

Yinan Xuan

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Education

University of California, San Diego

La Jolla, CA

M.S. in Biological Science in progress

09/2017~Present

Thesis Lab: Wang Lab

Expected Graduation: 06/2020

B.S. in Physiology & Neuroscience

Minor: Cognitive Science

Graduated in June 2017

Research Experience

University of California, San Diego

La Jolla, CA

Section of Neurobiology, Division of Biological Sciences

Wang Lab

Graduate Student Researcher

04/2018~Present

- Devised an olfaction virtual reality device to observe odor guided behaviors in *Drosophila* in a controlled setting
- Programmed digital image processing software to facilitate data analysis pipeline
- Collaborated in building and testing a customized three-photon calcium imaging microscope
- Built a platform to facilitate surgery process on *Drosophila*
- Co-author of three works in progress

University of California, San Diego

La Jolla, CA

Division of Otolaryngology–Head and Neck Surgery, Department of Surgery

Ongkeko Lab

Undergraduate Researcher

09/2013~06/2017

- Studied the role of long non-coding RNAs in head and neck squamous cell cancer
- Mainly responsible for designing and performing in vitro experiments in many projects
- Co-author of three published peer-reviewed articles
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AskGene Pharmaceutical Inc.

Camarillo, CA

Internship

06/2016~08/2016

- Participated in cell line development selecting clone cells with the highest titer
- Purified recombinant antibodies using Protein A Affinity Chromatography

Ministry of Education

Hangzhou, China

Key Laboratory of Reproductive Genetics

Researcher shadowing

07/2013

- Examined Potential Fetus Mutation via Chorionic Villus Sampling

Programming

- Machine Learning (3 years)
- Python programming (4 years)
- Matlab programming (4 years)
- C++ programming (1 year)
- Basic C# language programming
- Basic Java language programming

Technical Skills

- Data Analysis via Python and Matlab
- Microcontroller Programming
- Printed Circuit Board (PCB) Design
- Digital Image Processing
- Signal Processing
- Graphical User Interface (GUI) Programming
- Unity Game Programming
- Optical Path Alignment

Membership & Honors

Member of Muir College's Senior Honors Caledonian Society 01/2015
– Achieve Senior standing with at least a cumulative GPA of 3.8

Publications

Yu, Vicky, Mehran Rahimy, Avinaash Korrapati, Yinan Xuan, Angela E. Zou, Aswini R. Krishnan, Tzuhan Tsui, Joseph A. Aguilera, Sunil Advani, Laura E. Crotty Alexander, Kevin T. Brumund, Jessica Wang-Rodriguez, and Weg M. Ongkeko. "Electronic Cigarettes Induce DNA Strand Breaks and Cell Death Independently of Nicotine in Cell Lines." *Oral Oncology* 52 (2016): 58-65. Web.

Zou, Angela E., Jonjei Ku, Thomas K. Honda, Vicky Yu, Selena Z. Kuo, Hao Zheng, Yinan Xuan, Maarouf A. Saad, Andrew Hinton, Kevin T. Brumund, Jonathan H. Lin, Jessica Wang-Rodriguez, and Weg M. Ongkeko. "Transcriptome Sequencing Uncovers Novel Long Noncoding and Small Nucleolar RNAs Dysregulated in Head and Neck Squamous Cell Carcinoma." *Rna* 21.6 (2015): 1122-134. Web.

Zou, Angela E., Hao Zheng, Maarouf A. Saad, Mehran Rahimy, Jonjei Ku, Selena Z. Kuo, Thomas K. Honda, Jessica Wang-Rodriguez, Yinan Xuan, Avinaash Korrapati, Vicky Yu, Pranav Singh, Jennifer R. Grandis, Charles C. King, Scott M. Lippman, Xiao Qi Wang, Andrew Hinton, and Weg M. Ongkeko. "The Non-coding Landscape of Head and Neck Squamous Cell Carcinoma." *Oncotarget* (2016): n. pag. Web.