## Introduction

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he summer 2020 issue of SPUR presents a medley of articles that range in topics and perspectives from a two-year college and four-year US institutions to a university in Germany. Beginning the issue, Thomas J. Wenzel offers a response to an article related to NSF programs that have advanced undergraduate research (UR) and was published in the winter 2019 issue. Wenzel describes the significance of the Research in Undergraduate Institutions program and the Major Research Instrumentation program along with their contribution to the advancement of UR.

Beginning the Practice section of the issue, Vivian Kao and colleagues describe an interesting type of course-based undergraduate research experience (CURE), in which firstyear engineering students are introduced to education-based research. Although this population may readily engage in engineering research, they may not otherwise experience humanities- or education-based research. Joanna Werner-Fraczek offers a detailed description of the active and collaborative program Flying with Swallows, which engages two-year college students. Heather Dillon describes an academic-year CURE that immediately follows a summer research experience. Focusing on the publication process, including writing, and researching future directions, this CURE resulted in a significant number of publications and positive attitudes about pursuing future research opportunities. Closing out this section, Halcyon Lawrence and colleagues describe their continuous course lab (CCL) model, which facilitates the engagement in humanities research of students in fields other than the humanities.

Franziska Nikolov and colleagues contribute an international perspective related to training preservice teachers. The authors observed that freedom of choice, especially in the selection of the research instrument, is positively associated with the belief that an undergraduate research experience is valuable. Three articles in this issue relate to assessment. First, Heather Haeger and colleagues seek to explore the existing literature related to the future of assessment of undergraduate research. Using information from interviews and focus groups with leaders in UR, they identify specific challenges that should be addressed for the next phase of meaningful assessment. Their analysis of almost 300 assessment studies reveals that student outcomes are assessed far more than faculty outcomes, a significant bias exists toward STEM disciplines, and very few studies would qualify for the What Works Clearinghouse.

Rachel Hayes-Harb and colleagues describe the development and implementation of undergraduate research learning outcomes that can be applied regardless of discipline and their assessment of poster presentations via a common rubric at the University of Utah. The authors invite readers and institutions to use this tool on their own campuses and share their experience. Finally, Mary Crowe and colleagues identify the challenge to develop inclusive assessment instruments for undergraduate research. They call for the previously STEM-centric focus of UR assessment to shift toward a broader interdisciplinary model. As a trio, these articles challenge us to think broadly about assessment.

We are living in extraordinary times. Perhaps this is a hackneyed phrase, but it is accurate to describe the months since our last issue of SPUR as truly extraordinary. With a global pandemic lockdown, cancelled plans, shifts to online learning, ongoing racial conflict, and fiscal uncertainty, this summer has been far from normal. In reading these articles, I'm reminded that scholarly work can be an oasis and a place of refuge in the information hurricane that saturates our daily lives. When there are days we don't know what is certain, when our very communities are challenged in unimaginable ways, we can return to the discourse of ideas. Undergraduate research is still a valuable practice in higher education. This issue of SPUR reminds us of this truth.