

# STEVE CAO

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## SUMMARY

Research professional with six years of experience in a high throughput services laboratory. Adept at molecular biology wet work and troubleshooting various processes. Experience with developing new lab space, work flow, and Standard Operating Procedures (SOPs). Highly self-driven and flexible with an eagerness to learn new skillsets.

## SKILLS

DNA Microarray	QC	Automation	LIMS
Affymetrix Axiom Assay	Affymetrix WT Pico Assay	Beckman Biomek FXp	DNA/RNA Purification

## EXPERIENCE

2011 – Present	Thermo Fisher (formerly Affymetrix)	Santa Clara, CA
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*Scientist II*

- Operate Beckman Coulter FXP liquid handlers to conduct experiments and validate methods
- Troubleshoot Beckman Coulter FXP liquid handlers during experiments
- Train new hires on a range of laboratory procedures and write standard operating procedures (SOPs) for new technology within the group
- Oversee running the largest genome wide association study to date in collaboration with UK Biobank.
- Conduct high throughput genotyping utilizing Affymetrix Axiom microarray technology
- Utilize laboratory information management systems (LIMS) and optimize its usage in lab
- Conduct experiments with Hamilton Nimbus liquid handlers
- Execute quantification and normalization of nucleic acids with PicoGreen technology and also using NanoDrop technology
- Perform PCR, gel electrophoresis, purification, quantification and formulate own buffers and gels
- Prepare RNA for assays using Zymogen kit RNA extractions
- Handle fresh frozen tissue, RNA-later tissues, and FFPE tissue for Affymetrix RNA expression and Affymetrix QuantiGene Plex platforms
- Manage multiple projects simultaneously ranging from sample processing to quality control
- Design new lab space to maximize work flow and efficiency with lean standards in mind

2007 – 2010      University of the Pacific      Stockton, CA

*Undergraduate Research Associate*

- Learned about the properties of spider silk
- Created part of cDNA library from Black Widow spiders, *Lactrodectus Hesperus*
- Isolated cDNAs from cDNA library of Black Widow spiders, *Lactrodectus Hesperus*
- Performed minipreps to purify DNA for sequencing in order to look for homologs
- Ran countless PCR and gel electrophoresis

## EDUCATION & HIGHLIGHTS

University of the Pacific Stockton, CA

*Bachelor of Science, Biological Sciences (2010)*

**Foothill Community Health Center** **San Jose, CA**

### Outreach and translator volunteer (2016-Present)