



CURPA NEWS



Newsletter of the Council on Undergraduate Research Physics and Astronomy Division

Winter 2016

Message from the Chair

Happy New Year and welcome to the winter edition of the Physics and Astronomy Division's newsletter. During the past few months, CURPA members have been busy with a variety of activities related to undergraduate research. Along with some of our standard activities, such as Mark Biermann's service as facilitator for *Beginning a Research Program Involving Undergraduates at a PUI Institute*, several councilors have received various forms of recognition. For example, John Mateja has recently started as President of the *Barry Goldwater Scholarship and Excellence in Education Foundation* while Duncan McBride was elected as a Fellow of the *American Association for the Advancement of Science*. I want to congratulate both of them on receiving some well-deserved recognition!

This June 26 – 28th, CUR will be hosting its 17th National Conference whose theme is *Advancing Undergraduate Research: Collaboration and Innovation in a Global Society*. The conference will be held at the University of South Florida in Tampa, FL. Several councilors have submitted presentations and the division is planning on hosting an open house at the event. If you are interested in learning more about various models of undergraduate research activities and what colleagues are doing within and beyond P&A, please consider attending this year's conference.

Along the theme of collaboration and disseminating best practices, John Mateja sought out and compiled several vignettes

from division members outlining how their departments incorporated undergraduate research into their respective curricula. These vignettes can be found through our website:

http://www.cur.org/governance/divisions/physicsastronomy_research_vignettes/.

If your department has something to share, please be sure to contact me.

Elections for P&A councilors should open in late January. One advantage in having elections is the opportunity to see what people are working on and interested in. Please take advantage of this opportunity to check out those who are running for a P&A councilor position. Councilors hold three-year terms with an approximate 8 member cohort elected each year. As you look at candidate biographies, please consider running for a position sometime in the future – we put out a call for councilors each fall. Serving on the council is a great way to connect with others interested in and advocating for undergraduate research.

Finally, in this edition of the CURPA newsletter, you can find other information on NCUR 2016 along with an outline for how your student can apply for a NCUR 2016 travel award. We also want to promote some of the activities members are engaged in. Therefore, if you have something to submit to our spring newsletter, please contact Rick at thompsor@mail.strose.edu by the April 4 newsletter deadline. We are always looking for contributions from within the division, including articles, job announcements, promotions, and awards.

Once again, best wishes to the start of 2016. Please feel free to contact me if you have questions or suggestions at how councilors can help advocate and promote undergraduate research, including assisting you in such activities.

Michael Jackson
 Millersville University
mjackson@millersville.edu

Congratulations to Duncan McBride – Fellow of the American Association for the Advancement of Science!

As many of you know, Duncan McBride recently retired from the National Science Foundation after having served the agency in several capacities for nearly 30 years. His service to and advocacy for the physics community was recognized by his election as a Fellow of the American Association for the Advancement of Science (AAAS) following nomination by Section B, Physics. His citation reads, “For leadership in the NSF’s Undergraduate Programs Division and for deep and sustained commitment to physics education research and physics research at undergraduate institutions.” Congratulations Duncan!

Congratulations to John Mateja – President, Barry Goldwater Scholarship and Excellence in Education Foundation

After a national search, with confirmation of his appointment given by the White House, John Mateja has been selected to serve as President of the *Barry Goldwater Scholarship and Excellence in Education Foundation*. For more information about the scholarship program the Foundation manages, please visit their website at: <https://goldwater.scholarsapply.org/>. The program, if you are unfamiliar with it, will be the subject of a future newsletter. Congratulations John!

CUR Biennial Conference 2016

This June 26 – 28th, CUR will be hosting its 17th National Conference at the University of South Florida in Tampa, FL. The theme of the conference will be “Advancing Undergraduate Research: Collaboration and Innovation in a Global Society.” Several councilors have submitted presentations to the conference and registration for the conference is currently open. For more information, please visit the conference website:

http://www.cur.org/conferences_and_events/biennial2016/.



