

May 2017 Issue

PUBLICATIONS

Chen I.-H., L. Xue, C.-C. Hsu, J.S.P. Paez, L. Pan, H. Andaluz, M.K. Wendt, A.B. Iliuk, J.-K. Zhu and **W.A. Tao**. 2017. Phosphoproteins in extracellular vesicles as candidate markers for breast cancer. *Proc. Natl. Acad. Sci. U.S.A.* **114**: 3175 – 3180.

AWARDS & RECOGNITION

Jim Forney was awarded the “Exemplar of Professionalism Award”, a new award given by the Indiana University School of Medicine (IUSM). Jim was nominated by a medical student because of his commitment to upholding the IUSM Honor Code. The IUSM Honor Code emphasizes professionalism, honesty and respect for the dignity of others.

Andy Mesecar received an award from IUPUI for his project entitled “Indiana Clinical and Translational Science Institute” in the amount of \$18,665 for one year. The total grant includes several departments totaling \$922,847. The project period for this award is 5/1/2016 – 4/30/2017.

Majid Kazemian received an award from the NIH for his proposal entitled “Expression, regulation and role of enhancer RNAs in T cells” in the amount of \$249,000 for one year. The total grant amount is \$747,000. The project period for this award is 4/1/2017 – 3/31/2020.

Majid Kazemian was featured in an article entitled “Connecting Computers and Cancer” for Purdue Ag Stories on April 11. To read the full article click on the link, <https://ag.purdue.edu/stories/connecting-computers-and-cancer/>

Joe Lynch, post-doctoral scholar (Dudareva lab), was a winner of the 2017 Graduate Student and Post-Doctoral Sigma Xi Poster Competition which was held on Wednesday, April 12. To read the full article click on the link, <http://www.purdue.edu/newsroom/purduetoday/releases/2017/Q2/sigma-xi-presents-research-and-poster-awards,-inducts-new-members.html>

NEW FACES



Liyuan Zhang joined the Tao lab as a visiting scholar in March. She came from Dalian, China and is working to develop novel analytical technologies based on state of art mass spectrometry to help understand the mechanism of cellular events under various conditions, including disease development, infection and other stress, in biochemistry. In her spare time she likes to watch movies.

DEPARTMENT NEWS

The College of Agriculture Awards Banquet was held on Wednesday, April 26. Following are those who received rewards. Outstanding Undergraduate Counselor: Dr. Joe Ogas; Outstanding Service to Students: Dr. Orla Hart; Outstanding Graduate Teacher/Mentor: Dr. Clint Chapple; Outstanding Sophomore: Stephanie Price; Outstanding Junior: Abdias Rodriguez; Outstanding Teaching Assistant: Nina Serratore. Also recognized were graduating seniors in the following programs: MANRRS: Charles Hawthorne and Adetoro Koleosho, and Ag Ambassadors: Kaelan Brennan.



Purdue's annual Spring Fest was held on April 9 – 10. The Biochemistry Club led several hands on activities. Kids learned about "instant snow" which is a molecule called sodium polyacrylate and is activated by water which causes the molecules to unfold and grow. It is used for indoor snowboarding parks and a variation is the absorbent material in diapers.



Congratulations to Sara Cloutier (Tran lab) for being promoted to Administrative Professional staff rank 5.

Dr. Bruce Yankner, Co-Director, Paul F. Glenn Center for the Biology of Aging, Professor of Genetics and Neurology, Harvard Medical School gave the **Bernard Axelrod Lectures** on April 3 and 4. Dr. Yankner graduated from Princeton University, received his M.D. and Ph.D. from Stanford University, and did a residency at Massachusetts General Hospital. He has received the Major Award for Medical Research from the Metropolitan Life Foundation, the Derek Denny-Brown Neurological Scholar Award from the American Neurological Association, the Irving S. Cooper Award from the Mayo Clinic, the Zenith Award from the Alzheimer's Association, the Ellison Medical Foundation Senior Scholar Award, the Nathan W. Shock award from NIA and the NIH Director's Pioneer Award. Monday's lecture was titled: "REST and Stress Resistance in Aging and Alzheimer's Disease", and Tuesday's lecture was titled "Transcriptional Regulation of Lifespan".

