Our Conversation with Ivonna Dumanyan

Ivonna Dumanyan, a Duke senior studying Engineering, is one of Kairos Society’s Top 50 Emerging Global Entrepreneurs and founder of BioMetrix. BioMetrix is a company that produces wearable sensor solutions. These sensors are the first wireless motion capture platform to detect injury. The wearable sensor fits under clothing or inside shoes to detect injury, reduce risk, and improve form. Now, BioMetrix is building its customer base and looking to universities, dance companies, upper echelon athletes, and the military for partnership opportunities. The price paid for injury is something they want as few people as possible to experience.

**Duke I&E:** How has Duke helped take BioMetrix from building sensors in your dorm to being named one of Kairos Society’s top 50 emerging global entrepreneurs?

**ID:** Tracing back to the beginning, the Innovation Co-Lab was vital. We needed to see if we could get a sensor on somebody’s foot to detect pronation. They provided us with funding for basic materials to prototype the concept. Most importantly they offered office hours where I could learn basic skills like how to code and work with hardware.

Another influential program in this whole experience has been the Melissa & Doug Entrepreneurs program. The growth, acceleration, and personal business development I’ve experienced in the fellowship program was so much greater than anything I’ve ever experienced before. Through the Melissa & Doug Entrepreneurs program, we went from a cool, technologically possible idea to making it a business and making a product that is functional and sleek.

**Duke I&E:** How did you choose Duke, and did any of the entrepreneurship programs influence your decision to come to Duke?

**ID:** So this is not something that is often talked about, but I chose Duke because of financial aid. I couldn’t afford to go to any other school but Duke or the community college. I was choosing between Duke, University of Virginia, Carnegie Mellon, and Yale type institutions. Duke was in a great location and had fantastic engineering program, but it all came down to “Where could I afford to go?” and Duke was by far the best financial aid program.

**Duke I&E:** You are studying engineering and expected to work as an engineer after Duke. Has BioMetrix changed this plan?

**ID:** Oh totally! Duke offered an incredible opportunity to become more than an engineer, to become a designer, a business person, an innovator. After Duke, I’d always thought I’d become an engineer and work in some factory. I was always sad about it when I realized what engineering really is. When I graduate I want to work on BioMetrix. I want to start companies. I want to do things that are going to change the industry and shake the foundation. Duke has really helped bring that out in me.
**Duke I&E:** Do you have any advice for other undergraduate students who are looking to pursue their own ventures?

**ID:** Just get started. One thing I’ve seen is people have an idea then immediately start to go after money. It’s not good. You have to iterate, you have to try, you have to test and work through it. The Innovation Co-Lab gave me an incredible venue to actually try a ton of things. I tried over 120 iterations of the design. I tested it with university athletes, casual users, professional athletes – all through the Duke network. That was the best way to find the best solution. It’s about meeting somebody’s need. And if you are meeting somebody’s need and you are passionate about the idea, just go after it.