The AGEP-Transformation-Professorial Advancement Initiative

The lack of African American, Hispanic/Latino American, Pacific Islander, and Native American STEM faculty is an issue of national concern. The Committee on Institutional Cooperation (CIC) - a consortium that includes Purdue and 11 other Big Ten universities plus the University of Chicago - was recently awarded a National Science Foundation (NSF) AGEP-Transformation (AGEP-T) grant titled “Professorial ADVANCEment Initiative (PAI) to address this problem. The CIC, partnered with AGEP will utilize the PAI to increase the number of underrepresented minority (URM) Postdocs entering the professoriate. The AGEP-T PAI will work to double the number of URM faculty members hired annually. This initiative includes twelve CIC universities who seek to increase URM faculty by 50% in the first year. The objectives are as follows:

1) Create a pool of URM postdoctoral scholars that have been well prepared and trained to enter the academy as tenure track faculty.
2) Educate faculty and faculty search committees about unconscious bias and the compelling benefits of having a diverse faculty.

The program is moving forward at a steady pace, and has reached several important milestones:

- The CIC–AGEP training team has developed a mentoring curriculum for faculty mentors.
- New web-accessible resources have been developed that include:
  - “Gateway to CIC Faculty Positions” which allows postdocs to search for faculty positions available within the CIC member institutions.
  - The CIC Doctoral Directory – a searchable database listing PhD recipients to be promoted among CIC Universities.
- Updates to the Purdue AGEP website, some of which are in progress, include descriptions and links to PAI tools, as well as many other useful resources associated with the PAI.

Future Events

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<tr>
<th>Date</th>
<th>Event Description</th>
<th>Location</th>
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<tr>
<td>August 22</td>
<td>Information Fair-New Grads- STEW 214</td>
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<td>August 25</td>
<td>Classes Begin</td>
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<td>September 1</td>
<td>Labor Day</td>
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<td>September 11</td>
<td>IUPUI Grad EXPO</td>
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<td>September 19-20</td>
<td>McNair Scholars at UMBC, Baltimore</td>
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<td>September 21-22</td>
<td>Big Ten Grad EXPO</td>
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<td>September 23-26</td>
<td>NOBCCCHE, New Orleans</td>
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<td>September 24</td>
<td>Last day to declare candidacy for Degree for December 2014 Graduation</td>
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<td>October 13-14</td>
<td>Fall Break</td>
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<td>October 16-18</td>
<td>2014 SACNAS National Conference, LA</td>
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<td>October 30-November 2</td>
<td>COMPACT for Faculty Diversity</td>
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<td>November 5-7</td>
<td>HBI Visitation Program</td>
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<td>November 8</td>
<td>CA Diversity Forum, San Diego</td>
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<td>November 12-15</td>
<td>ABRCMS, San Antonio</td>
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<td>November 13-15</td>
<td>2014 AISES Conference, Orlando</td>
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AGEP Book Project Summer Update: EPUB3

M.M. Browne

As reported in the AGEP Spring newsletter, *GPS for Graduate School: Students Share Their Stories* was published by Purdue University Press (PUP) in March 2014. The book is available in hard copy form through the Purdue University Press, Amazon.com, and Barnes and Nobles.com. Also available through PUP is an eBook pdf version. And, for those of you excited about the latest in eBook technology, PUP will be releasing soon an EPUB3 version of the book.

About EPUB3: Last January, the University of Toronto in collaboration with PUP began developing the third generation prototype for electronic publication (EPUB3), the distinguishing feature being the incorporation of video in the format. PUP enlisted the Purdue AGEP production team to create an EPUB3 version of the book as a pilot. Dr. Smith developed the scripts, and Mary Maxine Browne worked with Jason Doty and three of the actors who had played the role of professor in the original book videos to record new video segments for the EPUB3 project. The final product is impressive. Following each chapter, the reader can engage in video roundtable sessions of questions and responses with the three professors who offer their expert advice on the chapter topics. Users of the EPUB3 version will also have access to the original book videos by clicking on an icon at the end of each chapter.

This fall, PUP and the AGEP Office will promote the book within the national AGEP and academic advising communities. As part of this effort, we are updating the book’s web site to include an interactive webpage where readers and group discussion leaders can share their experiences about the book project. We would like to give a special thank you to Jay Ravi who has worked on implementing these improvements. Many thanks again to all of the AGEP editors, authors, and contributors who helped create this excellent book!

Congratulations AGEP Graduates!

**Master’s**
Tandreia Dixon, Technology, (May 2014)
Quincy Clark, Technology (May 2014)
Fushcia-Ann Hoover, Engineering (Aug. 2014)
Kadari Taylor-Watson, American Studies (May 2014)
Onyx Uzomah, Biology (May 2014)

**Ph.D.**
Joseph Chaney, Chemistry (Dec. 2014)
Kirt Durand, Chemistry (Dec. 2014)
Velvet Fitzpatrick, Engineering (Aug. 2014)
Chasity Love-Nkansah, Chemistry (May 2014)
Oscar Morales Collazo, Chemistry (Aug. 2014)
Lauren Parker Health/Kinesiology (Aug. 2014)

Summer 2014 AGEP Scholars

Oyeleye Alabi Kirt Durand
Joseph Chaney Velvet Fitzpatrick
Quincy Clark Shana Hardy
Schane Coker Janie McClurkin
Tyrell Conner Oscar Morales

**AGEP Summer Workshops**

**Acing the Interview** ~ Presented by CCO representative Cher Yazvac on June 26

**Proposal Writing** ~ Presented by Dr. Peter Dunn on July 10

*Check the website events page for future workshops*
**AGEP Presents: AGEP Scholar Kirt Durand**

The following is a summary of the oral presentation given by AGEP Scholar and PhD Candidate, Kirt Durrand, at the annual American Society of Mass Spectrometry (ASMS) Conference held in Baltimore on June 19, 2014.