NCUR 2016

In honor of its 30th anniversary, the 2016 National Conference on Undergraduate Research (NCUR) will be held at its inaugural location, the University of North Carolina at Asheville, from April 7 – 9, 2016. This is a major venue for undergraduate students to present their research and consists of a variety of plenary speakers as well as oral and poster presentations, visual arts displays, and performances. Registration will open on January 25. For more information about NCUR, including links for registration and a draft schedule, please go to http://www.cur.org/ncur_2016/.

2016 NCUR Travel Award:

The CUR Physics and Astronomy division is pleased to offer several travel awards for

students attending the National Conference on Undergraduate Research (NCUR) at the University of North Carolina at Asheville, from April 7 – 9, 2016. Applying for the travel award is easy!

When your abstract is accepted by NCUR, send a single email to Michael Jackson (mjackson@millersville.edu) with the following:

1. Your name and contact information
2. Your student's name and contact information
3. Your NCUR acceptance letter

Awards will be made on a first-come first-serve basis. The first several applicants will have their student registration fee paid by the CUR Physics and Astronomy Division.

Please note:

- *One award will be made per department*
- *Awards are limited to physics and astronomy submissions. Separate physics and astronomy departments from the same campus will be considered as distinct, and are each eligible.*
- *Priority is given to students of CUR P&A members.*
- *CUR P&A councilors may apply, but will receive an award only if funds are available after they have been distributed to the general P&A membership.*

Michael Jackson
Millersville University

2016 Posters on the Hill

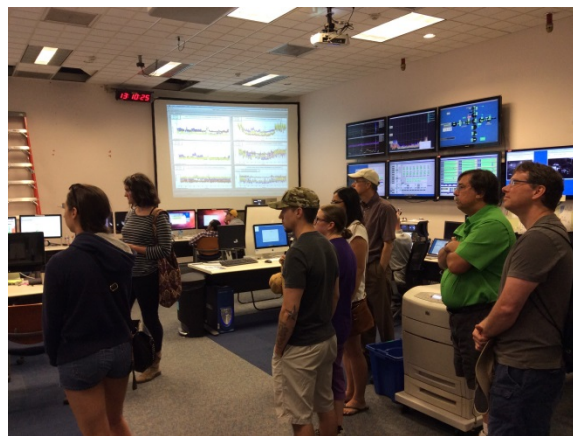
Abstracts submitted to the *Posters on the Hill* event are currently under review. About 330 completed abstracts were submitted this year, with each abstract evaluated by three reviewers. Selections should be announced at the beginning of February. The event is

tentatively scheduled for April in the US Capitol, Washington DC.

Michael Jackson
Millersville University

CUR P&A REU Program – 2015 Student Profiles

In the fall newsletter we briefly discussed the second year of our division's pilot REU program funded by the National Science Foundation (award number 1358879). During the 2015 summer, seven undergraduates participated in this REU program with additional support provided by CUR. The profiles for three of these students appeared in the fall newsletter while the profiles for another two appear in this edition.



End of the summer field trip to LIGO near Hanford, Washington.

Becca Reimer, Carroll Community College and Erin Flowers, Columbia University

Their project “Exploring the limits of planetary habitability using orbital dynamics” was performed at Weber State University with Dr. John Armstrong. Becca has graduated from Carroll Community College and is pursuing her physics degree at Frostburg State University. Erin is a rising junior and is pursuing her astrophysics degree at Columbia University.

Councilors and members of the division applied for another round of funding from the NSF to operate the program during the 2016 – 2018 summers. However, we were just informed the proposal was declined. The councilors will discuss future proposals at the June business meeting based on the feedback of reviewers and the panel summary.

