

Summary of Poster Presentation at the 2025 Digestive Disease Week (DDW) Meeting

At the 2025 DDW Meeting, I gave an oral presentation titled "A single nucleotide polymorphism in HNF1A plus a High-Fat Diet contributes to MASLD and HCC development." This work focuses on identifying the macromolecular interactions that mediate the progression of metabolic dysfunction-associated steatotic liver disease (MASLD) to hepatocellular carcinoma (HCC).

The lack of clinically relevant animal models has significantly impeded our understanding of how MASLD progresses to HCC. To address this challenge, we recently developed a mouse model that closely mimics the human MASLD-HCC spectrum. Preliminary data from our lab showed that 27% of Hnf1αA98V mice developed MASLD-HCC after being placed on a high-fat diet (HFD) for 14 months. Notably, specific components of the HFD, particularly sphingolipids—which are known to regulate gene expression—were found to be elevated in our mouse model.

My presentation offered an excellent opportunity for rich scientific discussions with physician-scientists, senior researchers, and fellow trainees. I received particularly

valuable feedback from the moderator Thanda Han a hepatologist from the University of Arizona, Phoenix, who advised me to revisit the tissue staining to see if the mis.

In addition to presenting my research, I engaged in several career development activities during the meeting and met with Dr Christopher Williams, a physician-scientist from Vanderbilt University who offered to provide me with ongoing career guidance.

I also met with Dr Akwi Asombang from Mass General Hospital who gave me some invaluable advice on how to pursue my interest in global health. I am grateful to the Carter Travel Award, which supported my attendance at the meeting and allowed me to share my work with the broader physician-scientist community.

Overall, participating in the DDW Meeting reinforced my commitment to a career at the intersection of clinical care and translational research. I left the meeting motivated to apply the feedback I received to strengthen my research, seek out future collaborations and continue developing the skills necessary to thrive as a physician-scientist.