Anson A. Lee

Apt #202, 940 Tiverton Avenue, Los Angeles, CA 90024
Phone: +1 (424)-757-3368 E-Mail: anson.lee@ucla.edu

Education

University of California, Los Angeles **Expected June 2017**
Chemical Engineering, Biomolecular Option 3.5 on a 4.0 scale
Bachelor of Science
Dean's Honors list

Experience

HHMI Undergraduate Researcher | UCLA | Ozcan Lab **October 2016 – Present**
- Designed paper based capillary filtration device for detection of bacterial Meningitis
- Contributed to paper structure design to improve filtration efficiency
- Utilized analytical method for characterizing membrane effectiveness through microscopy

Undergraduate Researcher | UCLA | Andre Nel's Lab **October 2014 – Present**
- Designed experimental procedures to investigate the effects of mammalian cell death from metal oxide nanoparticles (MOx) and conduct safe design through coating
- Contributed to in-vivo and in-vitro experiments supporting studies related to MOx safe design
- Utilized analytical methods for cell and particle characterization
- Assembled viability data from MOx dosing using MTS and ATP to measure cell death

Operational Excellence - Intern | Bayer Healthcare **June 2016 – August 2016**
- Supported Manufacturing Intelligence on implementing reporting system in key products
- Created dashboards and documented user requirements for Purification and Quality parameters

Manufacturing Sciences - Intern | Bayer Healthcare **June 2015 – August 2015**
- Performed studies to optimize purification operations by establishing viscosity data library
- Operated GE ÄKTA Pure systems with UNICORN software for scale-down chromatography studies with affinity columns
- Enhanced understanding of protein purification by analyzing viscous fingering phenomenon

Lab Technical Assistant | City University of Hong Kong | Professor Wey Yang Teoh **July 2014 – September 2014**
- Investigated the usage of microfluidics on single cell PCR amplification
- Created PDMS-based microfluidic devices through spin coating to test models

Publications

Refereed journal publications
- X. Cai*, **A. Lee***, J. Zhaoxia. C. Huang, C.H. Chang, X. Wang, Y.P. Liao, T. Xia, R. Li, "Surface Passivation by Phosphonate Coating as a Safe Design Approach for Metal Oxide Nanoparticles", Submitted. (*Equal contribution)

Poster presentation
- **A. Lee**, T. Xia, R. Li, A. Nel, "Surface Passivation by Phosphonate Coating as a Safe Design Approach for Metal Oxides", UCLA Grand Challenges 2015.

Technical Skills

•GE ÄKTA Pure	•Mammalian Cell Culture	•ELISA & Bradford Assays
•Cell Viability Assays (MTS&ATP)	•UV Spectroscopy	•Control Charts, Lean and 5S

Leadership

Director of Speaker Events | Bruin Medical Entrepreneurs **January 2015 - Present**
- Collaborated with UCLA physicians to launch clinical surveillance program to tackle sepsis
- Contacted and maintained business relations with corporations and local organizations

Project Leader | Grand Challenges - Undergraduate Research Scholars Program **October 2014 – June 2015**
- Collaborated with 5 undergrads to develop and coordinate interventions that encourage students to take public transportation
- Presented findings and data to a class of fifty students

Internal Fundraising Chair '14-'15 | Circle K International UCLA **September 2014 – June 2015**
- Raised over 5,000 dollars through fundraisers and sponsorships
- Planned events and taught fundraising initiatives for an organization of 200 members

Achievements

- University of Waterloo's Avogadro's Exam Top 5% Recipient
- Languages: Cantonese (fluent), Mandarin (fluent), and French (basic)
- Programming: Matlab