



## **Local Entrepreneur Partners with the MET Professional Academy and Receives Unexpected Benefits**

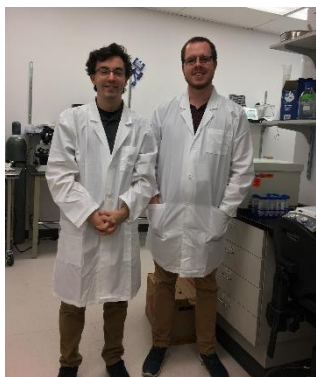
Initially, I was a bit apprehensive about taking on a high school intern because in the past when we worked with college freshman, they struggled with completing tasks on time, showing up when expected, knowing when to ask for help, and when to exercise initiative. I was somewhat worried about high school students being able to learn the skills quickly enough to contribute to the project before the school year ended, however, in the end, I was glad that I took the risk.

Quickly, I became impressed with the level of professionalism from both student interns that we decided to host from the MET Professional Academy. They were so quick to learn, incredibly responsible, and made real, tangible contributions to our product. We honestly are so much further along in development because of their help. The students were great communicators and had a surprising number of unexpected skills they gained from being in the MET program, including OSHA certifications. I am very grateful now, looking back, to have participated in the internship program, and we are excited to extend both student's internships into college.

Jake worked on a variety of projects, based on what we needed to get done at the time. Pupster believes very strongly on iterating quickly based on customer feedback and we had many improvements that needed to be made to the device. Jake worked on everything from designing a key part in CAD, to setting up and overseeing 3D printing of various parts to assisting with some of the software development, reaching out to vendors for RFQs, setting up part specifications, assisting with running weekly sprints, helping to plan out various projects, and even helping to dial in the chemistry for our electrodes. Colby mainly worked on building, configuring, upgrading, tuning, and running our in-house 3D prints. Colby's contributions were instrumental in helping us iterate on part concepts much more quickly. Colby was able to take a \$250 3D printer, and \$60 worth of upgrades and have it perform as well as a \$5,000 printer that we used at ASU, saving us more than \$4,000 in NRE costs. By being able to get high-quality prints in house, we were able to get instant feedback on the part, even as it was printing, and make changes much more quickly. It normally took us 7-9 days to get the part back after submitting for printing, and with the printer that Colby managed, we got it back in 1-2 hours and could do multiple improvements same day, greatly increasing efficiency and decreasing R&D time.

Having Jake and Colby on the team made all the difference, and we saw an immediate ROI with the time I spent mentoring them and getting them up to speed. An additional unexpected benefit, but valuable resource, was the large network that the students had access to. We were able to tap into these networks to obtain valuable feedback. I'm very grateful that MET focuses on both technical and soft skills for the students, including things like teaching them communication skills, to grow their network and learning how to market themselves. I feel that addition makes the partnership with MET invaluable.

Patrick McFarland  
Founder, Pupster



## Pinnacle Transplant Technologies Helps to Train Future Biomedical Engineering Talent

Pinnacle Transplant Technologies, a Phoenix-based company, strives to give back to the community in many ways. As the only tissue bank in the state, Pinnacle's goal is to train local talent to keep a skilled force in the state of Arizona after graduation. This is why this past spring we decided to accept a high school intern from the MET Professional Academy.

In the past, we have worked with college interns, so when we accepted a high school intern, we lowered our expectations a bit to try to fit with the maturity and experience level. We quickly realized that was not necessary. We were surprised by Holden's deliverables, sense of responsibility and passion, and ability to process high level scientific and technical information. Within a couple of weeks of hosting Holden, we were very impressed and had to adjust his internship to meet his level.

Holden started his internship by designing an engineering study to evaluate the ability to mesh a human dermal substitute by creating holes in it for certain skin reconstruction application. He was able to complete the engineering study and met the expected deliverables in a shorter time than anticipated. Holden then worked on developing a cell culture system to grow a cell line to test the performance of a bone allograft material and finally worked on a project using cytometry to characterize human bone marrow-derived stem cells.

This wasn't my first experience working with high school students as I was part of a group that created "a future innovator" eight-week program for middle school students in North Carolina five years ago. I was excited to get to work with young students again, and after our positive experience of hosting an intern from the MET Professional Academy, we look forward to working with other students from the program.

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## High School Interns New at American Express

American Express has a robust internship program for college students and is involved in several programs that contribute to building a pipeline of qualified IT Networking and Cybersecurity candidates, however, this is the first time we brought high school students into the fold.

We have worked with the MET Professional Academy for several years now, providing curriculum and program guidance, and have worked with students at the MET on projects and introduced students to Agile. We have been impressed with their professionalism and interpersonal skills and we were very excited to get MET students on-site in internship experiences at American Express.

The MET interns worked on a few different projects within the Information Security Dept. They performed quality assurance testing for software developed in-house, validated new functionality works as designed, looking for software bugs and helping to provide content to questions posed to our virtual personal assistant (chat bot).

The MET interns exceeded our expectations and were able to navigate a large corporate environment with ease. The students were very bright and have a thirst for knowledge and ask questions the organization may not have thought about. They were able to quickly contribute tangibly to the initiatives we are pursuing as a business and we would encourage other businesses to consider engaging with MET students through internship, job shadowing or student mentorship.

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