ARLETTE GELLER





LinkedIn* m

MEDICAL DEVICE DESIGN ENGINEER	EN - ES - HEB
EDUCATION	B 2.1 25 1.25
Duke University ♥ Durham, NC	
Master of Engineering in Biomedical Engineering* - Pratt School of Engineering GPA 3.5	2021
Certificate in Medical Device Design* - Department of Biomedical Engineering	2021
Arizona State University ♥ Tempe, AZ	
Bachelor of Science in Biomedical Engineering* - Ira A. Fulton School of Engineering GPA 3.73 - Cum Laude	2020
PROJECTS, WORK AND RESEARCH EXPERIENCES	
Medical Device Consulting*	
Providing consulting services in many areas of work related to medical device design and development.	2022
Women's Health	
Patent Pending Technology* - EFS ID: 44679090	
Developed adaptive and radially expanding disposable speculum. Designing clinical study for design validation and modification.	2021 - Present
Calla Health Foundation	
♥ Junior Engineer* - Completed engineering design, medical device validation studies, management on quality control of	2022
manufactured devices, written reports, data analysis and data dissemination, grant writing; and other.	
♥ Biomedical Engineering Intern* - Designed portable testing platform for quality testing of device specifications, development of	2021
packaging, labeling, manual, etc. Material analysis for product life-cycle and reprocessing assessment.	
Center for Global Women's Health Technologies	
Contractor* - Development of validation platform, training materials, and quality testing and validation of Pocket Colposcope	2022
Technology for research collaborations and future commercialization.	
Research Assistant* - Created and optimized portable staining platform for cervical biopsy analysis upon user requirements and	2020 - 2021
infrastructural constraints.	
Duke University Eric S. Richardson Ph.D.	
	2021
 Validation Study* - Design, execution and publishing physiological and particulate validation studies for orthopedic surgical helmet manifold modification efficacy under COVID-19 environments. 	2021
▼ Independent Study - Designed technology to tackle negative effects of long-term use from surgical masks by healthcare workers	2020 - 2021
Design+Health Program	,. 2020 2021
Fellow* - Worked with an interdisciplinary team to design and develop intermittent drainage system.	2020 - 2021
US Provisional Patent - Device and Method of Managing Fluid Collections 4-29-2021	2020 2021
Advanced Manufacturing and Prototyping	
♥ Speculum* - Developed unique silicon, disposable, and adaptable to different body sizes speculum.	2020
Mitral Valve Sewing Ring* - 3D-custom-modeled sewing ring from MRI.	
 Cystoscope* - Created a patient-friendly device for injection molding and large scale manufacturing. 	
Arizona State University	
Capstone Project	
At-home Breast Cancer Screening Device* - Developed portable device concept for early stage tumor detection through impedance	e 2019 - 2020
measurements.	
Instrumentation for Biomedical Engineers	
High Spinal Cord Injuries Assistive Technology* - Built device to allow individuals use the computer on their own through a	2019
headband for screen navigation, and a mouthpiece as the click functionality.	
Microcomputing for Biomedical Engineers	
Pen Plotter Machine* - Manufactured device to help individuals write cursive through speech.	2019
Product Design and Development III	
Vagus Nerve Stimulation Device* - Designed portable non-invasive vagus nerve stimulator system for remote stroke patients' rehabilitation.	2019
Locomotion Research Lab	
Research Assistant - Contributed in gait data acquisition, processing, analysis, and as a co-author for: Nonlinear Evaluation of Gait in Older Fallers and Non-Fallers*	2017 - 2019
LEADERSHIP AND AWARDS	
Duke University	
Master's of Engineering Hooding Ceremony Speech*	2022

Duke University Engineering Master's Student Council

2021

President

2020 - 2021 Vice-President and Founding Member **Arizona State University**

Biomedical Engineering Society - Mentor

Most Interesting Project Award - Inflatable birthing cushion design for at-home labor assistance in the DRC.

2017 2017

CITI Program - Research, Ethics and Compliance Training Completion Rotary Club ♥ Lima, PE

Operation Smile - Medical Translator at Operation Room

2016

2017 - 2019

TECHNICAL SKILLS