Former NSF REU participant Sofia Gonzales (Truman State University) had an essay published in the most recent issue of the American Society for Biochemistry and Molecular Biology (ASBMB) Today magazine. Her essay entitled "Empowering Immigrants in Rural America" describes her own assimilation into the US and her efforts to assist other immigrants through outreach activities. Sofia worked in Dr. Mesecar's lab and Brandon Anson was her co-mentor. To read the article click on the link.

<http://www.asbmb.org/asbmbtoday/201704/Essay/EmpoweringImmigrants/>



Five students from the 2016 NSF REU program presented posters at the ASBMB 2017 meeting in Chicago on April 22 – 25. Pictured are Blessing Enya, Kyle Ernze, Alekzander Garcia, Sofia Gonzales and Jim Forney.

GRADUATE STUDENT NEWS



Congratulations to Anwasha Sanyal (Mattoo lab) on passing her defense on Tuesday, April 11.

UNDERGRADUATE STUDENT NEWS

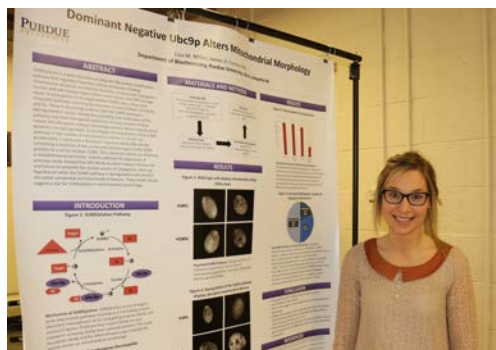
From March 30- April 2 MANRRS Purdue Chapter attended the MANRRS National Career Fair and Training Conference in Pittsburgh, PA where they had an opportunity to compete against other chapters across the country in various contests, attend workshops that spanned disciplines and attend a career fair where they were able to meet with future employers and/or grad school homes. Several biochemistry members were recognized for their hard work and dedication as being tops in the country in their respected contest:

MANRRS Case Study Team: Brandon Allen (YDAE), Christine Charles (Agronomy), Brandon Hunter (Biochemistry), Kierra Jammer (Biochemistry), and Gabriella Corradi (Animal Sciences) finished 2nd place in the Bunge Agribusiness Case Study contest.

MANRRS Quiz Bowl Team: Charles Hawthorne (Biochemistry), Maurina Baker (YDAE), Joseph King (Food Science), Vincent Finnell (NRES), and Penny Wang (Food Science) finished as runner-ups in the MANRRS Quiz Bowl contests, making it all the way to the championship game before coming up just 1 question short in a "sudden death" overtime.

Four Biochemistry students were among the Purdue students recently inducted into Phi Beta Kappa, the oldest honor society for the liberal arts and sciences: senior Jacob Crosser and juniors Julia Weeder, Kate Harris, and Abdias Rodriguez.

Biochemistry undergraduate students in BCHM 490 “Senior Seminar” displayed their undergraduate research posters on Monday, April 24.



Shown is Lisa Miller with her poster entitled, “Dominant Negative Ubc9p Alters Mitochondrial Morphology”.

BIOCHEMISTRY SPRING AWARD CONVOCATION



Tiffany Young (Kirchmaier lab) was named the **Outstanding TA in Biochemistry** (formerly the Hickory Stick Award). Established in 1970, the award is given annually to commend an outstanding teaching assistant in the Department of Biochemistry. Tiffany was also recognized on Tuesday, April 25 at the Annual Celebration of Graduate Teaching Excellence.



