



NewsBriefs

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Connect with CUR!



Upcoming Events

CUR Dialogues 2018
Hyatt Regency Crystal City
February 15-17, 2018
(Arlington, VA)
<https://bit.ly/2018CURDialogues>

AAC&U 2018
Diversity, Equity, and
Inclusive Democracy:
The Inconvenient Truths;
March 22-24, 2018
(San Diego, CA)
<https://www.aacu.org/>

AAC&U 2018
One-Day Institute on
Signature Work
March 24, 2018
(San Diego, CA)
<https://www.aacu.org/>

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Message from the Chair

Bethany Usher, George Mason University

Dear Fellow UPRDer,

Happy New Year! I'm drinking the last sips of my eggnog and planning for the new semester! As I look over the list of things I'd like for my undergraduate research office to try, I'm struck by how many of our "good ideas" are inspired by you, in conversations at the URPD conference last summer, presentations at the CUR biennial conference, at CUR institutes, and over the CUR and URPD listserves. My favorite aspect of CUR is the culture of communication and sharing.

As many of you know, our listserves were replaced this past fall with the new CUR Community, and I know that many URPDs have been frustrated by the loss of the trusty listserve. According to the CUR National Office, URPD has 795 members, and 184 have logged into the new CUR Community (23 percent), but only 45 have posted (5.7 percent). The Community forums have the potential to not only replace the listserve but also expand on them. Within the CUR Community, you can search conversations and share documents that are permanently (well, as much as anything digital can be) archived.

To set up a new URPD Community within the CUR Community page, we need to show that 25 percent of the URPD members have logged in, and at least 12 percent have posted in the CUR Member Forum. URPD is currently using the Main Community Forum, and we encourage you to increase your use of it. Our goal is to have more than the minimum number of URPD active users by March, so that we can launch the new URPD Community by the CUR meeting in June. This is a great time to ask for information as you plan your semester, search the existing threads, answer other queries, or share news or events that others may be interested in.

To join in, go to <https://community.cur.org/home>, and click on the Sign In button at the top. You'll be taken to the CUR page, where you log in with your regular credentials, and are taken back to the CUR Community page. From there, you can post a new question or comment or link in the CUR Member Forum or respond to someone else's post. For help or additional information, please contact Robin Howard (robin@cur.org).

We look forward to sharing ideas and increasing the quality of undergraduate research!

Sincerely,
Bethany

P.S. Our division has had a slight name change! We used to be the Undergraduate Research Program Directors division. As I mentioned in the summer URPD newsletter, we want to be more inclusive of all people who help administer undergraduate research programs—so our new name is the **Undergraduate Research Programs Division** (keeping the URPD acronym).





Upcoming Events (cont'd)

CUR Broadening Participation Institute 2018
March 23-25, 2018
(Bowie State University, MD)
<http://bit.ly/2018-CUR-BPI>

NCUR 2018
April 4-7, 2018
(University of Central Oklahoma)
<http://bit.ly/info-NCUR2018>

CUR 2018 Undergraduate Research Week
April 9-13, 2018
https://www.cur.org/events/undergraduate_research_week_2018/

CUR 2018 Posters on the Hill
April 17-18, 2018
https://www.cur.org/events/2018_POTH/

Q&A

Culled from the CUR Community Forum!

What does your institution do to increase learning opportunities for students participating in your celebration day?

We created an Engagement for Extra Credit at the Undergraduate Research and Creative Activity Forum. Faculty offer extra credit points or have an assignment for grade. The students check in at the Engagement for Extra Credit table and are given the instructions on how to access

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Spotlight: Supporting Nontenure-Track Faculty Dedicated to Undergraduate Research Mentorship

Patrick Killion, University of Maryland



The University of Maryland (UMD) initiated a major undergraduate research program in 2014 to provide authentic faculty-led research experiences, mentorship, and accelerated opportunity for first-year students from a wide range of academic backgrounds (FIRE, The First-Year Innovation & Research Experience—<http://fire.umd.edu/>). Through FIRE, first-year students build community, earn general education degree credit, and are immersed in research in a program designed to increase degree-relevance, academic success, and retention, as well as accelerate professional opportunity. FIRE launched in the academic year 2014-15 with a cohort of 225 students and has since grown to annually serve nearly 600 early-matriculation undergraduate students through the operation of 17 distinct research groups called streams.

