



INTRODUCTION

Well, it's finally here. After what seems an age, we received the Notice of Award for our COBRE application P20GM152281-01 entitled "Center for Molecular Interactions in Cancer (CMIC)". Our current funding period for Year 1 began on March 5th and runs through the last day of 2024. It's exciting to get the official notice, and I appreciate everyone's patience as we waited on the final word from NIH. All of the accounts for federal dollars are in place, as are the institutional support funds. There's nothing left now but to do the work.

In other big news, I'm very happy to announce that we have finalized the composition of our Advisory Committee (AC). Our external members will include Ann West (Ph.D.) from the University of Oklahoma, Brandt Eichman (Ph.D.) from Vanderbilt University, and Maria Spies (Ph.D.) from the University of Iowa. More about these great scientists on page 2. Plus, be on the lookout for email updates from me about our first AC meeting in September.

Until next time...

Cheers,

Robert L. Eoff, PhD
Professor of Biochemistry &
Molecular Biology
CMIC Director

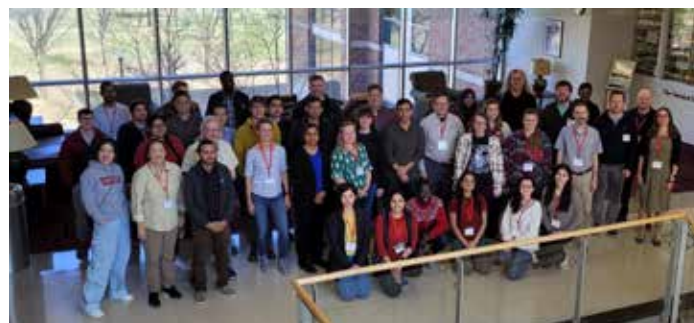


OUR MISSION

Cancer affects the health of millions of Americans. Studying molecular mechanisms that endow cells with malignant properties is an essential component of advancing pre-clinical studies and a key part of efforts to improve patient outcomes. The purpose of this NIH COBRE grant is to establish the CMIC at the UAMS. The mission of the CMIC is to study molecular features and functional properties of biomolecules that drive cancer. The unifying theme of research among Center members is the coupling of structural biology and high-resolution imaging with precise, quantitative analysis of biochemical and cellular processes to understand how molecular interactions govern the initiation, progression and treatment of cancer. Our long-term goal is to leverage faculty mentoring, strategic recruitment, and cutting-edge core resources to develop a critical mass of investigators that will support a self-sustaining center in which research advances our knowledge of cancer through precise and comprehensive analyses of molecular events that impact malignant pathogenesis.

CENTER NEWS & UPDATES

- On March 18-19, Dr. Enemark participated in a Phenix workshop offered by the Oklahoma COBRE in Structural Biology. Presenters at the workshop included the Phenix Developer Team from Lawrence Berkeley National Laboratory
<https://www.ou.edu/structuralbiology/events/workshops>



- The first CMIC meeting was held on April 17th. Thanks to everyone who attended the meeting. This meeting will occur on every third Wednesday of the month from 4-5 PM in the Betsy Blass board room on the 10th floor of the Cancer Institute.

April 4th: Drs. Enemark and Eoff were interviewed by Steve Barnes for *Arkansas Week*, a local TV show on PBS. The interview aired on Episode 15 of Season 42.



UPCOMING EVENTS

- We moved the date of our next center meeting to avoid conflicting with the Cancer Institute Research Retreat. The CMIC meeting will now be held on May 22nd from 4-5 PM. Please check your calendar for the revised invitation.
- A number of UAMS COBRE members, including several of us from the CMIC, will attend the 9th Annual National IDeA Symposium for Biomedical Research Excellence (NISBRE) to be held June 16-19 in Washington DC. One of the featured keynote speakers is Monica Bertagnolli, M.D., Director of the NIH.
- If you have any additional news or updates to share with the CMIC team, then please let Robert know.



NAMES TO FACES

The CMIC Advisory Committee (AC) is comprised of institutional leadership and external experts in structural biology and cancer-related research. Two UAMS faculty members and three external scientists have kindly agreed to serve on the AC. A brief bio for each member of the AC is provided below.



Dan Voth, Ph.D., Professor and Chair, Dept. of Microbiology & Immunology, Interim Vice Chancellor for Research & Innovation, UAMS - Dr. Voth is an expert in the pathogenesis of pulmonary bacterial pathogen infections. He serves as the senior institutional official for the CMIC AC.



Brandt Eichman, Ph.D., Chair and Professor - William R. Kenan, Jr. Chair, Dept. of Biological Sciences and Dept. of Biochemistry, Vanderbilt University - Dr. Eichman is an expert in the structural biology of DNA replication and repair.



Maria Spies, Ph.D., Professor of Biochemistry and Molecular Biology, Professor of Radiation Oncology, University of Iowa - Dr. Spies is an expert in the structural biology and biophysics of genome caretakers at the intersection of DNA replication, recombination, and repair.



Jessica Snowden, M.D., Professor in the Dept. of Pediatrics and UAMS College of Medicine Executive Associate Dean for Research - Dr. Snowden is a pediatric infectious disease specialist. She serves as the senior faculty member for the CMIC AC.



Ann West, Ph.D., Professor, Assoc VP, Research & Partnerships, Grayce B. Kerr Centennial Chair, E.K. Gaylord Presidential Professor, University of Oklahoma - Dr. West is an expert in pathogen signal transduction and PI of the Oklahoma COBRE in Structural Biology.

RECENT PUBLICATIONS

(RPL publications from January-April 2024)

Wolfe AR, Feng H, Zuniga O, Rodrigues H, Eldridge DE, Yang L, Shen C, Williams TM (2024) "RAS-RAF-miR-296-3p signaling axis increases Rad18 expression to augment radioresistance in pancreatic and thyroid cancers" *Cancer Lett*, 591, 216873 (DOI: 10.1016/j.canlet.2024.216873; PMID: in process). ■

Wolfe AR, Cui T, Baie S, Corrales-Guerrero S, Webb A, Castro-Aceituno V, Shyu D-L, Karasinska JM, Topham JT, Renouf DJ, Schaeffer DF, Halloran M, Packard R, Robb R, Chen W, Denko N, Lisanti M, Thompson TC, Frank P, Williams TM (2024) "Nutrient scavenging-fueled growth in pancreatic cancer depends on caveolae-mediated endocytosis under nutrient-deprived conditions" *Sci Adv*, eadj3551 (PMCID: PMC10906919).

THE STRUCTURE OF DETERMINATION

The All Blacks mens rugby team and the Black Ferns womens rugby team from New Zealand are two of the most successful sports teams in the world. They've achieved (and sustained) greatness on the pitch by creating a culture of intentionality and commitment, where self-discipline and teamwork are prioritized. Members of the legendary All Blacks follow a shared set of principles to guide their training and gameplay. James Kerr distilled these principles down into 15 mantras in his book *Legacy*:

Mantra #2: "go for the gap" - in other words, push back against complacency to give yourself and your team a competitive advantage by growing your skills.

For more reading, check out the article by Christine Kininmonth summarizing the book *Legacy* by James Kerr: <https://www.thegrowthfaculty.com/blog/summaryLegacyAllBlacksJamesKerrbook>

On a less...intense note, here's one of Pixar's storytelling rules/guidelines from Emma Coats for you to consider applying to your scientific writing process.

Pixar Storytelling Rule#10: Pull apart the stories you like. What you like in them is a part of you; you've got to recognize it before you can use it. 90% of being a good writer or storyteller is being a good noticer. Notice when things resonate with you and start asking why.