

Fall 2022 Seminar Series

“From Remdesivir (Veklury), Pavidolide B to Clopidogrel (Plavix): Using OChem-I & II Knowledge to Address Diverse Biomedical Challenges”



Overwhelmed by his mentor's blockbuster drug invention (Lyrica) emerged during his doctoral studies, Dr. Yaoqiu [yao-cho] Zhu [zoo-u] opted out postdoc training and went directly from Dr. Richard Silverman's group at Northwestern University to AbbVie upon graduation. However, the passion for basic science has driven him back to academia with an arduous start at the remote minority-serving university in El Paso, TX. This seminar will introduce how the nontraditional career path has channeled diverse and distinctive research innovations at the young and small Zhu group: (1) succinct and flexible synthesis platform for accessing anti-COVID drug remdesivir and its analogs; (2) reverse-enzymology-inspired 4-step total synthesis of complex marine natural product and 3D printing of its anticancer stereoisomers; (3) identification of the first clinical H₂S-donating drug and novel click-chemistry for H₂S donor development; (4) first and stereoselective chemical synthesis of the blockbuster clinical antiplatelet active metabolite and elucidation of its unique molecular mechanism of GPCR protein post-translational modification and signaling.

Yaoqiu Zhu, Ph.D.

Department of Chemistry and Biochemistry, The UT at El Paso

Wednesday, November 9

5:30 – 6:20 PM

Markstein Hall Room 125

Join Zoom Meeting: <https://csusm.zoom.us/j/81830691479>

Questions? Contact Dr. Kambiz Hamadani (khamadani@csusm.edu)