

MESSAGE FROM

## DEPARTMENT HEAD

Dear Alumni and Friends,

Greetings from Purdue! Summer is a season of transition for us in the Department of Chemistry. We try to recover from a busy academic year, we say farewell to our spring graduates, and welcome newly arriving students for the fall. Appropriately, this issue of Chemistry News focuses on our students. We are very proud of the accomplishments of our recent spring graduates. With this in mind, we profile three of our many exceptional undergraduate and graduate students who completed their degrees, on the following pages.

I am continually impressed with students who successfully balance coursework, research, and service to the university. Ayanna Jackson is an outstanding example of a graduate student who was a leader in the department, as well as a mentor in the Purdue community. Jim Newton was an undergraduate who took full advantage of graduate-level opportunities in the Wei Research Group. His hard work has paid-off with a NSF scholarship to Berkeley where he will start graduate school in the fall. Hannah Bowman chose to enhance her Purdue experience by taking coursework in Sweden for a semester. I strongly believe in the benefits of study abroad, and the Chemistry Department is working hard to improve our ability to make study abroad possible for all our undergraduate students, and is exploring ways to encourage more undergraduates to take part in these life-changing opportunities.

Finally, I want to extend my congratulations to Professor R. Graham Cooks and Professor Joseph Francisco who were recently elected members of the American Academy of Arts & Sciences, and to Jean Chmielewski, who was honored with the 2010 Murphy Award for Outstanding Undergraduate Teaching. The success of our students begins with exceptional teachers and mentors like Graham, Jean and Joe. Thanks to them for helping to make our department a great one!

Best wishes for the summer,

Paul Shepson



# STUDENT FEATURE

## JAMES NEWTON

BACHELOR OF SCIENCE IN BIOCHEMISTRY WITH MINORS IN BIOLOGY AND PHYSICS  
2010 D.W. MARGERUM UNDERGRADUATE RESEARCH AWARD

Even as a youngster, Jim Newton's ambition was to become a scientist. An eighth-grade course cultivated an early interest in chemistry and undergraduate studies at Purdue have fostered a research science career. The next step for Jim is a National Science Foundation Graduate Fellowship to pursue a Ph.D. in organic chemistry at the University of California, Berkeley.

The Indianapolis native was active in Professor Alexander Wei's laboratory studying nano-chemistry and organic chemistry applications. "Jim has been highly motivated to expand his research capabilities. In fact, he has brought new research protocols into our group, such as amplifying bacterial genes by PCR for protein overexpression – something that neither I nor my graduate students have any practical experience," says Wei.

"I think it is very cool to design a molecule on a piece of paper and then go make it in the lab. The coursework and research experience at Purdue has prepared me for my research career at Berkeley," says Newton.



## DR. AYANNA JACKSON

PH.D. ANALYTICAL CHEMISTRY - 2010 M.G. MELLON AWARD

Pleasant, intelligent, energetic, and proactive. Those are just a few adjectives that faculty use to describe Dr. Ayanna Jackson. Since completing her Ph.D. in April, she has accepted a position at Dow AgroSciences in Indianapolis as a senior chemist in its regulatory labs.

The Brandywine, Maryland native balanced her own studies along with leadership roles within the analytical division and as a campus-wide mentor. "Ayanna is not only an excellent scientist and researcher, but she was the go-to person in my large lab," says Professor R. Graham Cooks.

Her research is focused on the analysis of a variety of materials using non-conventional mass spectrometry ionization techniques in applications such as rapid detection of chemicals in foodstuffs.

"My experience at Purdue will be unforgettable. I always strived to do my best and to help others along the way to achieve their goals," says Jackson.

## HANNAH BOWMAN

BACHELOR OF SCIENCE IN ACS CHEMISTRY WITH A MINOR IN THEATRE TECHNOLOGY & DESIGN  
2010 ACS ANALYTICAL CHEMISTRY AWARD

Hannah Bowman has always had Purdue connections. Her parents and high school chemistry teacher are alums. But it was more than Boilermaker pride that influenced her college choice. Hannah's strong academic record at Cathedral High School in Indianapolis awarded her a Lilly-Purdue Alumni Scholarship to study chemistry here.

This fall she is headed to the University of Wisconsin-Madison to pursue a Ph.D. in chemical biology focusing on pharmaceutical research and development. "Over the past three years I have done several projects in Professor Jean Chmielewski's lab involving synthesizing and modifying collagen polypeptides to manipulate and study their tertiary structure," says Bowman. "Hannah has a great love of science, and her excitement to be in a research lab has really been a joy to observe," says Chmielewski.

Hannah leaves Purdue with a world-view of chemistry. Last spring she studied abroad in Uppsala, Sweden. She learned to connect with other international students and faculty through the daily Swedish coffee-break called fika. "The practice of fika extended into the classroom where the laid-back, friendly attitude of the Swedes was a refreshing change of pace," explains Bowman.



