

Book Review

Excellence in Mentoring Undergraduate Research

Edited by Maureen Vandermaas-Peeler, Paul C. Miller, and Jessie L. Moore



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Although most colleges and universities understand that undergraduate research (UR) is a high-impact practice that can deepen student learning, acknowledging the importance of this practice, the actual number of students involved in UR, and best practices in mentoring UR often are not connected. To address this issue, *Excellence in Mentoring Undergraduate Research* emerged from a multiyear, multidisciplinary seminar of the same name hosted by Elon University's Center for Engaged Learning. These intensive seminars addressed questions surrounding the effective implementation of best practices in mentoring UR. Three main themes emerged from these seminars and form the nexus of this compendium: student identity development, characteristics of high-quality UR mentoring, and the institutional factors that support UR.

As Vandermaas-Peeler and colleagues note in the introduction, the majority of existing research on UR is largely focused on the growth of program offerings and increases in student participation and development. Comparatively little work has been devoted to best practices for mentors, and “[g]iven the increased expectations for mentored UR in higher education, this is a significant omission” (10). Each of the core chapters (chapters 1–6) is presented as a standalone chapter, providing an in-depth literature review, new research evidence, and some examples of and challenges associated with implementation of best practices. The first three chapters examine the relationship between UR and identity development; chapters 2 and 3 specifically focus on the benefits accrued from UR for underrepresented students. Because of the established link among participation in UR, identity formation, and development in traditionally underrepresented students, the focus on strategies for mentoring these students in chapter 2 is particularly relevant. In this chapter, Shanahan highlights the need for mentors to be self-reflective

and intentional in recruiting underrepresented students into UR. These students also benefit from mentors who are accessible, understand the microaggressions they face, and share power. As Palmer and colleagues (chapter 1) indicate, as strategies for mentoring underrepresented students progress, future research should address the effects of mentorship on student development in other underrepresented groups (e.g., women, LGBTQA+, first-generation, low-income, intersectional).

Chapters 4–6 focus on models and institutional resources for faculty development. Chapter 4 (Walkington and colleagues) is particularly noteworthy, as it presents best practices for UR faculty mentors, addresses implementation challenges, and proposes solutions to elevate UR mentoring effectiveness. Specifically, this chapter presents 10 salient practices for effective mentoring, data on faculty evaluation of the strengths and challenges of these practices, and tools that faculty can use for self-reflection. Chapter 5's unique focus is on best mentoring practices within the arts, and chapter 6 presents the benefits and challenges of developing co-mentoring relationships. Research on the efficacy of multi-mentor models compared to the traditional model is lacking in the UR literature; this chapter advances that literature and relates the roles and responsibilities in co-mentoring to the 10 salient practices discussed in chapter 4.

There are three ancillary chapters (chapters 7–9) that present case studies highlighting the role of UR in the curriculum and reflect on mentoring relationships at community and faith-based institutions. Hewlett (chapter 8) presents the importance of community colleges in modeling scalable UR experiences. Community colleges in the United States enroll 41 percent of undergraduates, with disproportionately high numbers of underrepresented groups; this makes community colleges an underutilized yet important setting in which to introduce UR experiences. However, constraints exist such as misaligned promotion structures, heavy teaching loads, and student attrition.

Overall, this book provides an excellent compilation of the literature and an entrée into implementation for those new to the establishment and formalization of UR mentoring. However, it does not fully fill the niche for those practitioners looking for a comprehensive guide, tools, and surveys for implementation and assessment of best mentoring practices. Although some chapters address excellence in mentoring more so than others, the strengths in the aforementioned chapters support the use of this book as a general resource guide for mentoring in UR.

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This cross-disciplinary volume incorporates diverse perspectives on mentoring undergraduate research, including work from scholars at many different types of academic institutions in Australia, Canada, the United Kingdom, and the United States. It strives to extend the conversation on mentoring undergraduate research to enable scholars in all disciplines and a variety of institutional contexts to critically examine mentoring practices and the role of mentored undergraduate research in higher education.

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