KAI-YU (Carol) CHEN

Tel: (310)721-2583 Email: chvbs2000@ucla.edu
Address: 825 Weyburn Terrace, Room 315, Los Angeles, CA90024

EDUCATION

University of California, Los Angeles Sep. 2013 - Sep. 2015
Master of Biomedical Engineering, GPA: 3.5

National Cheng Kung University Sep. 2008 - Jun. 2013
Bachelor of Biological Science, Bachelor of Economics, Major GPA: 3.92 (**Top 10 percent**)

SKILLS

Basic knowledge in Python, R, MATLAB, C++, SAS
Experienced in PCR, RNA/DNA Extraction, Western blots, DNA Cloning, DNA electrophoresis, Cell Culture, Flow Cytometry, Immunoassays, Nano Drug delivery and Synthesis, Confocal Microscope, Histological Paraffin Block Section, Cell Imaging, In vivo Experiment

PROFESSIONAL EXPERIENCE

Drug Combinations and Optimization in Breast Cancer Jan. 2014- Jan. 2015
Used novel analytical methods to optimize combination therapy in breast cancer treatment.

Synthesized Anticancer Drugs on Nanodiamond Sep.2013 - Dec. 2013
Synthesized Nanodiamond Drugs by chemical interaction between anticancer drugs and modified Nanodiamond. Simulated and tested ND-anticancer drugs released from the Nano-diamond in human body condition with florescent analysis.

Tested the effects of Davallic Acid in the Lung Cancer Summer 2010, 2011
Investigated the effects Davallic Acid from the Chinese traditional herb Davallia divaricate Blume on the induction of apoptosis in A549 lung cancer cell. Provided related molecular mechanism by PCR, Western Blots, and Flow Cytometry.

Evaluated the Influence Transcription Factor *IRS-1* and *IRS-2* in Diabetes Feb. 2011- Sep. 2011
Studied the effects of the transcription factors IRS-1 and IRS-2 in insulin release from MIN-6 pancreatic cell by stimulating *egr-1* on both temporal-dependent and concentration-dependent trials with the use of RNA extraction, PCR, and DNA electrophoresis.

Cell Imaging: Motion of Membrane Proteins in Neuron Glial Cells Sep.2010-Dec. 2010
Used Confocal Microscope Imaging to observe the motion of membrane protein on the surface of neuron glial cells by GFP, and studied the adhesiveness on the surface of the flask and the development of the axons.

SELECTED PROJECT

Medical Device Assessment & Development Jan. 5- Jun 12. 2015
Consult physicians and assess medical device development such as brain retractor as well as its potential in the market, including reimbursement estimation, FDA processing time span, and prototype construction.

Isoform Inference and Quantification Apr. 2014- Jun. 2014
Simulated several sequences of protein and designed a novel algorithm to identify isoforms and quantification of them by R and Python program.

Lowering Trastuzumab Toxicity With Dual-Antibody Targeted Polymersomes Jan. 2014 – Mar. 2014
Proposed a novel targeted polymersome loaded with trastuzumab to enhance the specificity of trastuzumab to cancer cells, and shielded cardiac muscle cells from exposure to the therapeutic payload.

PUBLICATION

1. H.Wang, D.K,Lee, **K.Y, Chen**, J.Y, Chen, K. Zhang, A.,Silva, C.M,Ho, and D.,Ho, ACS Nano, 2015 Mar 24;9(3):3332-44 http://pubs.acs.org/doi/abs/10.1021/acsnano.5b00638
2. Cheng, A. S., Chang, W. C., Cheng, Y. H., **Chen, K. Y.**, Chen, K. H., and Chang, T. L. (2012). Molecules, 17(11), 12938-12949. http://www.mdpi.com/1420-3049/17/11/12938

LEADERSHIP EXPERIENCE

Captain, National Cheng-Kung University LS, UCLA TSA Basketball Team Jun. 2009- present
Recognize teammates' ability, be optimistic and motivate teammates as well as give instructions on basketball skills. Organize and represent the team to negotiate with other team and executive workers.

Chief of Executive, NCKU Life Science Student Association Jun 2010-Jun 2011
Collaborate with other department executives and school faculties to schedule panels and assist students developing leader skills. Build up social network with alumni and provide students with variety of career resources.