

DEPT. OF TOXICOLOGY AND CANCER BIOLOGY NEWSLETTER

Volume 7, Issue 2

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New Grants, Fellowships, and Awards

(New grants are shared once the department receives PADR 1 stating the account has been created):



Dr. Mary Mohrin Receives ACS Institutional Research Grant Funding

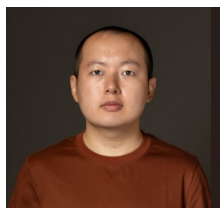
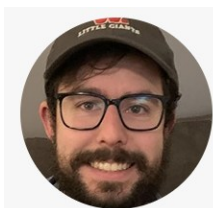
Congratulations to Dr. Mary Mohrin, whose American Cancer Society Institutional Research Grant pilot application was approved for \$40,000 in funding. Her project, titled "The Nucleolar Nexus: SIRT7-driven integration of stress response and epigenetic control in AML treatment," is effective June 1, 2026.

Dr. Mary Mohrin's UK-CARES Pilot Grant Application Selected for Funding, Congratulations to Dr. Mary Mohrin, whose UK-CARES "New to EHS Award" pilot grant application scored in the fundable range and is expected to receive \$25,000 in support.

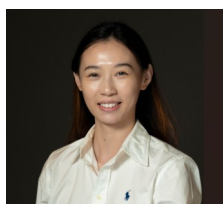
COM Graduate Student Dissertation/Thesis Research Grant Awards

Congratulations to the following DTCB and Forensics students whose College of Medicine Graduate Student Dissertation/Thesis Research Grant applications were approved:

- **Christian Gosser** received \$5,000 in funding for his dissertation project.
- **Sai Wu** received \$5,000 in funding for his dissertation project.
- **Xiangzhen "Wayne" Wei** received \$5,000 in funding for his dissertation project.
- **Terrisha Buckley** received funding for her thesis project.



Pictures left to right above: Christian Gosser, Xiangzhen "Wayne" Wei, Terrisha Buckley



Min Zhang Receives COM Student Travel Award

Congratulations to Min Zhang, whose request for a College of Medicine Student Travel Award was approved. Min was awarded up to \$800 in support for participation in a domestic meeting.

Laura Hoskins Receives Graduate School Fellowship

Congratulations to Laura Hoskins, a student in the Forensic Toxicology and Analytical Genetics program, who was selected to receive the Northern Kentucky Greater Cincinnati UK Alumni Club Fellowship from the University of Kentucky Graduate School. The one-semester fellowship provides \$5,000 for Fall 2026.

SUPPORT THE DEPARTMENT

Gifts to the department will be directed toward emerging needs and opportunities for our students, faculty research support, and unrestricted support for the department.

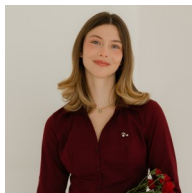
[Click here](#) to learn more and donate.

Thank you for your support!

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New Grants, Fellowships, and Awards (continued): (New grants are shared once the department receives PADR 1 stating the account has been created):



Marlee Harris Awarded 2026 CURE Fellowship

Congratulations to Marlee Harris from Dr. Eunus Ali's lab, who was awarded a 2026 Commonwealth Undergraduate Research Experience (CURE) Fellowship for cancer research. Marlee is a biology and Lewis Honors sophomore and is one of 11 University of Kentucky undergraduates selected for the 2026 CURE Fellowship.

This summer, Marlee will conduct research under Dr. Eunus Ali in the College of Medicine's Department of Toxicology and Cancer Biology. Her project is titled "*Dual Inhibition of MEK-ERK Signaling and Purine Synthesis Pathways as a Strategy to Target KRAS-Mutant Cancers.*" The project is supported by the Cancer Research Priority Area of the CURE Fellowship.



Sophia Roth Receives Undergraduate Research and AMBER Awards

Sophia Roth, an undergraduate student in Dr. Luksana Chaiswing's lab, received an Office of Biomedical Education Summer Undergraduate Research Award in the amount of \$5,047.50 for May–August 2026. Sophia was also named a 2026 AMBER Award recipient in Agricultural and Medical Biotechnology.

