Jazmin Lagier

jazminlagier@gmail.com • (786)731-5437 • portfolium.com/jazminlagier • linkedin.com/in/jazminlagier

EDUCATION

Masters of Engineering, Biomedical Engineering
Cornell University, Ithaca, NY 2023

Bachelors of Science, Biomedical Engineering
Florida International University, Miami, FL 2022
Minor: Chemistry. Concentration: Tissue Engineering.

French Baccalaureat & American High School Diploma
International Studies High School, Miami, FL 2017
Concentration: Economics and Applied Mathematics

HONORS AND AWARDS

- Ignite Fellowship. Cornell University. 2023
- Honors College Scholar. Florida International University 2022
- First Place, Capstone Poster Competition. FIU College of Engineering & Computing 2022

RESEARCH EXPERIENCE

Graduate Researcher in the Lee Lab 2022 – 2023
Department of Biomedical Engineering – Cornell University, Ithaca, NY

- Addressed challenges in microfluidic fabrication automating 3D printing for rapid prototyping, increasing model quality and decreasing production times.
- Designed and fabricated a multi–level microfluidic device to simulate villi–intestine and lymphatic interactions utilizing the improved design and fabrication methods.

Undergraduate Researcher in the Bio-Mems & Microsystems Lab 2021 – 2022
Department of Electrical Engineering – FIU, Miami, FL

- Engineered a microfluidic device with integrated biomarker sensors and mammalian cultures to model the epidermis for wound studies.
- Used computational modeling to identify ideal physicochemical conditions within the device.

Undergraduate Researcher in Dr. McGoron's lab 2021 – 2022
Department of Biomedical Engineering – FIU, Miami, FL

- Investigated nanoparticle diffusion in hydrogels targeting drug delivery systems.
- Formulated computational models to accurately estimate diffusion metrics.

WORK EXPERIENCE

Engineer Intern in Geegah 2023
Praxis Center for Venture Development – Cornell University, Ithaca, NY

- Designed and executed ultrasonic imaging protocols to quantify skin characteristics.
- Managed sample preparation, data acquisition, image processing, and results documentation.
- Collaborated with Computer Science groups, to enhance the data analysis software.

PRESENTATIONS

"Deciphering and Controlling Lymphatic Function Using Organ–on–a–Chip Model"
Lagier, J.; Lee, E.; et al.
[Oral] Cornell Meinig School of Biomedical Engineering. Research Exposition. Ithaca, NY 2023
[Poster] Cornell Meinig School of Biomedical Engineering. Poster Exposition. Ithaca, NY 2023

"Epidermis–on–a–Chip: A Microfluidic Platform for Wound Biomarker Studies"
Lagier, J.; Bhansali, S.; Kamat V.; et. al.
[Oral] FIU Biomedical Engineering. Senior Research Exposition. Miami, FL 2022
[Poster] FlU College of Engineering & Computing. Senior Design Exposition. Miami, FL 2022
- Awarded First Place for Best Poster

VOLUNTEERING

Art for Evolution (NPO), Product Strategist 2023 – Present

• Collaborating with the non-profit founder, whose organization emphasizes environmental awareness through art, to develop a product that intersects art with augmented reality.
• Refining a business model canvas and engaging in ongoing product development, streamlining its transition from concept to market.

Cornell Graduate Society of Women Engineers, Corporate co–Chair 2022 – 2023

• Developed relationships with corporate partners, serving as the liaison for club members.
• Collaborated with interdisciplinary teams for the planning and execution of key initiatives.

FIU Upsilon Pi Epsilon, Committee Member 2021 – 2022

• Provided professional and technical development opportunities for STEM students.
• Organized 6 workshops on 3D Printing, Arduino, and Raspberry Pi with +40 attendees each.

StartUp FIU, Member 2019 – 2021

• Represented the university in seven pitch competitions including four global competitions (Hult Prize), and three local competitions (Miami Herald, eMerge Americas, Venture Bites).

SKILLS AND COURSEWORK

• **Laboratory**: 3D Print, Soft Lithography, Mammalian Cell Culture, ELISA, Imagining, Wet Lab.
• **Software**: Excel, Python, GSuites, SolidWorks, AutoCAD, ANSYS, MATLAB, COMSOL.
• **Languages**: Spanish, and French (fluent), Italian (basic).
• **Organ-on-a-Chip**: Biological Systems: Engineering Analysis, Biomedical Innovation & Design
• **Precision Medicine**: Precision & Genomic Medicine, Engineering Principles for Drug Delivery
• **Tissue Engineering**: Cell & Tissue Engineering, Biomaterials, Materials Eng., Molecular Eng.
• **InSilico Modeling**: Modeling & Simulation, Engineering Data Evaluation, Python for Engineers

EXTRACURRICULAR AWARDS

IRONMAN 70.3 Triathlon Athlete:

• World Championship, Competitor. 2019
• Haines City Race, 1st Place in Age Group. 2019
• All World Athlete Award, Top 10% of All Competitors. 2020