women in dairy science will require will change as their career progresses. Third, throughout these changes, a thriving network will help women identify personal and professional contacts to help them navigate. Finally, a diverse set of experiences will allow women to find their true areas of passion and where they can thrive. Above all, it is up to all of us to build awareness of the unconscious biases that exist and may impact these talented professionals and do our part to influence people and systems to interrupt the biases and even the playing field. Everyone benefits from the greater diversity of thought that is brought to the table when women in dairy science are empowered to be the best that they can be.

**Key Words:** mentoring, bias, gender

127 **Mentoring postdocs in an increasingly competitive environment.** P. Clifford*, University of Illinois at Chicago, Chicago, IL.

The National Institutes of Health and National Science Foundation define a postdoctoral fellow as someone “who is engaged in a temporary and defined period of advanced training to enhance the professional skills and research independence needed to pursue his or her chosen career path.” How do PhD scientists decide on their chosen career path? And what are the professional skills that are needed for success? This session will discuss the value of creating an individual development plan (myIDP.sciencecareers.org) to facilitate career progression.

**Key Words:** mentoring, career development, professional development

128 **Mentoring young faculty to succeed in teaching and research.** K. A. Weigel*, Department of Dairy Science, University of Wisconsin, Madison, WI.

New faculty members represent an investment of roughly $1.5 million for salary, benefits, and start-up package during the probationary period, and more importantly they determine the department’s climate, productivity, impact, and reputation for the next 3 decades. The rewards of successfully hiring and mentoring an exceptional candidate are great, whereas the penalties of failure are severe. Young assistant professors are full of energy and enthusiasm, which are powerful indicators of success when coupled with intellectual prowess and strong graduate and postdoctoral training. They are also under tremendous pressure, particularly at a top research university, where achieving promotion and tenure can feel like becoming a partner at a top law firm. Balancing work and home life is a challenge, especially when plans for starting a family have been postponed during the candidate’s graduate and postdoctoral studies. Faculty colleagues play a key role in the success of a new assistant professor, as their informal daily interactions are critical to helping the individual understand departmental, college, and campus policies, procedures, and priorities. An effective mentor committee, which typically includes tenured faculty members from within and outside the department, is also critical. The department chair or head must find the right balance between protecting the young faculty member and fostering his or her independence. Too much responsibility too quickly, in terms of teaching load, research expectations, or service requests, can lead to frustration and burn-out. Conversely, too much protection for too long can lead to isolation of the faculty member, as well as resistance or disenchantment several years later, when he or she is confronted with a heavier teaching load, significant service activities, and the expectation of a self-sufficient research program. We have tended toward the former – full and quick integration of the young faculty member into all aspects of departmental life, while trying to monitor the workload and commitments. Excellent time management and organizational skills are therefore essential, particularly as the individual transitions from a relatively unknown assistant professor to a highly sought-after speaker and collaborator.

**Key Words:** mentoring, faculty, tenure