

## INTRODUCTION

Happy New Year AND Happy New Budget Period too!

I hope that the end of 2024 was filled with good friends, good food, and some well-earned relaxation. Of course, new papers and grants are nice too!

At the time of writing this newsletter, we are now officially in Year 2 of our Phase 1 COBRE award. So much progress has been made this year. I am very grateful for everyone's efforts to help complete what has been a solid start for the CMIC.

A big "thank you!" to Veronica Overton for working so hard to close out the Year 1 fiscals and ensure that everyone received their new account numbers for Year 2 in a timely fashion. I am excited to see what Year 2 holds for our team.

Cheers,



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



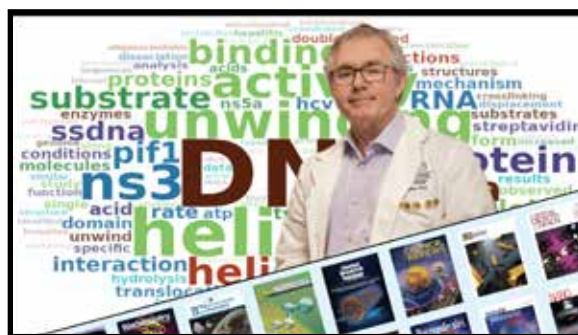
## OUR MISSION

*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.*

**PLEASE CITE Grant P20 GM152281** if you receive COBRE support or use CMIC core services/instrumentation

## CENTER NEWS & UPDATES

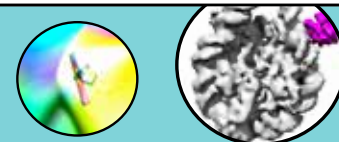
- **New NIH funding for Dr. Kevin Raney.** Dr. Raney received a Notice of Award for his R35 grant entitled "Helicase mechanisms and G-quadruplex signaling" (R35GM156702). The 5-year award will allow his group to continue their work unraveling the mechanisms of action for helicases, including enzymes implicated in cancer and viral pathogenesis. An additional aspect of the award will study how helicase action is tied to signaling by guanine-rich, four-stranded nucleic acids called G-quadruplexes (G4). Congratulations to Dr. Raney & his team!



- **Accolades for CMIC Pilot Project Awardee Dr. Kirk West.** Dr. Kirk West received the Frank M. Torti M.D., M.P.H. award for his poster at the 2024 Cancer Biology Training Consortium (CABTRAC) in Kansas City, MO (October 28-30, 2024). He also presented a poster at the American Cancer Society Jiler Professors and Fellows Conference in Tuscon, AZ (November 7-10, 2024). Well done Dr. West!



- **CMIC Research Cores supporting grants.** Researchers can now indicate their planned CMIC Core usage for grant submissions by checking the "Structural Biology" and "Biomolecular Interactions" boxes on the "Tags" document provided by OSPAN. Additionally, Letters of Support can be provided to researchers for grant submissions that involve the CMIC Research Cores.
- **SAVE THE DATE!** We will hold a virtual "check-in" with the CMIC Advisory Committee (AC) on Wednesday, March 26th. Starting at 8:30 AM CST, CMIC leadership, Core staff, Research and Pilot Project Leaders (RPLs & PPLs) will give a brief update on progress made since our AC meeting back in September. Please save the date and contact Dr. Eoff or Veronica with any questions.



## CENTER NEWS & UPDATES (CONT.)

- **CMIC Co-Sponsored seminar.** The CMIC is co-sponsoring a seminar by Karen M. Vasquez, Ph.D., as part of the WPRCI Forum Series. The talk by Dr. Vasquez is entitled “Novel Mechanisms of Genetic Instability in Cancer” and will occur on Monday, February 10th from 12-1 PM in the Walton Auditorium on the 10th Floor of the Cancer Institute. Dr. Vasquez is Division Head and Professor of Pharmacology & Toxicology at the University of Texas at Austin. She is also the Jaime N. Delgado Endowed Chair in Pharmacy and a world-renowned leader in the study of genome stability, DNA damage, and mechanisms of repair. Please join us on the 12th to hear about Dr. Vasquez’s exciting research.
- **Lunch Gathering for CI Young Investigators.** Drs. Lu and Miousse are leading a lunch gathering for young investigators in the Winthrop P. Rockefeller Cancer Institute. The gathering occurs the second Friday of every month from 12-1 PM in the CI Director’s Room on the 10th floor of the Cancer Institute and is intended to provide professional guidance and personal support for junior faculty who are launching their research programs. The next meeting will take place on Friday, February 14th. Lunch for the first 15 attendees will be provided by the CMIC. Please contact Dr. Lu or Dr. Miousse with questions.
- **NIH changes guidelines for images on aims page.** The NIH recently altered its guidance on use of images and other graphics on the Specific Aims page. Please see the link below for more details.

[https://grants.nih.gov/grants-process/write-application/how-to-apply-application-guide/format-attachments#figures-\(e.g.,-images,-graphics,-charts,-graphs,-and-tables\)](https://grants.nih.gov/grants-process/write-application/how-to-apply-application-guide/format-attachments#figures-(e.g.,-images,-graphics,-charts,-graphs,-and-tables))

As someone who loves a good illustration, the recent guidance from the NIH barring use of images on the Specific Aims page is a bit of a disappointment, but I suppose there are bigger things to worry about...

## RECENT PUBLICATIONS

*(Center publications from November 2024-January 2025)*

**West K**, Nguyen TTN, Tengler KA, Kreiling N, **Raney KD**, Ghosal G, Leung JW (2024) “Autophosphorylation of the Tousled-like kinases TLK1 and TLK2 regulates recruitment to damaged chromatin via PCNA interaction” *Nucleic Acids Res.*, gkae1279 (PMID: 3972791).

*Center members are listed in bold*

## THE STRUCTURE OF DETERMINATION

Valentino Rossi is one of the most talented and successful motorsports athletes of all time. Nicknamed, “The Doctor”, Rossi won 9 world championships during his 26 season racing career, including 115 wins, 235 podium finishes, and over 400 total races. Rossi’s success and longevity in the sport is a testament to his own talents, as well as the exceptional teams surrounding #46, but all those victories required uncounted hours of training, preparation, and a healthy dose of failures. In fact, one of Rossi’s very earliest opportunities to race in the 125 cc class of motorcycles ended with him crashing on the very first corner of the very first lap. Did that one crash keep him from becoming arguably the greatest racer of the modern era? Did the next one? Nope.

What we do as biomedical researchers is challenging, and (just like #46) we experience a healthy dose of failure. It’s not fun and it often seems completely unfair, but it’s okay. So, when you are back in the lab repeating the last experiment for your next paper or back at the computer writing the next grant, know that it’s because you (just like #46) are resilient.

