

**Achieving balance in academic identity and career – insights from award winning
undergraduate research mentors**

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Abstract

The aim of this study was to explore how Undergraduate Research mentoring and supervision fits into the career profile of award-winning Undergraduate Research mentors and to determine the factors that motivate engagement as an Undergraduate Research mentor / supervisor. Twenty-four award-winning Undergraduate Research mentors were interviewed about their mentoring practices. Five themes emerged including academic identity and motivations; the challenges to academic identity and career development; enhanced research productivity, reward and recognition, as well as the benefit from developing other mentors. In addition to explaining these themes, the authors discuss how the findings can be utilized for career development and academic-identity formation for faculty.

Context

Multiple research studies have indicated that the student benefits from participating in undergraduate research include the development of critical thinking and problem-solving skills; clarification of career and educational goals; and preparation for careers or graduate school (Laursen et al., 2010, 2012). While the benefits to students participating in Undergraduate Research are clear, and while the need for effective mentorship is essential to realizing those benefits, few studies have considered how mentors may benefit from their role in Undergraduate Research. Laursen and colleagues (2010) asked 80 UR advisors and administrators about the costs and benefits of conducting research with undergraduates. Only 26% of the observations were about the benefits of mentoring undergraduate research, while 53% of responses were related to the difficulties, and 21% referred to additional strains. The three main benefits for mentors were career gains that arise from research productivity, intrinsic benefits, and the personal satisfaction that came from contributing to positive outcomes for students. Vandermaas-Peeler, Miller, and Peeples (2015) found that about 40% of the perceived benefits for UR mentors were psychosocial-the interaction of emotional and social factors of being in relationships. Despite the limited amount of research examining mentor benefits from UR mentoring even less is known about the way in which this form of mentoring impacts on career development and work-life balance. The aim of this study was to determine how UR mentoring fits into the career profile of award-winning mentors and to determine the factors that motivate engagement as a UR mentor. This paper focuses on the experiences of faculty in the US, UK, Canada and Australia, across a diversity of disciplines and institutional classifications, who have been recognized for their work as excellent undergraduate research mentors.

Methods

In-depth interviews were conducted with 24 recent award-winning mentors to represent a diversity in terms of gender, the nature of the mentoring (from embedded approaches within the curriculum to one-to-one mentoring), discipline and country. As part of the interview participants were asked: *How does undergraduate research mentoring fit into your career? What continues to motivate you as an undergraduate research mentor?* All interviews were transcribed and entered into Dedoose, a web-based software package, allowing multiple coders access to the transcripts. The responses were double-blind coded to identify grounded themes and emergent concepts.

Results

Five primary themes were identified:

1. Academic Identity and Motivations

Mentoring aligned with the academic's career goal of developing a rich undergraduate experience for their students. Faculty mentors gained further motivation to engage in UR mentoring when they could see the ways the experience changed the lives of their mentees. In particular, mentors indicated that their career goals included not just producing the next generation of college graduates but, for example, to get more women into science, or to provide opportunities for students from underrepresented groups to access the high-impact practice of Undergraduate Research.

2. Challenges to Academic Identity and Career Development

Despite the intrinsic motivation to mentor students in research, many participants talked about the challenges they faced. Several believed that their colleagues devalued their UR mentoring work because they did not see how it integrated with the primary responsibilities of a faculty member. Other challenges included time, workload structure,

the lack of institutional rewards, and lack of alignment to criteria for tenure and promotion.

3. Enhanced Research Productivity

The award-winning mentors said that their mentorship of undergraduate students enhanced their research productivity through co-authoring with students and expanded research opportunities based on gaining ideas from students.

4. Recognition and Reward

At the level of the individual, many faculty described feeling valued due to their successful mentoring practice. For some, the role of the UR mentor was more significant than their other roles at the institution. Beyond their university, mentors provided a clear sense of the contribution that their mentoring made to employability and to securing jobs for graduates as well as to the general scientific endeavour.

5. Developing Other Mentors

Working with colleagues helped participants to think about their own mentoring and become more reflective as practitioners.

Implications

Quigley (2011) suggested that academic identity is “complex and composed of many competing influences” and is “a constantly shifting target, which differs for each individual academic” (p. 21). Understanding the aspects that influence academic identity are important in the development of the faculty member. This study provides a unique contribution to the literature on how undergraduate research mentorship fits into the careers of faculty. First, the separation of academic roles is counter to what many of the award-winning faculty in our study discussed. They expressed appreciation for how UR mentorship allowed them to blend their roles as teachers and scholars. The trend toward

a blended teacher-scholar identity has been seen at many institutions that have adopted tenure and promotion documents that reference mentorship of students as an integral part of being a faculty member. Many of the award-winning faculty members in our study reported increased scholarly productivity when working with undergraduates and gave examples of how working with students expanded their research opportunities. Reward systems to acknowledge the importance of UR mentorship are important in providing recognition and enhancing promotion prospects. It is important to create opportunities to share good practice in UR mentorship. Pfund et al. (2006) have demonstrated that the implementation of seminars focusing on mentoring can be effective for student outcomes. These faculty development programs may also be helpful in focusing on how UR mentorship fits into the formation of academic identity through the personal, relational, and contextual domains (Lieff et al., 2012). The desired outcome from these recommendations is the broader participation of students in UR with more faculty taking on mentorship because of the significant benefits that can be gained for both parties. Additionally, these implications may help promote faculty careers and academic-identity formation.

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