

HUMANS OF MEDICAL RESEARCH



Understanding DISEASE...Finding a CURE

DR KEN LIU



Dr Ken Liu is investigating new ways to treat liver cancer. This area of medical research is particularly important today as liver cancer is the fastest rising cancer in Australia and is among the deadliest.

Ken, a PhD student with Centenary's Liver Injury and Cancer Lab, is using a novel drug to improve the structure and function of tumour blood vessels (which are usually leaky and disorganised). By improving the quality of these vessels, the team aims to enhance the body's immune response to the cancer and also increase the delivery of any other anti-cancer therapy which is co-administered.

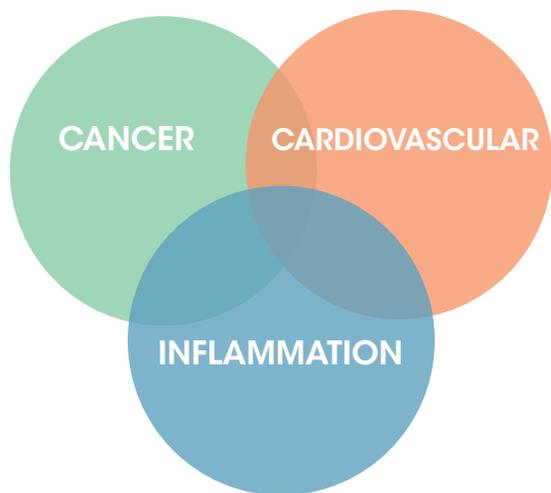
Ultimately, Ken wants his work to have an impact on people like the patients he meets during his clinical work as a doctor. He

says: "Throughout my training as a Hepatologist (liver doctor), I came across so many patients diagnosed with liver cancer and most died from the disease. Patients often present too late for curative treatment and current therapies available for advanced disease are extremely limited without any significant discoveries made over the past decade. At the end of the day, it is the patient in front of me that drives me to do research in liver cancer."

In addition to the connection to his patients, the study of liver cancer is personal for Ken, with his own family members and his wife's family affected by this terrible disease. "Both my wife and I have had several family members pass away from liver cancer related to hepatitis B (the most common cause of liver cancer worldwide). Thankfully, the virus can now be effectively prevented with immunisation. However, for those like my family members who contracted the virus before the vaccine became available, they are at risk of getting liver cancer."

Being a scientist requires a great deal of patience, dedication and focus, so down-time is important. For Ken, sometimes this means getting outdoors in the fresh air and exercising, "Hiking and bike riding are among my favourite activities." But Ken is also handy in the kitchen. He likens cooking to carrying out a science experiment, "I enjoy baking cakes and desserts and sharing them with my friends and colleagues. In fact, the process of baking is not too dissimilar to performing a scientific experiment, except the end product is edible." We hear Ken's kitchen creations taste pretty good too!

WHAT DOES IT ALL MEAN?



CANCER

Cancer is a disease of the cells, which are the body's basic building blocks.

1 in 3 women and 1 in 2 men will be diagnosed with cancer by the age of 85.

INFLAMMATION

Inflammation is the body's natural response to protect itself against harm. There are two types: acute and chronic.

1 in 9 Australians have asthma, around 2.5 million people.

CARDIOVASCULAR

Cardiovascular Disease (CVD) is a collective term for diseases of the heart and blood vessels.

Almost 1 in 3 deaths in Australia in 2015 were due to cardiovascular disease.

Together we are the solution...together we can save lives.



Ask Ken a question here <https://www.centenary.org.au/meet-dr-ken-liu/>