Sophia Roth Receives Glenn B. Collins Award Honorable Mention

Sophia Roth received an Honorable Mention for the Fall 2025 Glenn B. Collins Award. Congratulations to Sophia on this recognition.

Dr. Nathan Vanderford Recognized with Faculty Awards

Dr. Nathan Vanderford received the University of Kentucky College of Education Teacher Who Made a Difference Award in March 2026. Dr. Vanderford was also named a University of Kentucky Chellgren Center for Undergraduate Excellence Chellgren Endowed Professor.

Recently Accepted or Published Manuscripts:

CESB Publication

1. Kaddah, M.M.M., Fan, T. W-M., Islam, J., Lin, P., Cassel, T.A., Cunningham, R., Brown, T., Higashi, R.M., and Lane, A.N. (2026). Ion chromatography–ultra-high-resolution mass spectrometry reveals EZH2-driven reprogramming of nucleic acid and protein methylation. *Analytica Chimica Acta*, 1412, 345653.

Dr. Changhai Tian Publication

2. Islam, M.M., Liang, S.Y., Sun, L.J., Hu, G.K., Dhyani, N., Gao, L., Rudebush, T.L., Liu, J.P., Zucker, I.H., and Tian, C.H. (2026). Cerebral extracellular miRNA alterations contribute to cognitive impairment in the progression of heart failure. *Biomolecules*, 16(6), 776. <https://doi.org/10.3390/biom16060776>. Dr. Tian served as corresponding author.

Xiaoqi Liu Lab Publications

3. Zhang, M. and Liu, X. (2026). Metabolic plasticity and enzalutamide resistance: emerging roles of PGK1 in prostate cancer. *Endocrinology*. Online ahead of print. PMID: 42178481. doi: 10.1210/endocr/bqag063.

4. Rao, X., Liu, J., Allison, D.B., Harrison, D.A., Fong, K.W., Wu, Y., He, D., Peng, J., Li, Z., Wang, C., Sturgill, J.L., Sen, P., and Liu, X. (2026). mTORC1-dependent regulation of the CCL24-CCR3 axis controls granuloma formation and maintenance in sarcoidosis. *Molecular and Cellular Biology*, 1–22.

Dr. Nathan Vanderford Publications

5. Hunter, G.G., Campbell, J., Baggett, R., Biazzin, C., Carithers, K.L.S., Kellie, S., Eichas, R., Howell, M., Jones, K.R., Wies, J.R., Slone, C., Yates, J.R., Smallwood, A.M., Lanphier, T.S., Young, A.D., and Vanderford, N.L. (2026). Where Are the Faculty Leaders? (Revisited). *Journal of Faculty Development*, 40(2), 82–101.

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Recently Accepted or Published Manuscripts (continued):

6. Kim, J., Kim, Y., Ausin, J., Bakhos, A., Bowens, H., Flynn, A., Mott, T., Simpkinson, E., Sowders, T., Turner, R., and Vanderford, N.L. (2026). Peer-led Cancer Education Intervention in Appalachian Kentucky: Evaluating Effects on Participants' Cancer Knowledge and Perspectives. *Journal of Cancer Education*, 41(3), 570–575.

Faculty Activity:

Dr. Teresa W-M Fan

1. Dr. Teresa W-M Fan served on EU Pathfinder grant proposals in June 2026.

Dr. Andrew N. Lane

1. Dr. Andrew N. Lane presented "CCM Metabolism Core" to the COBRE External Advisory Board on June 11, 2026.

Dr. Changhai Tian

1. Dr. Changhai Tian served as moderator for the DTCB Trainee Talk Series during the Spring 2026 semester, from April to May 2026.

2. Dr. Tian attended the International Society for Extracellular Vesicles Annual Meeting in San Juan, Puerto Rico, April 21–26, 2026.

3. On May 1, 2026, Dr. Tian gave an invited talk titled "Extracellular Vesicles and Brain Homeostasis in Cardiogenic Dementia" in the Department of Pharmaceutical Sciences at the University of South Florida in Tampa, Florida.