# SPRING 2010 GRADUATES

## ADVANCED DEGREES

Dr. Jeremiah Bowers (Professor McLuckey)  
Ms. Jessica Burkett (Professor Bart)  
Dr. Angela Chavers (Professor Shah)  
Dr. Teng-Yi Huang (Professor McLuckey)  
Dr. Ayanna Jackson (Professor Cooks)  
Dr. Travis Knepp (Professor Shepson)  
Dr. Jee Yeon Lee (Professor Chmielewski)  
Ms. Young Lee (Professor McLuckey)  
Dr. Ashraf Madian (Professor Regnier)  
Mr. Patrick Palafox (Professor Thompson)  
Dr. David Pinkston (Professor Kenttamaa)  
Dr. Ewa Sokol (Professor Cooks)  
Dr. Yanping Sun (Professor Raftery)  
Dr. Nicholas Travia (Professor Abu-Omar)  
Dr. Qi Wei (Professor Kais)  
Dr. Chunping Wu (Professor Cooks)  
Dr. Shucha Zhang (Professor Raftery)

## UNDERGRADUATE DEGREES

Jared Avelis  
Daniel E. Beck  
Stuart B. Blankenhorn  
Hannah E. Bowman  
Dorothy Cupka  
Zachary C. Curd  
Daniel R. Curtis  
Hoang Q. Doan  
Vanessa A. Fabrizio  
Rachel N. Gatz  
Carl R. Gulbranson  
Aubrie A. Harland  
Martin J. Jaspers  
Paul J. Jones  
Elaheh Kamali  
Adam S. Kinne  
Melinda S. Landwerlen  
Mallory K. Lay  
Ashley L. Mann  
Laura J. Marholz  
George R. Marshall  
Jerald C. Martin  
Brian W. McCormack  
Aditya M. Merchant  
James N. Newton  
Elise M. Novorolsky  
Alexandria L. Reed  
Tony Y. Ren  
Tennie L. Renkens  
Ashley N. Rogers  
Kasi J. Rubadue  
Jacob T. Schreeg  
Lincoln M. Slentz  
Joshua D. Sparks  
Zachary Stockdale  
Hsiang Su  
Narin S. Tangprasertchai  
Kristina R. Thorsell  
Pamela M. Williamson Jordan  
Ashley M. Wittrig  
David Wood  
Katelyn M. Zak  
Michael A. Zipper

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Rebecca Fega, Ph.D. student in the Ben-Amotz Research Group, is appearing in a Susan G. Komen for the Cure print advertisement. The photo of her volunteering at an Indiana tissue bank was chosen for the current national ad campaign.



## MORE CHEMISTRY NEWS ONLINE!

Purdue graduate assists in Gulf oil spill response.  
Professor Francisco featured in national magazine ad  
Cooks Group therapeutic drug monitoring research  
Dr. William E. Moore receives Distinguished Alumni Award  
Professor Ghosh awarded IUPAC-Richter Prize  
Dr. Swaminathan Sivaram receives honorary doctorate  
Professor Chmielewski honored with Murphy Teaching Award  
Cooks and Francisco Academy of Arts and Sciences election  
Professors Hrycyna and Chmielewski receive Gates Foundation grant to study malaria drug resistance

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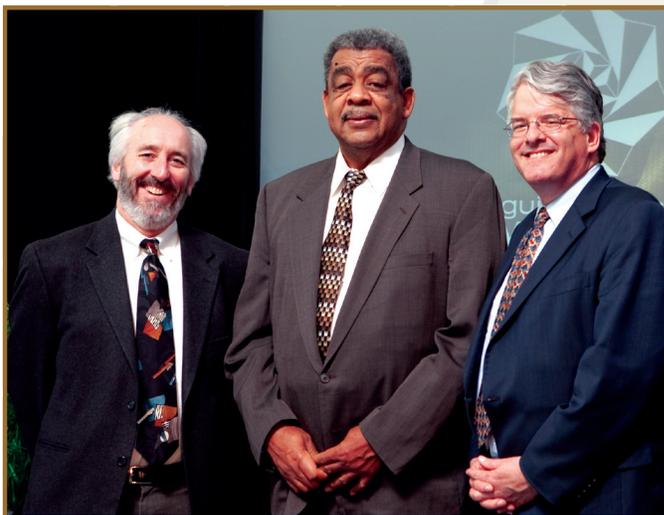
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## CHEMISTRY NEWS



**2010 College of Science  
Distinguished Alumni Award**  
is presented to Dr. William E. Moore  
(center) by Chemistry Department  
Head Paul Shepson (left) and College of  
Science Dean Jeffrey Roberts (right).

Dr. Moore is a chemistry professor at  
Southern University and in 1967 was the  
first African-American to receive a Ph.D.  
in the Chemistry Department at Purdue.