# **Sophie McDevitt**

Seattle, WA - Email me on Indeed: indeed.com/r/Sophie-McDevitt/b02f5072cd6bbb91

Willing to relocate to: Boston, MA - New York, NY - San Diego, CA Authorized to work in the US for any employer

WORK EXPERIENCE

#### **Medical Scribe**

Swedish Medical Center - Seattle, WA - Seattle, WA -

March 2017 to Present

- Document all chart information and physician-patient interaction.
- Improve healthcare efficiency through chart documentation and daily reports.

# U.S. Army Officer

U.S. Army Reserve - Marysville, WA -

June 2016 to Present

- Department of Defense Security Clearance.
- Organize and implement health service plans for 200+ soldiers in accordance with Federal regulations.
- Manage training and medical records, review files to ensure accuracy and provide process improvement guidelines to ensure 100% oversight and confidentiality of material.

## **Engineer Intern**

Bio-Therapeutic - Seattle, WA -

July 2016 to September 2016

- Utilized ISO, FDA, and international protocols to ensure quality standard achievement for \$1M+ worth of designs and devices for a global market.
- Developed trials for microcurrent, light therapy, manual exfoliation, and skin analysis devices to ensure device efficacy, lifetime, and quality.
- Designed device analysis and quality improvement processes for engineering.
- · Processed and evaluated data sets.
- Trained team members on new SOPs.
- Assessed and documented device failures that were returned from the field. Developed device changes for improved lifetime and improved device instructions.
- Inspected and improved returned device documentation procedures for ISO 13485 compliance.
- Revised device tracking protocol for devices and materials to better assess failed devices.
- Improved troubleshooting manuals and customer service interaction templates.
- Trained new team members on customer service, quality SOPs, ISO documentation, and device familiarity.
- Analyzed manufacturing conditions and established quality checkpoints from supplier materials in-processing to completed consumer device to improve device quality in the field.

- Coordinated with supplier procurement to document unsatisfactory materials shipments to improve device quality and maintain contractual obligations.
- Established improved shipping techniques to minimize damage both domestically and internationally.

## **Undergraduate Research Associate**

Santa Clara University - Santa Clara, CA -

October 2015 to May 2016

- "Development of exosome surface display technology in living human cells" published in Biochemical and Biophysical Research Communications Journal.
- "Exosome Engineering and Imaging" published in the Santa Clara University Journal.
- Designed and conducted experimentation for engineering proteins on the surface of exosomes.
- Employed mammalian cell counting, cryopreservation, transfection, immunofluorescent attachment, and cell proliferation techniques.
- Performed DNA analysis and bright field microscopy to ensure engineering progression and success.
- Analyzed and modeled protein attachment using confocal microscopy.
- Responsible for raw materials procurement.
- Maintained lab to OSHA and FDA requirements.
- Received Best Presentation Award from Santa Clara University School of Engineering and secured two grants.

## **Bioengineering/Organic Architecture Fellow**

Moscoso Arquitectura - Cochabamba -

August 2015 to September 2015

- Selected for Santa Clara University Global Fellowship.
- Conducted a 20 week practicum with 5 weeks of in country experience.
- Facilitated research on Polytetrafluoroethylene (PTFE) and Ethylene Tetrafluoroethylene materials for architecture applications in developing countries.
- Worked throughout the organization to analyze efficacy and limitations facing Moscoso.
- Developed proposals for organizational and engineering problems.

#### Lab Aide

Oregon Health and Science University (OHSU) - Portland, OR -

February 2012 to May 2012

- Conducted viral vector DNA expansion and experimentation for genetic disease therapy applications.
- Assisted in small mammalian testing and familiarization.
- Transformed DNA into plasmid models.
- Collected and analyzed experimentation data.

**EDUCATION** 

## **B.S.** in Bioengineering

Santa Clara University, School of Engineering

June 2016

#### **SKILLS**

cGMP (2 years), Customer Service (2 years), Data collection (2 years), Failure Analysis (1 year), ISO 13485, 14971 (1 year), cGLP (2 years), CMDR (1 year), EU MDD (1 year), Solidworks (4 years), Matlab (3 years), Quality Assurance (2 years), Biostatistics (2 years)

#### **LINKS**

https://www.linkedin.com/in/sophiemcdevitt

MILITARY SERVICE

Service Country: US

Branch: Army

Rank: 2LT

June 2016 to Present

U.S. Army Reserve Medical Officer.

CERTIFICATIONS/LICENSES

#### **Security Clearance**

October 2013 to Present

Department of Defense Security Clearance

**PUBLICATIONS** 

## Development of exosome surface display technology in living human cells

https://www.ncbi.nlm.nih.gov/pubmed/26902116

March 2016

Abstract: Surface display technology is an emerging key player in presenting functional proteins for targeted drug delivery and therapy. Although a number of technologies exist, a desirable mammalian surface display system is lacking. Exosomes are extracellular vesicles that facilitate cell-cell communication and can be engineered as nano-shuttles for cell-specific delivery. In this study, we report the development of a novel exosome surface display technology by exploiting mammalian cell secreted nano-vesicles and their transmembrane protein tetraspanins. By constructing a set of fluorescent reporters for both the inner and outer surface display on exosomes at two selected sites of tetraspanins, we demonstrated the successful exosomal display via gene transfection and monitoring fluorescence in vivo. We subsequently validated our system by demonstrating the expected intracellular partitioning of reporter protein into sub-cellular compartments and secretion of exosomes from human HEK293 cells. Lastly, we established the stable engineered cells to harness the ability of this robust system for continuous production, secretion, and uptake of displayed exosomes with

minimal impact on human cell biology. In sum, our work paved the way for potential applications of exosome, including exosome tracking and imaging, targeted drug delivery, as well as exosome-mediated vaccine and therapy.

#### ADDITIONAL INFORMATION

## Society of Women Engineers

Collegiate and Professional Membership

• Aid in the development of STEM professionals and mentor young women.

## Junior League

**Provisional Member** 

• Participate community service events throughout the Seattle area.

#### Global Fellow Alumnae Board

 Assisted in the development of the fellowship program through marketing, interviewing candidates, and placement research.

## Santa Clara Panhellenic Board

#### President

- Conducted board meetings with executive members and delegates from the five recognized National Panhellenic Council chapters.
- Instituted Sexual Assault Prevention curriculum for Santa Clara sororities and fraternities.

## Amigos de las Americas, Nicaragua

- Developed environmental education curriculum and taught classes at the local school.
- Facilitated community project organization and aided in the project's execution.