"Formation and Reaction of Methoxy Radical with Disulfide Linked Peptides in a NanoESI Plume: Chemistry and Utility"

Formation of disulfide bonds is one of the most common post translation modifications (PTMs) and plays a vital role in stabilizing the three-dimensional structure and function of many proteins and naturally occurring peptides. Pinpointing disulfide linkage patterns in addition to obtaining sequence information is critical in studying the biological functions of these proteins and peptides. Herein we report the formation of methoxy radical and its reaction with disulfide bonds. When the methoxy radical was allowed to cleave one disulfide bond, collision induced dissociation (CID) of the newly formed radical reaction products produced a distinctive neutral loss of 32Da peak as well as site-specific sequence ions allowing for the assignment of the disulfide bond connecting pattern.

**AGEP Presents: AGEP Scholar Reginald McGee**

The following is a report of workshops attended by AGEP Graduate Student, Reginald McGee.

17th Annual Applied Management Principles Program

This June I attended the 17th annual Applied Management Principles program offered through the Krannert Center for Executive Education. The ten day program consisted of ten mini-courses in Accounting, Business Law, Change Management, Economics, Finance, Human Resources, Leadership, Marketing, Operations, and Strategic Management. Program participants included professionals from large and small companies, university staff, and graduate students who were nominated and sponsored by their respective colleges. Thus the workshop served as a unique networking opportunity while providing efficient exposure to topics typically learned during a MBA program.

MBI-NIMBioS-CAMBAM Summer Graduate Workshop

I recently finished a two week summer school at the Mathematical Biosciences Institute (MBI) in Columbus, OH. MBI as well as the National Institute for Mathematical and Biological Synthesis (NIMBioS) and Center for Applied Mathematics in Biosciences and Medicine (CAMBAM) jointly sponsor this event annually. This year's summer school focused on mathematical tools to study biological rhythms and oscillations. Dr. Daniel Forger of the University of Michigan and Dr. Paul François of McGill University organized the summer school and enlisted speakers whose research interests spanned cardiac rhythms, embryonic oscillations, respiratory oscillations, neural rhythms, circadian rhythms, ecological oscillations, glycolytic oscillations, the cell cycle, synchrony and sleep patterns. Furthermore, the workshop brought together a diverse group of graduate students in the mathematical and biological sciences from various institutions in Canada, Germany, France, Belgium, Denmark, the United Kingdom and the United States. The summer school consisted of daily lectures and computer labs, speaker panels as well as a group project.
AGEP gives a special welcome to our AGEP Summer Bridge students Carlos Salinas and Guillermo Caballero. As Ph.D. students, Carlos will be joining the Mathematics program and Guillermo will be joining the Political Science program this fall.

The Summer Research Opportunities Program (SROP) and BRIDGE program welcomed a wonderful group of very bright, polite and professional students this summer. The programs ended with an excellent Poster Session on July 25.

A Cultural Learning Experience

June 19th 2014, SROP and AGEP students were treated to a HULA dance demonstration and workshop led by Kanoe Perreira and Alexis Peterson, SROP students from Chaminade University of Honolulu. Additional workshops were offered July 3rd, July 17th and July 24th at the Co-Rec. We enjoyed this glimpse of Native Hawaiian Culture! AGEP is pleased to have a pipeline for students in Hawaii through Chaminade University. From Chaminade, we welcomed Aerille Ferreira, Philip Ng, Naomi O’Mara, Kanoelehu Perreira and Alexis Peterson to the Purdue Summer Research Opportunities Program (SROP) program. Read more about Hula instructors Kanoe and Alexis below.

Kanoe Perreira received her Bachelor’s in Communication from Chaminade University. She has applied to Graduate School at Purdue University and hopes to attend in the Spring or Fall of 2015. In the meantime she plans to work as a Research Assistant at Chaminade. This is Kanoe’s second summer in SROP at Purdue. Kanoe says she enjoyed her second summer at Purdue more and she feels “at home”. She was able to build more relationships with faculty and grad students and added that she is more confident this summer than last summer. Her confidence has helped her immerse herself in her research such that she feels better about presenting it. Her favorite places on campus are the courtyard at Cary Quad and the Spitzer Court where she can see the trees, flowers and squirrels. She also enjoyed her stay at the Hilltop Apartments.

Alexis Peterson is a Junior at Chaminade University. She expects to earn her Bachelor’s in Forensic Science in May 2016 and has gained valuable research experience in Marine Biology and Food Science. She enjoys Hula dancing and spending time at the beach. Her favorite thing about Indiana is Insomnia Cookies and all the restaurants that deliver! Alexis said about SROP: “I learned a lot about Graduate School that I didn’t think about before and it (SROP) has helped to put it all into perspective.” She also said that she has realized the importance of finding a good mentor. Her ideal mentor is one who will spend the time to get to know her and her educational/career goals very well and work with her one on one.

Kanoe and Alexis are both looking forward to enjoying a Poke Bowl upon their return to Hawaii and spending a lot of time relaxing on the beach. The Poke Bowl is their favorite Hawaiian dish. It consists of cubed tuna (raw) with rice, seaweed, chili pepper, sesame oil and spices. The Poke is a raw salad usually served as an appetizer in Hawaiian cuisine. Other variations of ingredients may include other types of sashimi, tuna or salmon, tomatoes, onions, garlic, hot sauce or wasabi, soy sauce and other types of seaweed.

Visit the AGEP website at http://www.purdue.edu/gradschool/research/agep/index.cfm