From the *CURQ* Issue Editor

In the past few decades, we have seen undergraduate research move from an elective activity conducted by a handful of faculty and students to becoming a central part of the undergraduate experience at many institutions. The fall 2016 and winter 2016 issues of *CUR Quarterly* focused on integrating undergraduate research into the curriculum—a practice that has the potential to reach all students and that is becoming more common at colleges and universities. In this issue, the contributors are thinking past current practice to examine how undergraduate research impacts the landscape of higher education of the future. They share with us new approaches that build upon and enhance exciting changes taking place in education and society.

Jenny Olin Shanahan (Bridgewater State University), Helen Walkington (Oxford Brookes University), Elizabeth Ackley (Roanoke College), Eric E. Hall (Elon University), and Kearsley A. Stewart (Duke University) explore this theme by asking award-winning mentors of undergraduate researchers to imagine the future of their work with students. This fascinating study reveals the increasingly inclusive nature of student engagement in research from ethnographic, disciplinary, and curricular perspectives. Faculty see this democratization of participation as an imperative in the higher education landscape of the future.

Karen Mumford, Stephen Hill, and Laurel Kieffer (University of Wisconsin–Eau Claire) consider the potential for undergraduate research to serve as an integrative experience for students, moving beyond the confines of disciplinary and classroom-based learning. They describe a synergistic effort that combined the high-impact practices of learning communities and undergraduate research, resulting in surprising new gains in student learning outcomes. This approach mirrors a broader realization that, to be successful postgraduation, students must not only master their field of study but also practice how to integrate expert knowledge with other disciplinary learning and skills, and the large amount of information relevant to a problem available at their fingertips.

In “Leveraging the Maker Movement for Undergraduate Research: Developing a Making and Innovation Culture,” Jeanne Mekolichick and Joseph Wirgau (Radford University) describe how they have built upon the maker movement to engage diverse student populations in undergraduate research. They argue that introducing students to “Making” builds students’ confidence and skills in design, teamwork, and collaboration, as well as develops their interests in subsequent research, scholarship, and creative endeavors.

Linda Chamberlain and Susan Mendoza (Grand Valley State University) build on the theme of innovation with their employment of design thinking as a pedagogical framework for project-based learning. Their course asks students to research and test creative solutions to particularly thorny

problems. Readers will find a thorough introduction to the design-thinking paradigm in their article.

Faculty at Utah State University offer a new model for engaging students in scholarly work through the curation of exhibits. Alexa Sand, Becky Thomas, Erin Davis, Darcy Pumphrey, and Joyce Kinkead describe introducing students to curatorial work on physical art installations as well as digital exhibits relevant to a variety of disciplines and interdisciplinary themes.

In the summer 2017 *CURQ on the Web*, Candice Foley and Nina Leonhardt (Suffolk County Community College) describe how a community college partners with nearby research facilities to create access to undergraduate research for their students, providing early exposure to research for students intending to transfer in STEM fields.

The five vignettes in this print issue, as well as the two that are included in the summer 2017 *CURQ on the Web*, expand our vision and practical tools for undergraduate research in the future. Stacia Miller, Christina McIntyre, and Suzanne Lindt (Midwestern State University); Nathan Ryan (Bucknell University); and Conrad Zapanta, Wayne Chung, and Joanna Dickert (Carnegie Mellon University) all employ collaborative methods that engage students in cross-disciplinary research, design, and production. David Burns and Anya Goldin (Kwantlen Polytechnic University) describe their application of undergraduate research to community decision-making, whereas Seth Hudson and Douglas Eyman (George Mason University) explore ways to build on the excitement of video games to increase student interest in research.

Tricia Meredith and Donna Chamely-Wiik (Florida Atlantic University) offer practical advice on ensuring the safety and success of minors—in this case, dual-enrolled high school students who do research in courses alongside their college peers. In *CURQ on the Web*, Donna Chamely-Wiik (Florida Atlantic University) and Bethany Usher (George Mason University) describe a campus-wide approach to implementing a research-intensive course designation that enables evaluation and tracking of student outcomes in a systematic way, a method that many CUR members will be keen to adapt to their campuses.

Higher education is in a period of transition. The boundaries among disciplines, between secondary- and university-level study, and between campus- and community-based research continue to blur. The articles in this issue demonstrate that undergraduate research is both responsive to these changes and is leading innovative pedagogical approaches that prepare students for twenty-first-century life and work.

Janice DeCosmo

University of Washington
CURQ Issue Editor

doi: 10.18833/curq/37/4/9