Title: Development of a Novel *In Vitro* Human Hepatocyte Model to Predict Drug Transport Alterations in Nonalcoholic Fatty Liver Disease (NAFLD)

Description: This project aims to develop a new *in vitro* NAFLD model that can be utilized to study drug disposition in this disease state. *In vitro* data will be incorporated into physiologically based pharmacokinetic (PBPK) models to improve pharmacokinetic predictions in NAFLD patients. The student will learn human hepatocyte cell culture methods and assays to study drug disposition (e.g., B-CLEAR®). The student will also become familiar with data analysis tools (e.g., R) and PBPK modeling software (i.e., Simcyp™ Simulator) to translate *in vitro* data to *in vivo* predictions.

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