

# CLAIRE MUSCAT

## WORK EXPERIENCE

### Research Assistant | Stanford Healthcare Innovation Lab | Sept 2021 - March 2022

- Modified NightSignal, a real-time smartwatch-based algorithm to detect infectious disease onset, in Stanford Data Ocean, an open-source online platform
- Led training session for a UPenn research team about NightSignal to equip this team to use our algorithm for a wide range of applications in pediatric contexts

### Global Technology Solutions Intern | International Justice Mission | Jan 2021 - April 2021

- Worked with the Data Science Director to design a prototype of an internal database tool for use by field office staff to thwart human trafficking
- Produced and audited Tableau dashboards and data visualizations about field work to help quantify organizational success

### Student Trainee | Food and Drug Administration (FDA) | July 2020 - Sept 2020

- Manually data mined FDA databases for pertinent information on ophthalmic devices and curated a digital collection used to track devices and ensure FDA consistency on regulatory policy
- Vetted illegal contact lens websites and documented these vendors to aid in larger effort to thwart illegal contact lens sales in the US

### Research Assistant and Bio-X Fellow | Gerlinde Wernig Lab | Oct 2018 - March 2020

- Maintained and organized dozens of mice subjects for in vitro tests, genotyping tests; analyzed dozens of CT scans; created and maintained in vivo cell cultures
- Edited lab manuscripts; reviewed, and responded to journal reviewer comments

## PROJECTS

### Mobile App Design Project | CS 147: Introduction to Human-Computer Interaction

- Organized and synthesized a dozen needfinding interviews with individuals with experience in the non-profit world and ideated on how to solve the problem of isolation of philanthropists
- Partnered with 3 classmates to design a social media-like mobile app to connect philanthropists through ideation, Figma wireframes, culminating in building a high-fi prototype using React Native
- Link: [web.stanford.edu/class/cs147/projects/TheFutureOfPhilanthropy/DOHO/](http://web.stanford.edu/class/cs147/projects/TheFutureOfPhilanthropy/DOHO/)

### Design Project for Accessible Calendaring | CS 377Q: Designing for Accessibility

- Conducted needfinding interviews people who are blind and low-vision (BLV) community about scheduling tools
- Worked with a team of 4 to create an experience prototype for a group calendaring tool for BLV individuals harnessing audio cues that was well received by user who tested our prototype
- Designed a user study to test our prototyped tool including specific user tasks, data to collect, and metrics used to analyze usability and the user experience

## LEADERSHIP ACTIVITIES

### Testimony Christian A Cappella | Sept 2018 - June 2023

- Organized 5-day tours for 15 people in multiple cities
- Co-led weekly practice altos to supplement time spent in full group rehearsals

### Christian Union Caritas | Sept 2021 - June 2023

- Led welcome campaign to 2,000 incoming Stanford freshman, answered questions about starting at Stanford
- Planned weekly group gatherings for worship, prayer, and study of Scripture

### Girl Scouts of the United States of America | Sept 2006 - June 2018

- Wrote and illustrated a kids' book in both English and Spanish, donated books to kids in the US and Mexico, and created YouTube videos of kid-friendly science experiments for my Gold Award (Girl Scouts' highest honor)
- Prepared agendas for and guided weekly troop meetings of 10-15 members as the president

## CONTACT

📞 (818) 448-2993

✉ [cnmuscat@stanford.edu](mailto:cnmuscat@stanford.edu)

📍 Stanford, CA 94305

## EDUCATION

### Stanford University | MS

Computer Science, Human-Computer Interaction

GPA: 3.6/4

Oct 2021 - June 2023

### Stanford University | BS

Computer Science, Biocomputation

GPA: 3.6/4

Sept 2018 - Dec 2022

## SKILLS

### Technical Skills

Python, Figma, JavaScript, HTML/CSS, React Native

## PUBLICATIONS

Tristan Lerbs, Lu Cui, Claire Muscat, Atif Saleem, Camille van Neste, Pablo Domizi, Charles Chan, Gerlinde Wernig. "Expansion of Bone Precursors through Jun as a Novel Treatment for Osteoporosis- Associated Fractures", Stem Cell Reports (2020), <https://doi.org/10.1016/j.stemcr.2020.02.009>

Tristan Lerbs, Lu Cui, Megan E. King, Tim Chai, Claire Muscat, Tyler Shibata, Gerlinde Wernig. "CD47 prevents the elimination of diseased fibroblasts in scleroderma", JCI Insights (2020), <https://doi.org/10.1101/2020.06.06.138222>

## AWARDS

### Milken Scholars Mentor of the Year

Received 2022

### Girl Scout Gold Award

Received 2019