# CURPA Diem: Newsletter of the Physics & Astronomy Division



A publication of a division of the Council on Undergraduate Research Winter 2019

# View from the Chair

Happy Lunar New Year!

It's my pleasure to bring you up-to-date on some of the CUR-PA Division activities. There's some news from the National Office that should interest division members as well.

CUR-PA has recently decided to reboot its Student Travel Award program. Over the last two years, there has been a strong demand for such support, and we have decided to commit the majority of our annual budget to support student travel to professional meetings this year. There will be two due dates this spring to accommodate the range of spring/summer meetings most likely to be of interest to members. You'll need to act fast to respond to the first one, which will be about the time this newsletter circulates. Also, in the works is a call for nominations for the CUR-PA Division Faculty Mentor Award. This announcement will be on the division webpage shortly—keep an eye out!

CUR elections were underway as this newsletter was being prepared. The division had a strong slate of candidates this year, and the next newsletter will report the results. I hope some of you will consider running for the CUR-PA council next time.

This spring, CUR-PA will be reaching out to professional societies in physics and astronomy to ask that they adopt or renew their policy statements on the importance of incorporating undergraduate research in the

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# About CUR's Physics & Astronomy Division

The P&A Division of the Council on Undergraduate Research provides networking opportunities, activities, and resources to assist Physics and Astronomy administrators, faculty members, students, practitioners, and others in advancing undergraduate research.

## • Newsletter Editor

Richard Thompson Cabrini University rt533@cabrini.edu

#### • Division Chair

Terry Oswalt Embry-Riddle Aeronautical University Terry.Oswalt@ERAU.edu

CUR Physics and Astronomy Div Facebook page

The Council on Undergraduate Research 734 15th Street, NW • Suite 850 Washington, DC 20005

Tel: 202/793-4810 Email: <u>CUR@cur.org</u> WWW: <u>www.cur.org</u>

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Copyright © 2019 Council on Undergraduate Research curriculum. If you know of a society that should be included in this outreach, please drop me an email so we can add it to our list of contacts.

The CUR Executive Board (CUR-EB) has been very busy this year. At the January meeting, CUR Assessment Research Coordinator Heather Haegar gave a preliminary report on her work with five universities on the assessment undergraduate research. In late December, Congress passed H.R. 5509/S.3583 "Innovations in Mentoring, Training and Apprenticeships." This bill directs funding agencies to create new grant programs for undergraduate internships, and surely it will be of interest to many of us. Several names have been selected for the new position of CUR-EB general representative; you can expect more about this at the summer business meeting. As some of you may know, CUR Executive Officer Beth Ambos is retiring this year. If you know of a wellqualified person who might be interested in this position, contact the search committee co-chair Anne Boettcher.

This summer, the CUR Annual Business Meeting will be held on June 25–27. It will be immediately followed by the CUR Undergraduate Research Programs Conference on June 27-29. Both are at The Ohio State University in Columbus. Watch the cur.org website for updates and registration information. Even if you are not a Councilor, you are welcome to attend any of the division's sessions. Suggestions from division members for the ABM meeting's agenda are encouraged.

Did you know that faculty at "Enhanced Members CUR" Institutional of are automatically individual members? There are several hundred CUR Institutional members representing more than 13,000

individual members across a dozen different disciplines. I'll bet there are at least a thousand physicists and astronomers at these institutions mentoring students in their research. They all should be involved in CUR-PA. Help us get the word out!

As always, the division is only as active and useful as you make it. How can we better engage our colleagues? What new initiatives would improve our ability to support undergraduate research? Any CUR member can serve on our committees, task forces, or advisory groups. Have a look at the CUR website, and let us know where you are willing to help.

On a final note, we'd love to make a few more Student Travel Awards this year, but we need your support. Or, contribute to whatever CUR-PA Division activity interests you most. It's easy; just click on the "give" button at the top right side of the cur.org website.

As always, we welcome articles, notes and photos about your undergraduate research activities and accomplishments for this newsletter. Materials should be sent to Rick Thompson at rt533@cabrini.edu. Keep us upto-date on your activities by posting on the CUR-PA Facebook page.

I hope to see you at the summer ABM!

Terry Oswalt Chair, CUR Physics and Astronomy Division Embry-Riddle Aeronautical University Terry.Oswalt@ERAU.edu

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#### Plan to Attend NCUR 2019!

Like past events, NCUR 2019, hosted by Kennesaw State University on April 11–13, 2019, promises provide to your undergraduates with an outstanding experience. Oral, poster, visual art and performing art works will be presented by over 4,000 undergraduates.

Plenary speakers for NCUR 2019 include:

- (1) Dr. Alistair Dove, vice president of research and conservation at the Georgia Aguarium,
- (2) Dr. Valerie Montgomery Rice, president and dean of Morehouse School of Medicine, and
- (3) Mr. Frank Patterson, president of Pinewood Atlanta Studios.

