

Dissertation Defense

Novel Tetracycline Reduced Angiogenesis in Mouse Model of Choroidal Neovascularization

Presented by:

Josh Willms

Ph.D. Candidate
Translational Neuroscience and Pharmacology

Wednesday, March 22, 2023 TTUHSC | ACB110 10:00 a.m. – 11:00 a.m.

ABSTRACT: Choroidal neovascularization (CNV) is a leading cause of blindness worldwide. Minocycline and diacetyl minocycline (DAM; modified to remove the antimicrobial action of its parent compound) are tetracycline derivatives with antiangiogenic properties. Minocycline and DAM were tested in a laser-induced model of CNV in mice via topical eye drops. Both compounds reduced CNV lesion volume, suggesting that topical administration of minocycline and diacetyl minocycline may represent