Erin Sorlien (Ogas lab) was named the recipient of a one-year **Purdue Research Foundation (PRF) Grant**. This grant is provided by the College of Agriculture in conjunction with the Office of the Vice President for Research.



The spring winners of a **Beach Family Travel Grant** were Cindy Xing (Tran lab) and Ricky Wang (Liu lab). Funmilayo Adebesein (Dudareva lab) received the award in the fall. This award was first given in 2006 through the Beach Family Lectureship in Biochemistry endowment. The \$1,000 award is given twice per year to help defray the costs of a graduate student to attend a scientific meeting.



Rachel Stegeman (Weake lab) received the fall **Henry Weiner Biochemistry Travel Award**, and Chuan-Chih Hsu (Tao lab) received the spring award. The award provides \$1,000 to help defray the costs to attend a scientific meeting.



Allison Norvil (Gowher lab) was the recipient of the **Henry A. Moses Award**. Established in 2008 by Dr. Bradley Sheares and his wife Adrienne Simmons to honor fellow alumnus Dr. Henry Moses for his contributions to research, education and service. This award is given annually to a graduate student in the Department of Biochemistry based on a scientific paper that the applicant has authored that demonstrates his/her productivity and excellence in scientific research.



Chen Shao (Liu lab), was the recipient of the **Arnold K. Balls Award** for outstanding graduate student. This award is given annually to one of our graduate students who has demonstrated outstanding research potential, scholarliness and intellectual curiosity.



Chris Petell (Gowher lab) and Nina Serratore (Briggs lab) received the **Bilsland Dissertation Fellowship**. The College of Agriculture in conjunction with the Graduate School makes available these fellowships to provide a semester of salary support to graduate students who are within the final year of completing their PhD degree.



Jie Li (Liu lab) received the **Don Carlson Award**. Established in 2011, this award is given annually to a postdoctoral fellow, research associate or staff scientist to recognize their contributions as full-time research personnel to the scientific goals of the Department of Biochemistry.



Sherry Honn (Business Office) was awarded the **Linda Siersema Staff Excellence Award**. This award was established in 2013 and is given annually to a staff member who has demonstrated outstanding performance and service to the department



It has become a tradition for the rotation students to receive a personalized lab coat once they have been permanently placed in a lab. Here are the 2016 – 2017 recipients: Kortany Baker (Briggs lab), Spencer Escobedo (Weake lab), Courtney Traugh (Dudareva lab) and Gilbert Kayanja (Puthiyaveetil lab).

The Bernard Axelrod Memorial Scholarship was established thanks to a gift from Dr. David Schroeder (BS 1962, PhD 1968) to honor Dr. Axelrod, who served as Head of the Department of Biochemistry for 11 years from 1964 to 1975, and retired in 1985. Dr. Axelrod passed away in 2011 at the age of 97. This year's winners were Reid Herran and Jasmin Gonzalez (Not shown).



The Dr. Stephen P. and Charlotte A. Coburn

Scholarship was established by the Coburns in 2014. Dr. Coburn earned his MS in 1961, and his PhD in Biochemistry from Purdue University in 1963. Dr. Coburn is a Professor Emeritus of Chemistry and past director of the Biochemistry Department and Clinical Laboratory at the Fort Wayne State Developmental Center at Indiana University-Purdue University at Fort Wayne. This year's winners are Nicole Adkins and Quin Waterbury (Not shown).



Ray W. Fuller Memorial Scholarship — Ray W. Fuller received his PhD from the Department of Biochemistry at Purdue in 1961. In 2007, Dr. David Schroeder established this scholarship to honor Dr. Fuller for his contributions to science and education. This year's recipient is Benjamin Anderson.



David and Mary Scheible Scholarship in Biochemistry — David Scheible received his bachelor's degree in biochemistry and master's in industrial administration from Purdue. He is President and CEO of Graphic Packaging Corporation in Marietta, Georgia. This year's recipients are: Abigail Gress and Christopher Roberts (Not Shown).