*Michael Jackson
Millersville University*

*John Mateja
Murray State University*

Opportunities

(If you have a job opening or program that you would like to advertise here, please send the information to us for inclusion in the next newsletter)

Positions at the American Institute of Physics

The American Institute of Physics (AIP) seeks an experienced education professional and dynamic leader to fill the position of Director of the Society of Physics Students (SPS) and Sigma Pi Sigma, the physics honor society. The candidate will be responsible for leading staff, directing the daily operation of both societies, and supporting service and outreach activities for Chapters, Physics Departments, Member Societies, and the public. SPS is located at AIP's headquarters in College Park, MD. The Director will assist in strategic planning, working closely with other AIP program directors, key volunteers, and Member Societies in developing new education activities, and supporting the AIP presence in the science/physics education arena. He or she will also work closely with the Development office to oversee fundraising activities. The PhD in Physics is preferred. The full job announcement, with details regarding qualifications can be found on the SPS jobs site:

<http://jobs.spsnational.org/jobs/7771792/director-society-of-physics-students-and-sigma-pi-sigma>

The Society of Physics Students is also seeking to fill the SPS/Sigma Pi Sigma Programs Manager position.

The American Institute of Physics (AIP) Society of Physics Students and Sigma Pi Sigma is seeking a Manager, Society of Physics Students (SPS) and Sigma Pi Sigma Programs. The ideal candidate will take full responsibility for ongoing SPS and Sigma Pi Sigma programs, including scholarships and a variety of award programs, and will seek out new programs and projects as appropriate. This will include continuous evaluation and revision of existing programs and development of innovative new programs and also include the oversight of programs and projects from inception through execution. She/he will serve in a supervisory capacity for associated staff and take responsibility for all logistics of programs and projects, including consulting with the Director for budgetary considerations. A physics master's degree is preferred.

Full details about the position are found on the SPS jobs site:

<http://jobs.spsnational.org/jobs/7772056/manager-society-of-physics-students-and-sigma-pi-sigma-programs>.

Your CURPA Councilors

John Armstrong, Weber State University.
Integrating Research into the Curriculum Task Force and CURPA Webmaster.

Nadine Barlow, Northern Arizona University. CURPA Secretary and Chair CUR Fellows Committee.

Maria Bautista, Kapi'olani Community College. Diversity and Inclusion Task Force.

Matthew Beaky, Juanita College. CUR Finance Committee.

Mark Biermann, Valparaiso University. Constitution and ByLaws Committee.

Horace Crogman, University of California Merced.

Beth Cunningham, AAPT. CURPA Mentoring program.

Michael Jackson, Millersville University. CURPA Chair, CUR Posters on the Hill Committee, Innovation and Collaboration Task Force, and CUR Executive Board.

George Marcus, SUNY Geneseo

John Mateja, Murray State University. CUR/Barry Goldwater Scholar Faculty Mentor Award Committee and NCUR Oversight Committee.

Duncan McBride, formerly at the National Science Foundation. CUR Treasurer, CUR Finance Committee, and CUR Investments Committee.

David McGee, The College of New Jersey. Internationalization and Undergraduate Research Task Force.

Sorinel Oprisan, College of Charleston. CUR Quarterly Editors Board.

Terry Oswald, Embry-Riddle Aeronautical University Daytona Beach. Advocacy Advisory Committee.

Raul Peters, Paine College. Nominations Committee.

Doug Petkie, Wright State University.

Phillip Reed, Kutztown University.

Mohammad Samiullah, Truman State University. CURPA Chair-Elect and Internationalization and Undergraduate Research Task Force.

Toni Sauncy, Texas Lutheran University.

Allyn Smith, Austin Peay State University. CUR Posters on the Hill Review Committee.

Gubbi Sudhakaran, University of Wisconsin La Crosse. Program Review.

Brian Utter, James Madison University.

Richard Thompson, The College of Saint Rose. Integrating Research into the

Curriculum Task Force and CURPA Newsletter Editor.

CURPA News Deadline

CURPA News comes out three times per year and we welcome your contributions! Please send your submissions, comments, achievements, opportunities, etc. to editor Rick Thompson (thompsor@strose.edu). Deadline for the Spring 2016 issue is ***April 4, 2016***.