Dr. Luksana Chaiswing

1. Dr. Luksana Chaiswing served as an ad-hoc reviewer for the European Science Foundation on May 28, 2026.

2. On May 4, 2026, Dr. Chaiswing was an invited seminar speaker for the Winthrop P. Rockefeller Cancer Institute Forum Seminar Series, where she presented "Compartmentalized ROS Overload: Insights into Cancer Radioresistance and Normal Tissue Injury."

3. Dr. Chaiswing also served as an NCI ad hoc member for the K99-K00 Transition to Independence Study Section on January 14, 2026.

Dr. Xiaoqi Liu

1. Dr. Xiaoqi Liu gave a seminar presentation titled "Moving PLK1 Beyond Mitosis" at The Coriell Institute for Medical Research in Camden, New Jersey, on June 17, 2026.

2. Dr. Xiaoqi Liu, Dr. Yanquan Zhang, Dr. Jinghui Liu, Dr. Jia Peng, Sai Wu, Min Zhang, and Fatemeh Seilani attended the AACR Annual Meeting in San Diego, California, April 18–22, 2026. Dr. Jia Peng, Sai Wu, Min Zhang, and Fatemeh Seilani presented posters at the meeting.

Dr. Nathan Vanderford

Dr. Nathan Vanderford served as a member of the National Institutes of Health R13 Conferences and Scientific Meetings Special Emphasis Study Section in May 2026.

Dr. Vanderford delivered several presentations this quarter:

- April 8, 2026: "Appalachian Kentucky Students Take ACTION Through Advocacy," University of Kentucky Center of Excellence in Rural Health Appalachian Research Day, Corbin, KY.
- April 17, 2026: "Cancer Disparities in Kentucky," University of Kentucky Markey Cancer Center Kentucky NextGen Cancer Summit: AI, Innovation, and Discovery, Lexington, KY.
- May 29, 2026: "Taking ACTION to Reduce Cancer Disparities in Appalachian Kentucky," Rural Health Scholars Program, University of Western Kentucky, Bowling Green, KY.

Faculty Activity (continued):

- June 3, 2026: “Taking ACTION to Reduce Cancer Disparities in Appalachian Kentucky,” Rural Health and Cancer Conference, University of Vermont Cancer Center, Burlington, VT. This presentation was given as a keynote presentation.

Conference Presentations and Posters

CESB Poster Presentation at AACR

Sheng, P., Karimpour, A., Elliott, J., Fenderson, T., Cassel, P., Lin, R.M., Higashi, A.N., Lane, T. W-M., Fan, M., Chen, and K.L. O'Connor presented the poster “*Integrin $\alpha 6 \beta 4$ stimulates glucose metabolism and NAD(H) production needed to drive invasive growth of triple negative breast cancer cells*” at the AACR Annual Meeting in San Diego, April 17–22, 2026.

Dr. Changhai Tian Poster Presentation

Sun, L.J., Liang, S.Y., Hu, G.K., Dhyani, N., Gao, L., Rudebush, T.L., Liu, J.P., Zucker, I.H., and Tian, C.H. presented “*Alterations of Cerebral Extracellular Vesicle MicroRNA Profiling Potentially Disrupts Brain Homeostasis Following Myocardial Infarction*” at the International Society for Extracellular Vesicles 2026 Annual Meeting. Dr. Tian served as corresponding author.

Min Zhang Poster Presentation

Min Zhang presented the poster “*Targeting the PGK1–BECLIN1 Axis to Overcome Enzalutamide Resistance in Prostate Cancer.*” Authors: Min Zhang, Ricky Wang, and Xiaoqi Liu.

Sai Wu Poster Presentation

Sai Wu presented the poster “*CHAF1A phosphorylation by PLK1 promotes AR-driven enzalutamide resistance in prostate cancer.*” Authors: Sai Wu, Chaohao Li, Jia Peng, and Xiaoqi Liu.

Fatemeh Seilani Poster Presentation

Fatemeh Seilani presented the poster “*Plk1-BRN2 signaling axis drives lineage plasticity in castration-resistant prostate cancer.*” Authors: Fatemeh Seilani, Meng Wu, Jia Peng, Mohammad Esfini Farahani, Xinyi Wang, Yanquan Zhang, Jinghui Liu, and Xiaoqi Liu.