NCUR 2019 special interest sessions include, among others:

- (1) applying to graduate school
- (2) developing a resume or CV, and
- (3) applying to medical school.

NCUR 2019 has a number of exciting opportunities planned, including:

- (1) A Friday Night Big Event the Atlanta Braves versus the New York Mets at the new SunTrust Park,
- (2) Campus Open Houses that allow attendees to network with peers in their fields.
- (3) Lunchtime Mentorship and Leadership that allow attendees the Sessions opportunity to have small-group discussions about different topics (e.g., LGBTO leadership, veteran college student experiences), and
- (4) A free preconference Career Fair on April 10 with employers from all over metro Atlanta and Georgia.

The deadline for early conference registration is February 26, 2019. For more information

NCUR 2019, please about http://www.cur.org/what/events/students/ncur/2019/. Kennesaw State University, which is located just north of Atlanta, GA, is easily and inexpensively accessible by both air and car. Plan to attend and plan to bring your students to NCUR 2019!

## Applications Now Open! 2019 Physics & Astronomy Student Travel Awards

We are pleased to announce that the application window is now open for Physics and Astronomy Student Travel Grants. These grants, up to \$500 each, fund undergraduate students presenting original research results at professional meetings.

The spring 2019 submission deadlines are: February 22 and April 19 APPLY NOW!

Applications must be submitted at least 10 days prior to travel. To learn more about eligibility and requirements, click here!

Ouestions? Contact CURPA Councilor Rae M. Robertson-Anderson (randerson@sandiego.edu)

#### 2019 Posters on the Hill

Abstracts submitted to the Posters on the Hill event are currently under review. More than 300 completed abstracts were submitted this year, with each abstract evaluated by at least three reviewers. Selections should be announced by mid-February. The event is scheduled for April 29-30, 2019, in the US Capitol, Washington, DC.

> Michael Jackson Millersville University mjackson@millersville.edu

# AAS Task Force Report Available

The AAS task force on diversity and inclusion in graduate education just released its final report; many of the recommendations should also be considered in all departments and undergraduate research groups. It can be found here.

> Carol Hood Cal State San Bernardino chood@csusb.edu

## CUR Departmental and Program Review

For members of departments planning an external review of their department or program, there are a number of significant tasks to accomplish. Typically, these include performing a thorough self-study and securing appropriate external reviewers. Whereas some institutions have a specific, required format and timeline to plan and organize a review, others leave it to the department to determine the specific structure.

The CUR Departmental and Program Review Committee offers one option to accomplish these goals by helping members identify potential reviewers and providing a thorough list of potential self-assessment components: https://www.cur.org/what/services/program/

Upon contacting CUR Program Review Services, you will be connected with the Astronomy liaison who Physics and maintains a list of potential reviewers and will work with you to identify an appropriate team. Reviewers are CUR members who represent a broad range of backgrounds and expertise beyond undergraduate research to perform a comprehensive program review. CUR recommends completing a self-study in advance for a team of two or more reviewers for a two-day site visit.

The time frame for a review typically includes preparing the self-study, which may take many months, providing this document to the review team 3-4 weeks ahead of the site visit, and receiving a formal report from the review team 4-6 weeks after the visit. The CUR Program Review webpage includes a comprehensive list of items that might be included in a self-study, with the specifics dictated by the goals and needs of the department.

Information self-study potential on components are available online. The fee for the review is \$600 per reviewer per day, which is coordinated directly with the consultants. There is also a \$750 CUR fee. but it is waived for CUR Institutional and Enhanced Institutional Members.

If you have any additional questions, or if you would like to be considered as a potential reviewer, please feel free to contact me.

> Brian Utter CUR Program Review, Physics and Astronomy liaison brian.utter@bucknell.edu

# **Opportunities**

If you have a job opening or program that you would like to advertise here, please send Thompson information to Rick (rt533@cabrini.edu) for inclusion in the next newsletter.

## REU Opportunity at Miami University (Oxford, OH) in Physics and Engineering

The Physics Department at Miami University (together with engineering faculty) has a funded Research Experience for Undergraduates (REU) program beginning summer 2019. The program will span a 10-week period and will support a cohort of up

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to 10 students. Students will work in small teams (with other students) and in close collaboration with a chosen faculty mentor. Research activities are open in areas of quantum computing, atomic and molecular optics, biophotonics, condensed matter and material science. In addition to working in the laboratory, there will be social and teambonding events, opportunities for professional development activities. interactions with students from other REUs on campus. Miami University is well-known nationally for its dedication to undergraduate education, and we expect this REU program will strengthen academic skills of all participating students. Please see http://miamioh.edu/cas/academics/departments/physi cs/academics/reu-program/index.html for more information and the application process.

