From the *CURQ* Issue Editor

The Winter 2016 *CUR Quarterly* continues an exploration of the theme that was introduced in the fall 2016 issue, exploring how colleges and universities integrate undergraduate research experiences into their curricula. This issue probes the theme at the disciplinary level, examining approaches to this pedagogical shift in various disciplinary contexts. As readers

will see from the scope of fields represented here, faculty in many departments are designing courses that include introductory research experiences to enhance learning and to teach students the skills and approaches they will need for more advanced work as senior undergraduates, graduate students, or professionals.

Deborah Overath, Daiyuan Zhang, and J. Robert Hatherill at Del Mar College—a two-year, Hispanic-serving institution—describe their experience implementing Howard Hughes Medical Institute’s SEA-PHAGES (Science Education Alliance-Phage Hunters Advancing Genomics and Evolutionary Science) program in an introductory biology course with funding from the National Science Foundation. Student outcomes indicate the approach to be promising—one that faculty at both two-year and four-year institutions will want to explore.

Zamira Simkins and coauthors address the need for new approaches in social sciences to increase undergraduate research participation in those fields. Their article describes the initiative they have taken at University of Wisconsin–Superior to integrate undergraduate research into introductory-level economics courses.

Patricia Baynham, at St. Edward’s University, points out that introducing research into required coursework is an educational equity issue. Working with students a bit further along in the microbiology curriculum, Baynham describes how she integrated a novel assay into a required microbiology laboratory, asking students to test hundreds of field-acquired plant extracts for antimicrobial agents. All microbiology students get to experience the research process that encompasses identifying methods, reviewing the literature, and finally testing samples and analyzing results.

In the final themed article of the print issue, Jeanne Match-Maroney and Penelope Moore, at Iona College, combine two innovative pedagogies—“flipping the classroom” and integrating research into coursework—to increase student engagement and motivate deeper learning in research methods courses in social work. Their article is timely for faculty in a wide variety of fields who may be exploring the use of both of these pedagogical innovations.

The vignettes offer a glimpse into how research experiences may be integrated into the curriculum in additional disci-

plinary contexts. Brigett Scott, at Nicholls State University, describes the approach she has taken in the dietetics program, and J. Chris Arndt and colleagues from James Madison University provide an example from history. In the *CURQ on the Web*, Nicole Bies-Hernandez and colleagues at Northern Arizona University redesigned a large research methods course in psychology to provide students with a research experience. Emily Wiley and Douglas Chalker show how faculty research and student learning benefit from course-based research experiences in genomics.

In the *CURQ on the Web*, Thomas Steiger and colleagues at Indiana State University describe their partnership with a state agency that enables them to engage first- and second-year students in environmental monitoring projects as part of two large introductory courses.

The examples of course-based undergraduate research presented here show the wide variety of institutions, disciplines, and faculty eager to engage students as active learners in their courses by requiring them to do research. For students in these courses and degree programs, undergraduate research is no longer an optional educational enhancement but becomes an expectation for all students. Given the gains in learning, critical thinking, career development, and self-confidence shown in the student outcomes of many of the projects in this issue, this seems like an educational model that offers powerful benefits for students.

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CUR Calendar

JANUARY 2017

13	Deadline, CUR Biology Division Student Travel Awards
13-15	Broadening Participation Institute
15	Deadline, CUR Psychology Division Student Travel Awards

FEBRUARY 2017

16-18	CUR Dialogues 2017—Reigniting Research: Identifying and Pursuing Diverse Options, Arlington, VA
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APRIL 2017

6-8	National Conference on Undergraduate Research, University of Memphis
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JUNE 2017

27-29	Undergraduate Research Programs: Undergraduate Research Collaborations Conference, Northern Arizona University, Flagstaff
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Be sure to check www.cur.org for the most up-to-date news and the Event Calendar.