FIRE streams are initially designed by tenured or tenure-track (TT) faculty members. Day-to-day operations, instruction, and mentorship of each of these streams, however, is led by a special class of nontenure-track (NTT) faculty members referred to as Research Educators. They are experts in the research discipline of the stream and are responsible for the success of students. They are appointed as assistant clinical professors with new Research Educators recruited from a reliably strong pool of applicants who have a committed interest in continued research productivity and leadership, curriculum development, instructional pedagogy, and student mentorship. Research Educators manage the curriculum, assessment, research productivity, facilities, budget and undergraduate peer mentor staff of a stream. Given that their Research Educator appointment is their sole role at UMD, they are available to the students of their stream during most business hours of daily operation and provide the students they lead with broad forms of mentorship.

The FIRE program currently has 16 full-time Research Educators. Research Educators may stay in the role for many years or use the position as a professional step toward the attainment of faculty positions, leadership positions in industry, and administrative positions in higher education. The role of the Research Educator is essential to the FIRE program and realization of targeted student outcomes. While it is valuable for students to have access to the TT faculty members associated with each FIRE stream, the Research Educators form direct, powerful, and often lasting relationships with students through their daily availability, commitment, and dedicated roles.

Ongoing training, professional development and support of Research Educators is integral to ensuring continuity of FIRE student experiences and targeted outcomes. Training begins with the assignment of an experienced mentor to each new Research Educator. The mentor is able to share valuable perspectives regarding how to develop documentation, research processes and mechanisms of formative assessment that allow mentorship to scale to the nearly 40 students each Research Educator mentors annually. Additionally, each Research Educator joins the UMD Teaching & Learning Transformation Center (TLTC) Launch program (<https://tltc.umd.edu/launch>). The Launch program provides all UMD faculty with a cohesive but customizable series of professional development activities to help them advance their teaching; collect evidence of their effectiveness; and leverage innovative, evidence-based approaches in their classrooms. In this manner, FIRE Research Educators become active participants in a community of educators dedicated to ongoing curricular and pedagogical growth. Finally, Research Educators form strong collegial relationships with the TT faculty members that originally proposed and continue to serve as research advisers for FIRE streams. These relationships allow Research Educators to build valuable skillsets through experience-driven advice regarding research leadership, grant authorship, and publication.

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Q&A (cont'd)

engagement materials using their electronic devices. Students evaluate presentations using a rubric and submit them online.

We use Google to create the forms and surveys. Professors send us the course information ahead of time. Students and faculty respond positively to this activity. (*Magaly Rincón-Zachary, Midwestern State Univ*)

We have two poster sessions, so students assigned to present during session 2 are encouraged to provide feedback (we give them a printed rubric) to students in session 1 and vice versa. The hook is a gift card raffle. Students must complete at least 3 feedback forms to enter the raffle. The actual feedback students provide to each other varies in quality, but the benefit is that students have to listen to three other student projects with enough attention to provide the requested feedback. We give our student presenters their corresponding forms for them to reflect on the comments from other students. (*Lourdes Echegoyen, University of Texas at El Paso*)

We invite faculty, alumni, and donors to attend our undergraduate research celebration, Made in Millersville, as reviewers. The reviewers work in teams and provide written feedback to presenters with a focus on how they presented and spoke about their work. We also offer a generic extra-credit form faculty can use to encourage their students to attend. Importantly,

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Spotlight (cont'd)

Annual evaluation of Research Educators is important to ensure recognition of excellence, enumeration of challenges to be engaged, and opportunities for growth. This process is primarily driven by evaluation of Research Educator excellence in four areas: research leadership, education, mentorship, and longer-term professional development. Research leadership is primarily characterized by the ownership and execution of the stream's research agenda. Does the Research Educator clearly define and lead the stream in overcoming resource, logistical, or intellectual challenges that inhibit the attainment of results? Educational excellence relates to the Research Educator's curricular and pedagogical capacities. Do Research Educators employ best practices that include proactive formative assessment and active learning strategies that challenge and ensure the growth of the students they instruct? Mentorship refers to their capacities as personal, academic, research, and professional advisers. Do Research Educators work to form strong relationships with their students that impact student-reported senses of self-efficacy, identity and community? Next, assessment of professional development engagement ensures that Research Educators are growing in a manner that will serve both the students they lead and their own longer-term professional intentions. We ensure that Research Educators are active within their discipline-specific research communities and growing in their academic capacities. Finally, for each of these enumerated categories of excellence, we use analytics to combine data provided by regular use of the Undergraduate Research Student Self-Assessment (URSSA) and Persistence in the Sciences (PITS) instruments with UMD course evaluation data to better understand student experiences in each FIRE stream that relate to research leadership, educational capacity, and mentorship provided by the Research Educator that leads the group.

