Victoria Dalzell Villalonga

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Summary

Motivated, passionate, and punctual Sophomore pursuing a Biomedical Engineering and Biology degree with long-term career goals in regenerative medicine and prosthetics. An excellent collaborator, skilled and experienced in managing projects and performing research, with strong administrative, relationship-building and problem-solving abilities.

Education

University of Massachusetts Amherst
Bachelor of Science in Biomedical Engineering and Biology

Anticipated May 2026

Skills

Onshape CAD, Python, Fusion360, MATLAB, 3D bioprinting, Cell culture, Arduino, Gel electrophoresis, Southern/Western blotting, PCR analysis, Biotherapeutics lab experience, Microsoft Office (Word, PowerPoint, Excel), English, Spanish, and German Fluency

Relevant Coursework

Organic Chemistry | Intro to Biomedical Engineering | Calculus | & II | General Genetics | Physics I | Multivariate Calculus | Intro to Programming | Mechanical and Industrial Engineering

Academic Projects

MedTech Team | UMass Amherst | September 2023- Current

- Use CAD, 3D bioprinting, soldering, circuits and hand and power tools to create a biomedical device to treat osteoarthritis pain in the knee with a wearable surface EMG sensor in a mechanical brace
- Construct and test multiple prototypes within electrical and mechanical subteams and present it to professionals and investors in the field

Work Experience

Undergraduate Researcher | Gao Labs at UMass Amherst | September 2023 - Current

- Collaborate with other researchers on nanoparticle-mediated brain mapping, gene therapies, and long-acting delivery of biologics for chronic diseases
- Find and investigate relevant studies and design and present them in meticulous slideshows to fellow researchers
- · Maximize samples and run traceability by documenting data in spreadsheets and reports
- Develop solutions to problems using knowledge and technology

Customer Service Spanish Representative and Translator | Neighborhood Villages in Boston, MA | May 2021 - September 2021

- Interned as a research experience for a local non-profit
- Translated free Covid-19 testing registration and protocol to test13,000 members of the Hispanic and Latino community per week entirely in Spanish
- · Answered questions and filled out registrations for mostly nearby preschools and daycare facilities
- Observed scientists test and analyze samples from a pooled testing system with PCR to ensure contact tracing and quarantine when needed

Volunteer Experience

Wellesley High School

 Coached elementary school kids weekly and volunteered with other high school players to be a role model for young, aspiring players

Affiliations and Activities

Society of Hispanic Professional Engineers (SHPE), Medtech Team, Society of Women Engineers (SWE), Engineers Without Borders, field hockey, running, piano