Sara Macias Palacio Receives Naff Symposium Poster Award

Congratulations to Sara Macias Palacio, who received 1st place in the poster presentation competition at the 51st Annual Naff Symposium on April 2, 2026, in HKRB. Her poster was titled “*Glioblastoma-derived Extracellular Vesicles as modulators of Neuroinflammatory Responses and Tumor Aggressiveness.*”

Sophia Roth Poster Presentation

Sophia Roth presented “*The Effects of Hypo- Versus Hyper-Fractionated Radiation on the Characteristics of Extracellular Vesicles*” at the 20th Annual Showcase of Undergraduate Scholars on April 29, 2026, at Memorial Coliseum.

Cooper Kincaid Poster Presentation

Cooper Kincaid presented “*Impact of Glioblastoma-Derived RedoxEVs on Neuroinflammatory Biomarkers in Mice*” at the 20th Annual Showcase of Undergraduate Scholars on April 29, 2026, at Memorial Coliseum.

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Student News

Congratulations to Dr. Kevin Fulp

Dr. Kevin Fulp successfully defended his Ph.D. dissertation on April 1, 2026. Congratulations to Dr. Fulp, his mentor Dr. Guan-Yu Xiao, and his committee members Drs. Christine Brainson, John D’Orazio, Houfu Guo, and Kathleen O’Connor.

Congratulations to Dr. Oluwafunmiyi Obaleye

Dr. Oluwafunmiyi Obaleye successfully defended his Ph.D. dissertation on April 6, 2026. Congratulations to Dr. Obaleye, his mentor Dr. Guan-Yu Xiao, and his committee members Drs. Yekaterina Zaytseva, Luksana Chaiswing, Marlene Starr, Christine Brainson, and Rina Plattner.

Congratulations to Dr. Sara Macias Palacio

Dr. Sara Macias Palacio successfully defended her Ph.D. dissertation on May 6, 2026. Her dissertation was titled “Cognitive Dysfunction in Glioblastoma: Role of Extracellular Vesicles and Evaluation of a Novel Therapeutic Strategy.” Congratulations to Dr. Palacio, her mentor Dr. Luksana Chaiswing, and her committee members Drs. Qiou Wei, Subbarao Bondada, Edward Kasarskis, and Tianyan Gao.

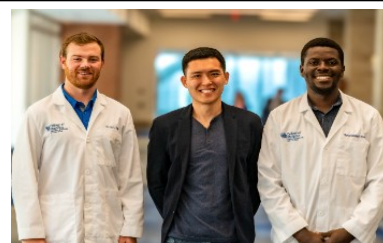
Spring 2026 Commencement

Congratulations to Kahleel Guerrier and Sara Macias Palacio, who participated in the May 9, 2026 Commencement ceremony.

Lab Activity

Xiao Lab Celebrates Successful Defenses

The Xiao Lab celebrated two successful Ph.D. dissertation defenses this quarter. Congratulations to **Dr. Kevin Fulp** and **Dr. Oluwafunmiyi Obaleye** on this major accomplishment.



LtR: Dr. Fulp, Dr. Xiao, and Dr. Obaleye

Chaiswing Lab Student Achievements

The Chaiswing Lab celebrated several student achievements this quarter, including Sara Macias Palacio’s successful thesis defense, her 1st place poster presentation award at the 51st Annual Naff Symposium, and undergraduate research accomplishments by Sophia Roth and Cooper Kincaid.

Xiaoqi Liu Lab at AACR

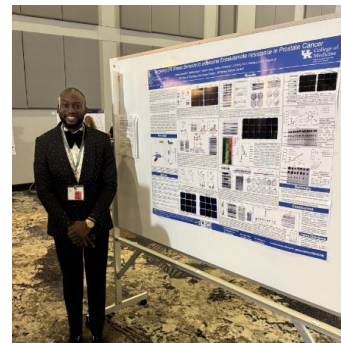
Members of the Xiaoqi Liu Lab attended the AACR Annual Meeting in San Diego, California, April 18–22, 2026. Dr. Jia Peng, Sai Wu, Min Zhang, and Fatemeh Seilani presented posters at the conference.