Dedicated NTT faculty members leading undergraduate research groups can have profound educational and professional impacts on their students. Their long-term success in this mission requires clear enumeration of professional expectations, ongoing support and regular assessment of areas of excellence and challenge.

Lessons Learned from a Community College Undergraduate Research Program

Ashley Hagler, Gaston College

Beginning and sustaining an undergraduate research program at the community college level is a highly novel endeavor. While the underlying fundamentals and principles are the same as a program at almost any other college or university, the logistics and challenges are often unique. Gaston College began this journey in 2009, and our success since then has hinged upon several elements.

It has been critical to get the right people involved in the right roles at the right time, and support these individuals with guided professional development. Traditionally, the focus of community college faculty has been solely teaching and not conducting research as a scholarly activity; however, since undergraduate research has been documented as a high impact teaching tool, many community college faculty have begun to embrace the practice. Initially many faculty were hesitant to implement undergraduate research because they had not done hands-on research in a number of years or had nonresearch-based graduate degrees. As such, the faculty were unsure as to where to begin and how to successfully change their curriculum to support this high-impact learning strategy. The success at Gaston College began by getting a small group of

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Q&A (cont'd)

the extra-credit form requires that the student interact with presenters, ask questions, and listen to presentations so that it is more than simple proof of attendance. We especially encourage faculty teaching lower division courses to utilize the form, the hope being that students unsure of how to engage in research or other creative experiences, or unsure of what they might want to major in, will have a chance to talk to peers who have successfully engaged in a project and become inspired. (*René Muñoz, Millersville University*)

We have first-year students in our Honors program serve as the moderators for the talks. We think this helps to introduce them to what will be expected of them in a few years plus helps with public speaking skills. We give a short training session about keeping on time, generating discussion questions and making sure that a faculty member is in the room just in case things start to come unhinged. Second, we share an assignment that requires students to go to different types of presentations (oral, poster, creative, performing) and reflect on some questions regarding to what they learned, how it connects to something they already knew, what questions they now have, etc. (*Mary Crowe, Florida Southern College*)

Lessons Learned (cont'd)

enthusiastic faculty leaders involved in the process and gaining administrative support. Gaining administrative support encouraged participating faculty in fearlessly trying new techniques without the worry of the effects of negative student evaluations and allowed faculty to ask for what they needed to make the changes in their courses successful. In particular, one of the major supports provided for faculty was extensive professional development on how to design and incorporate authentic undergraduate research into existing courses. As a result of this support, every science faculty member who teaches in the Associate of Science degree program now actively incorporates authentic undergraduate research experiences into their curriculum courses.

Because of large teaching loads (18–24 contact hours per week) that lead to a lack of working time outside of the classroom, and budget and funding challenges, it has been necessary to embed the research opportunities into established courses and to be creative in searching for funding opportunities to support research and student dissemination of work. At Gaston College, we have sought out community and national grant opportunities to support travel and dissemination costs, used lab fees to support the costs for required research supplies, and sought out community and industry partnerships to provide ample opportunities for students to participate in research in a variety of settings. Additionally, we have used the option of honors credit for classes to compensate students who participate in apprentice-style mentored research outside of class. Because of this, in just over eight years we have provided thousands of first- and second-year students with authentic undergraduate research experiences in the sciences; have had several hundred students disseminate their work at the local, state, and national levels; and have helped students seamlessly transition to STEM programs at four-year universities and into the local workforce.

Undergraduate research programs at community colleges are novel and not without their specific challenges, but with fearless faculty, administrative support, and some creativity, they can be a successful endeavor that will support both students and faculty in their scholarly pursuits.

URPD Updates and Accomplishments

Joseph Flaherty from Coker College received an NSF-funded, multi-institutional S-STEM grant. The project, “Collaborative Research: Institutional Collaboration to Recruit, Retain and Graduate Low-Income Students in Biology,” was awarded for \$4.5 million to six collaborating institutions and the nonprofit organization The Yes We Must Coalition; it will support a study involving 114 incoming students next year. Congratulations to Joe who serves as the principal investigator!

Lance Barton was promoted to full professor at Austin College. He was also successful in receiving funding for program expansion and course improvements. The funded projects include:

1. Expansion of the Austin College STAR (STEM leadership development) program intentionally into mentored research experiences through NSF IUSE (Co-PI)
2. Establishment of a “mini” research experience in the sciences for incoming students identified as “at risk” for 2017 and 2018. Program call ENSURE (Enhancing New Student Success through Undergraduate Research Experiences)—funded through 2 different external sources (PI on both)
3. Multiyear support for his courses and integrated research program with undergraduates in the area of basic cancer biology (PI on both)

Congratulations, Lance!