

DIEGO ALBA BURBANO

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EDUCATION & RELEVANT COURSEWORK

Johns Hopkins University

Bachelor of Science in Chemical and Biomolecular Engineering, Minor in Mathematics

Baltimore, MD

May 2019

Dean's List Recipient (5 semesters), GPA: 3.73

PROFESSIONAL & RESEARCH EXPERIENCE

IMEC: Interuniversity Microelectronics Center

Leuven, BEL

Visiting Scholar:

June 2017

- Advanced the study of self-folding 3D tetrode shells for single, live cells recordings.
- Microfabricated and tested the devices, cultured the cardiomyocytes, and improved the data analysis software performance by 8-fold.

A micropatterned multielectrode shell for 3D spatiotemporal recording from live cells, J. Cools, Q. Jin, E. Yoon, D. A. Burbano, Z. Luo, D. Cuypers, G. Callewaert, D. Braeken[‡], D. H. Gracias[‡], Advanced Science, (2018).

Johns Hopkins University

Research Assistant: Hur's Lab

Baltimore, MD

Feb. 2018

- Studied the inertia focusing of asymmetric particles in microfluidic channels. Characterized asymmetric particles to determine their equilibrium position and velocity.

Teaching Assistant: Chemical and Biological Process Analysis

Baltimore, MD

Jan. 2017

- Tutored 6-12 students by implementing a peer-led-team learning approach in order to build a strong chemical engineering foundation.
- Led weekly problem-solving sessions, and assisted the professor in organizing and grading the course.

Warehouse Assistant:

Baltimore, MD

Sept. 2016

- Cultivated strong skills in retail, customer service, data entry, package delivery, and chemical handling.
- Developed a process which improved the purchase request system efficiency by 37%.

Research Assistant: Gracias' Lab

Baltimore, MD

Jan. 2016

- Studied the microfabrication of self-folding microdevices, sustained drug release from wax matrices, and polymers with UCST, in order to develop novel drug delivery tools. *Publication in Progress.*

VOLUNTEERING & EXTRACURRICULAR ACTIVITIES

Johns Hopkins University Magical Arts Initiative

Baltimore, MD

Sept. 2016

- Managed budget allocation and grant application as Treasurer of the organization.
- Taught magic and the skills associated with it to members and non-members, and performed in non-profit events.

Other Organizations:

Baltimore, MD

Sept. 2016

- Project Charmify, Habitat for Humanity, Engineering Without Borders, Exnumera

AYUVI:

- Unloaded, stored, and prepared food packages for families on AYUVI, a non-profit organization that helps pregnant woman and families under risk of social exclusion.

Vigo, ESP

July 2014

SKILLS

- Computer skills: MATLAB, Maple, Python, Java, basic R, and Mathematica
- Languages: native fluency in Spanish and Galician
- Interests: Photography, Data Analysis, Karate, Soccer. Travelling, Cuisine