LtR: Yanquan Zhang, Jinghui Liu, Xiaoqi Liu, Min Zhang, Fatemeh Seilani, Jia Peng, Zhiguo Li, Sai Wu

Zhiguo Li's Lab

- Amos Akinyemi - 1st Place — Four Minutes for Cancer Research Award (May 2026, Markey Cancer Center)
 - Awarded first place at Markey Cancer Research Day for the presentation, “Prostate Cancer: One Guest That Refuses to Leave.”
- Amos Akinyemi - Trainee Research Mentorship Award (May 2026, Markey Cancer Center)
 - Recognized for outstanding mentorship, commitment to trainee development, and contributions to scientific learning and collaboration.
- Amos Akinyemi - Best Overall Poster Presentation Award (April 2026, IDeA State Cancer Trainee Research Conference, WVU Cancer Institute)
 - Received the top poster award among trainee presenters for research presented at the conference in Morgantown, West Virginia.



Pictured is Amos Akinyemi

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Lab Activity (cont.)

Zaytseva Lab News

Dr. Yekaterina “Kate” Zaytseva served on the organizing committee for the IDEa State Cancer Trainee Research Conference, held April 13–15, 2026, in Morgantown, West Virginia. Dr. Zaytseva also presented “Effects of Forever Chemicals Exposure on Metabolic Dysregulation in CRC Initiation and Progression” at the conference.

Congratulations to Dr. Josi Tessmann, who received 1st place in the lightning talk competition at The Wyatt Symposium, held April 22, 2026, in Lexington, Kentucky. Dr. Tessmann also gave a talk for the Superfund Research Program SPAN webinar through NIEHS.

The Zaytseva Lab also received two new awards this quarter: a UK-CARES Rapid Response Pilot Award in April 2026, with Dr. Zaytseva as PI, and an NCI R03 award for “Fatty Acid Synthase Driven Exosome Secretion in CRC Metastasis,” with Dr. Zaytseva as PI. The NCI R03 award period runs from June 2026 through May 2028.



Dr. Josi Tessmann

Forensic Program News

MS Forensic Graduates Celebrate Commencement

Congratulations to the 2026 MS Forensic graduates. A group photo from the May 2026 UK Commencement ceremony was submitted for inclusion in this issue.

Ryan Asmann and Lexi Ward Join Eqias Labs

Congratulations to Ryan Asmann and Lexi Ward, recent graduates from the Toxicology Track of the Forensics program, who are now employed at Eqias Labs, the new horse testing facility at the University of Kentucky.



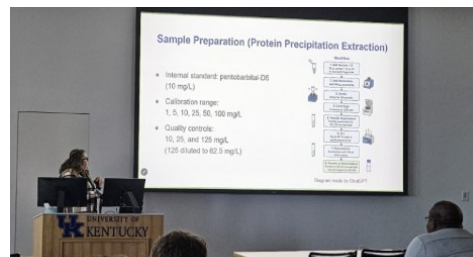
Back row, left to right: Ryan Asmann, Ariel Harris, Aj McCondichie, Sydney Singh
Front row, left to right: Amber Nguyen, Zoe Krispin, Destiny Addison, Lexi Ward,
Ashlyn Mallory Not pictured: Farzam Alavi

2026 Forensics Oral Presentations

Our forensics students had a successful round of oral presentations held in HKRB 150 on May 8th. They presented on their Spring 2026 internships in this culminating event



Presenting, Ariel Harris



Presenting, Lexi Ward

Summer 2026 Internships

We are proud to recognize 6 of our MS in Forensic Toxicology and Analytical Genetic second year students who will be completing their first internship during the summer term. Below are their respective placements.