The **Donald and Rita Weeks Scholarship** was established by the Weeks in 2014. Dr. Weeks earned his BS from Purdue University in 1963, and his PhD from University of Illinois in 1967, and is currently a professor at the University of Nebraska, Lincoln. This year's recipient is Jordan Page.



Kwok Yip Tso Scholarship — Dr. J. Yun Tso received his PhD degree in Biochemistry from Purdue University, and was a co-founder and managing partner of JN Biosciences. Dr. Tso established the scholarship in honor of his father. This year's recipient is Kevin Lin.

The **Zhao-Herrmann Scholarship in Biochemistry** was established by Dr. Jian-Min Zhao in 2012 to honor retired Purdue Biochemistry professor Klaus Herrmann. Dr. Zhao received his PhD in biochemistry from Purdue in 1992 and works for Monsanto in St. Louis, MO. This year's recipient is Emily Overway.

Zygmunt Family Scholarship in Biochemistry, was endowed by Dr. Deb Zygmunt and her mother in memory of Deb's father, Walter A. Zygmunt. Deb Zygmunt received her BS in biochemistry from Purdue in 1977 and her MD from Indiana University. This year's recipients are: Jacqueline Phipps, Jacob Crosser, Elizabeth Amundson, Sara Monhollen, Katelyn Huff, Gabrielle Buck, Kyle Wettschurack, Justin Couetil, Will Collier, Madison Smith and Mary Witucki.

GOING THE EXTRA MILE

Several faculty and students attended the American Society of Biochemistry and Molecular Biology (ASBMB) meeting in Chicago on April 22 – 25.

- Humaira Gowher and three members of her lab attended. Humaira gave a talk in the spotlight session, Chromatin Modification, Gene Expression and Epigenetic Mutations, entitled "Biological outcome of the catalytic specialization of DNA methyltransferases"; Chris Petell presented a poster entitled "An epigenetic switch regulates de novo DNA methylation at a subset of pluripotency gene enhancers during embryonic stem cell differentiation"; and Lama Al Abdi and Allison Norvil attended.
- Jeremy Lohman and four members of his lab attended. Lee Stunkard presented a poster "Investigating the Catalytic Molecular Details of Malonyl-thioester Decarboxylating Enzymes"; Logan Richards (undergrad) presented a poster entitled "Elucidating the Molecular Details of Catalysis for Type III Polyketide Synthases Using Near Natural Substrate/Intermediate Analogs"; Austin Dixon (undergrad) presented a poster entitled "Structural Analysis of LigB to Determine the Mechanism of Substrate Specificity"; and Aaron Benjamin attended as well.
- Orla Hart presented a poster entitled "Using Skills Assessments to Improve Outcomes and Engagement in a Biochemistry Lab Course".

Andy Tao traveled to Detroit, MI on April 18 and gave a seminar at the Wayne State University's Chemistry-Biology Interface (CBI) program. The title of the seminar was "Chemical strategies in translational proteomics".

STRICTLY PERSONAL



Beth Tran spoke at the March for Science rally held on Saturday, April 22 in Lafayette. More than 500 marches were held across the world to celebrate science and encourage its application in policymaking. (Photo courtesy of Leah Kenaga)

BIRTHDAYS

Funmilayo Adebisin
Gunter Kohlhaw
Siwen Wang

Barb Golden
Nina Serratore

Hana Hall
Bob Stephenson

Orla Hart
Peng Wang

UPCOMING EVENTS

Biochemistry Graduate and Postdoc Seminars

(Every other Friday at 12:30 – 1:30 p.m. in Whistler 116)

May 5 – Tiffany Young (Kirchmaier lab) & Laura Henry (Dudareva lab)

2017 Spring Commencement

(Elliot Hall of Music)

May 13, Saturday at 2:30 p.m. – Spring 2017 Commencement Division IV Agriculture