

The long-term goal of my studies is to investigate the molecular mechanism of cancer progression, especially the regulation of glioblastoma and colon cancer stem cells (CSC). We now focus on identifying the new regulating molecules for CSCs and the herbal extracts which may serve as a new drug for targeting CSCs.

Techniques used in study

Cell culture (including primary cell culture, suspension stemloid cell culture)
Zebrafish xenotransplantation model
Mouse xenotransplantation model
Immunofluorescent staining
Co-immunoprecipitation and Western blot analysis
Quantitative reverse-transcription PCR

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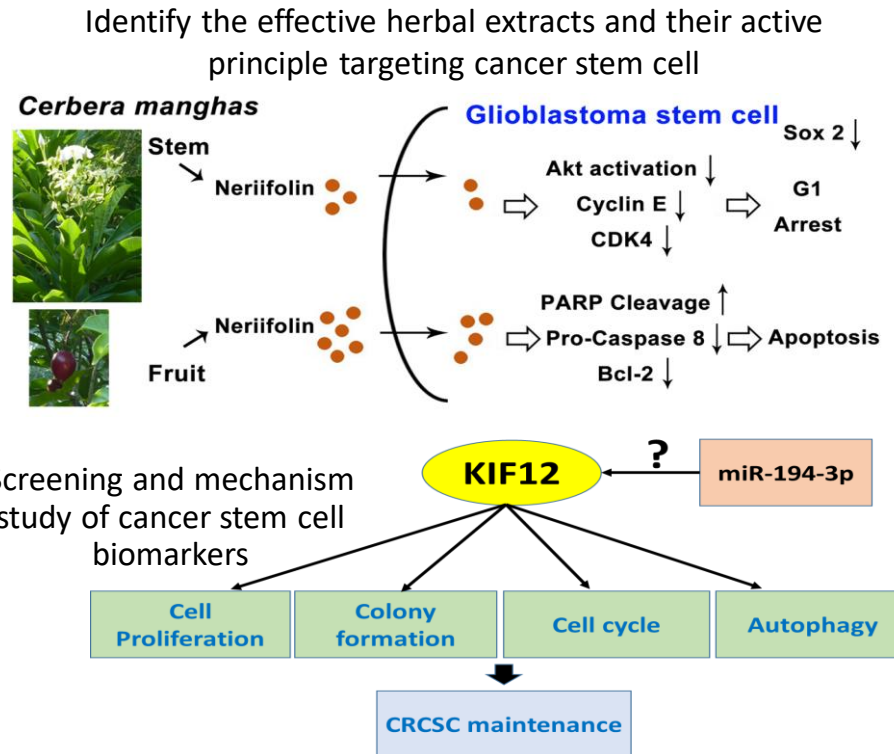
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Background:

PhD in Cell Biology, University of Alabama at Birmingham, AL, USA

Funding:

Ministry of Science and Technology
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Publications

1. Tsai JC, Liu WS, Tseng YT, Lam HI, Chen SY, Fang CL, Tong TS, **Lai YJ*** (2018, Sep). Extracts of *Cerbera manghas* L. effectively inhibit the viability of glioblastoma cell lines and their cancer stemloids in vitro and in mouse xenograft model. *Journal of Functional Food* 48; 283-96.
2. **Lai YJ**, Tsai JC, Tseng YT, Wu MS, Liu WS, Lam HI, Yu JH, Nozell SE, Benveniste EN (2017, Feb). Small G protein Rac GTPases regulate the maintenance of glioblastoma stem-like cells in vitro and in vivo. *Oncotarget* 14;8(11):18031-18049.