UKY Harm Reduction Lab:

- Daniel Daly
- Abby Noren

KY Newborn Screening Lab

- Tatum Snyder

UKY Gluck Equine Research Center

- Katie Riley

UKY AARTS Program

- Jan Wilson

KY Energy and Environment Cabinet

- Kealy Stephens

Forensic Alumni Updates

Kaleigh Wingate, 2022 Graduate, Matches into Psychiatry Residency at Dartmouth

Congratulations to Kaleigh Wingate, a 2022 graduate of the Forensic Toxicology and Analytical Genetics program, who recently matched into psychiatry residency at Dartmouth. Kaleigh shared that her training in forensic toxicology and analytical genetics remains an important part of her journey and continues to shape the way she thinks about science, medicine, and patient care.



Pictured: Kaleigh Wingate



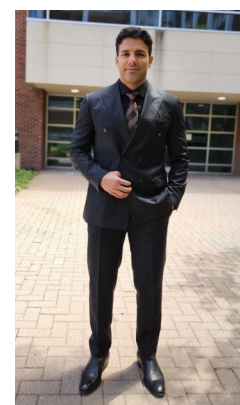
Pictured: Kaleigh was selected to serve as a panelist for the 2026 APA MOORE Equity in Mental Health Youth Summit in Albuquerque, New Mexico

Farzam Alavi, a recent graduate of the MS Forensic Toxicology and Analytical Genetics program

The Department of Toxicology & Cancer Biology is proud to highlight Farzam Alavi, a recent graduate of the MS Forensic Toxicology and Analytical Genetics program. Farzam is beginning his career with the United States Secret Service as a Criminal Investigator/Special Agent. In this role, he will apply the knowledge, skills, and professional experiences gained through his forensic science training as he begins this exciting next chapter in public service.

Farzam Alavi reflecting on his journey and his future:

"I am excited to begin my career with the U.S. Secret Service as a Criminal Investigator (Special Agent). In this role, I will be responsible for conducting complex criminal investigations, gathering and analyzing evidence, interviewing witnesses, and working with other law enforcement agencies to protect the nation's financial infrastructure and investigate federal crimes. The position also includes protective responsibilities and requires strong attention to detail, integrity, and sound decision making.



Pictured: Farzam Alavi

My interest in this career developed through both my scientific training and my experiences outside the classroom. While completing my Master's degree in Forensic Toxicology and Analytical Genetics at the University of Kentucky, I gained extensive experience analyzing data, conducting research, and applying critical thinking to solve complex problems. I also had the opportunity to work on a cold case homicide project with the Lexington Police Department, where I saw firsthand how scientific evidence can contribute to criminal investigations and public safety. Those experiences strengthened my interest in pursuing a career that combines analytical problem-solving with public service.



Farzam pictured presenting at Lex PD

I am grateful to the faculty and mentors within the Department of Toxicology & Cancer Biology who helped me develop the scientific foundation, discipline, and investigative mindset that prepared me for this opportunity. I look forward to serving the public and applying the skills I developed at the University of Kentucky throughout my career."

Congratulations

The Department of Toxicology & Cancer Biology would like to once again congratulate our Spring 2026 Ph.D. graduates on successfully completing their dissertation defenses. This major accomplishment reflects years of dedication, research, perseverance, and hard work.

Congratulations to Dr. Kevin Fulp, Dr. Oluwafunmiyi Obaleye, and Dr. Sara Macias Palacio on this exciting milestone. We are proud to celebrate your achievements and look forward to seeing all that you accomplish in your next chapters.



LtR: Dr. Kevin Fulp, Dr. Oluwafunmiyi Obaleye, and Dr. Sara Macias Palacio

DTCB Fall 2026 events

No 1. Faculty meeting

9/15, 10/20 and 11/17

Time: 2PM

Location: HKRB 150

Only Coffee/Tea will be provided

No 2. Monday Seminar Series

9/7, 9/14, 9/21, 9/28, 10/5, 10/12, 10/19, 11/2, 11/9, 11/16 and 11/23

(final schedule might be adjusted, and shared with you)

Time: 12PM

Location: MN 463

Provide food and Coffee

Only three external speakers will be invited!

NEWSLETTER ITEMS

Want to include something in the next newsletter? Send your stuff to Ashley Cowan at ToxAndCancerBio@uky.edu



SAVE THE DATE

The Forensics Orientation will be held on Friday, August 21st, 2026 from 9:00 am—1:00 pm