

BIO

Dr. Hu received her doctoral degree from National Taiwan University, Taiwan, in 2010 and completed three postdoctoral research fellowships in Taiwan and the USA by 2014. She joined the Genomics Research Center faculty in 2014 as an assistant Research Specialist and became an assistant research fellow in 2019. Dr. Hu's research interests are focused on translational medicine, with a particular emphasis on cancer prevention, diagnosis, and treatment, especially in pancreatic cancer.

Dr. Hu has authored 25 papers in cancer biology journals, covering topics such as nucleotide and glucose metabolism, targeted therapy, and tumor microenvironment. She has also patented three cancer treatments, including inhibitors for dTTP synthesis and mitosis and a peptide that blocks IL-17RB and MLK4 interaction.

In her research on pancreatic cancer initiation and prevention, Dr. Hu has established a mechanistic link between perturbed sugar metabolism and genomic instability that leads to de novo oncogenic KRAS mutations in pancreatic cells. She has also shown that high sugar drinks and high GlcNAc uptake can lead to DNA damage and increase the risk of cancer initiation. In her research on pancreatic metastasis, she has identified potential therapeutic opportunities for inhibiting metastasis by interfering with the interplay between tumor cells and fibroblasts.

Dr. Hu has participated in developing humanized IL-17RB antibodies and IL-17RB/MLK4 disruptors for pancreatic and breast cancer treatment. She has also gained extensive experience in coordinating grant applications and assisting project progress in pancreatic cancer studies with a diverse team of cancer biologists, physicians, pathologists, chemists, and biomolecular engineers. Dr. Hu and Dr. Wen-Hwa Lee have established a pancreatic cancer research team in Taiwan that has been active for over a decade.