

PROPOSITIONS

TO THE THESIS

Targeting Wnt/ β -catenin Signaling in Liver Cancers

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1. The evolutionarily conserved Wnt/ β -catenin signaling pathway is involved in both physiological and pathophysiological processes in liver. (*This thesis*)
2. Hepatitis C virus aberrantly activates Wnt/ β -catenin signaling pathway both by core and NS5A protein. In turn, stimulated Wnt/ β -catenin signaling pathway facilitates the progression from chronic hepatitis C to hepatocellular carcinoma by regulating inflammation and fibrosis. (*This thesis*)
3. Blocking Wnt secretion reduces growth of hepatocellular carcinoma cell lines mostly independent of β -catenin signaling, possibly through alternative routes currently unappreciated. (*This thesis*)
4. Tankyrase inhibition clearly diminishes β -catenin signaling activity in all *AXIN1* and most non-mutant liver cancer cell lines. (*This thesis*)
5. The STRAP protein is upregulated in hepatocellular carcinoma and potentiates tumor growth by regulating Wnt/ β -catenin signaling activity. (*This Thesis*)
6. Hepatocellular carcinoma is characterized by both phenotypic and molecular heterogeneity (*Snorri S.Thorgeirsson. Nat Rev Cancer. 2015*). Rational treatment strategy requires adequate understanding of molecular features and genomic traits.
7. Transformative and translational science happens on a foundation of basic research. (*Michael S. Diamond*). I hope my studies on targeting Wnt/ β -catenin signaling pathway will aid in the efficient treatment design in the fight against liver cancers.
8. 《荀子·劝学》：不登高山，不知天之高也；不临深溪，不知地之厚也；不闻先王之遗言，不知学问之大也。(Xuncius: We don't know the sky is so high until we climb up steep mountains. We don't know the earth is so thick until we dive in deep rivers. We don't realize knowledge is so boundless until we listen to the words of our predecessors.)
9. It is not the strongest of species that survives, nor the most intelligent, but the one most responsive to change. (*Charles Darwin*)
10. I might say that success is won by three things: first, effort; second, more effort; third, still more effort. (*Thomas Hardy*)
11. Things did not turn out the way they were supposed to, but what can you do? You must take life the way it comes at you and make the best of it. (*Life of Pie by Yann Martel*)