## Research Corporation for Science Advancement - Program Director Position, January 2019

The Research Corporation for Science Advancement (RCSA), which was founded in 1912 to support scientific research and education at universities and colleges across the country, is seeking to hire a program director. Located in Tucson, AZ, RCSA focuses on early-career faculty in the physical sciences, specifically chemistry, physics, astronomy, and overlapping fields through its two signature programs, Cottrell Scholars and Scialog. Key to the success of these programs is the work of our program directors, who actively engage with science faculty to build collaborative communities for interdisciplinary research, for innovative approaches to science education, and for guiding career development.

A description of the Scialog program can be found at http://rescorp.org/scialog and of the Cottrell Scholar program http://rescorp.org/cottrell-scholars. Qualified candidates will have had faculty experience, will have conducted research in chemistry, physics, or astronomy that overlaps with the life sciences, and will have taught students in the classroom and in the laboratory. Prior experience at a foundation is not required but would be a positive. Statements of interest in the position along with a CV should be sent to the attention of Lisa Jo Kastigar at ljkastigar@rescorp.org.

### James Madison University Jobs -General Education Program -Math / Science Area Coordinator

#### joblink.jmu.edu

The General Education program at James Madison University (JMU) is accepting applications for coordinator of the Math and Science Area. The position is a 10-month, tenured position that will begin August 25. 2019. General education at JMU is an outcomes-based program that serves our institution's 20,000 undergraduate students. The math and science area comprises courses in three distinct groups (10 credit hours total). Eight different departments contribute courses to the area: biology, chemistry and biochemistry, geology and environmental science, mathematics and statistics, physics and astronomy, integrated science and technology, psychology, and anthropology. The General Education program values diversity in its faculty, staff, and students. We seek a colleague who shares the program's commitment to diversity and inclusion and who will be a dedicated teacher, active scholar, and committed to the success of students with a wide variety of backgrounds. preparations, and career goals.

#### **CURPA** Councilors

Rae Robertson-Anderson, University of San Diego, CUR Fellows Committee randerson@sandiego.edu

Maria Bautista, Kapi'olani Community College. mariab@hawaii.edu

Matthew Beaky, Juniata College beaky@juniata.edu

Mark Biermann, Valparaiso University Constitution and Bylaws Committee mark.biermann@valpo.edu

Saida Caballero-Nieves, FIT scaballero@fit.edu

Beth Cunningham, AAPT. Finance Committee; Diversity & **Inclusion Task Force** bcunningham@aapt.org

Chris Fuse, Rollins College. Nominations Committee cfuse@rollins.edu

Taviare Hawkins, UW La Crosse thawkins@uwlax.edu

Carol Hood, Cal State San Bernardino Diversity and Inclusion Task Force chood@csusb.edu

Chris Hughes, James Madison University hugheswc@jmu.edu

Michael Jackson, Millersville University. CUR Posters on the Hill, Goldwater Faculty Mentor Award Committee Michael.Jackson@millersville.edu

Seth King, UW La Crosse sking@uwlax.edu

Lakshmi Krishna, Colorado School of Mines lkrishna@mines.edu

Hasitha Mahabaduge, Georgia College & State University, SPUR Journal Hasitha.mahabaduge@gcsu.edu

John Mateia, Goldwater Scholarship Foundation. CUR/Goldwater Scholar Faculty Mentor Award Committee. NCUR Oversight Committee johnmateja2@gmail.com

Duncan McBride, formerly at the National Science Foundation. CUR Finance Committee, demcbride@verizon.net

Terry Oswalt, Embry-Riddle Aeronautical University. CURPA Chair, Advocacy Advisory Committee, **CUR** Executive Board Terry.Oswalt@ERAU.edu

Kristin Rabosky, Weber State University Innovation and Collaboration Committee kristinrabosky@weber.edu

Toni Sauncy, Texas Lutheran University, Student Programs Committee tsauncy@tlu.edu

Allyn Smith, Austin Peay State University. CUR Posters on the Hill Committee smithi@apsu.edu

Richard Thompson, Cabrini University. **CURPA** Newsletter Editor rt533@cabrini.edu

Francis Tuluri, Jackson State University, Francis.tuluri@jsums.edu

Brian Utter, Bucknell University, Assessment and Program Review Committees

Brian.utter@bucknell.edu

Karthik Vishwanath, U. Miami Ohio vishwak@miamioh.edu

Gabriel Williams, College of Charleston **Assessment Committee** williamsgj@cofc.edu

#### **CURPA** News Deadline

CURPA News is issued three times per year, and we welcome your contributions! Please send your submissions, achievements, comments, opportunities, etc. to Rick Thompson (rt533@cabrini.edu). Deadline for the spring 2019 issue is April 5, 2019.