Rocketing Through the Glass Ceiling

By Jess Arnold COMM 260W Writer

Excited to delve into rocket science as a freshman, Amelia Batcha looked forward to her first group project, which involved constructing and presenting a model rocket. Her allmale group, however, was more interested in taunting her than they were in working.

"Why don't you go be a teacher?" "Why aren't you in nursing?" "You're raising our women to men ratio." "Why are you in engineering?" they said.

Annoyed by their immaturity and lack of initiative, Batcha rolled her eyes and buckled down to complete the project on her own.

When the day of the presentation arrived, her group members were ready to sit back and let Batcha earn them their grades. Instead, she told them to sit down while she presented the rocket she made. Her professor ended up failing the boys and awarding her an A.

As one of 13 women in Aerospace Engineering, junior Amelia Batcha said she is no stranger to the "extra testosterone."

"You can't back down. I've had to deal with guys always thinking I'm stupid and undermining my intelligence, but at the end of the day, I think I've gained more from it," Batcha said. "I've had to prove myself."

Her hard work has certainly paid off. Batcha just landed a premiere co-op with NASA. While the boys from her project will be finding a way to boost their GPAs, Batcha will be living her dream at Mission Control in Houston.

She almost missed the opportunity of a lifetime, however.

When she first roamed around the career fair, she skipped over NASA's table.

"That's always been my dream job, but I figured that there's no chance I would even get it, so I didn't even bother," Batcha said.

But, her friend pushed her to talk to the recruiter, and they hit it off, she said.

The recruiter called Batcha an hour later, saying she had secured a phone interview with NASA for the next morning. Still feeling like she was in a dream, she interviewed and waited anxiously to hear back.

A few weeks later, NASA congratulated her on her newly secured multi-semester co-op.

Over the next few years, Batcha will travel to Texas three times to study different aspects of NASA, like creating spacesuits to survive the harsh environmental conditions of space.

Before deciding on her major, she often wondered about space and the mystery surrounding extraterrestrial life.

"My initial instinct was thinking of space, and how there's so much out there, and we don't know it," she said. "There's so much mystery, and I want to find it."

This drive to pursue the unknown and challenge herself was evident from an early age.

Her father, Jerry Batcha, reflected that in high school, she valued the knowledge she gained from classes, not just the grades.

"She often could look at problems from a creative angle, and then apply the technical aspects," he said.

This skill served her well when she landed her first internship with Air Products and Chemical Co. as a high school junior. Batcha went in blind to what the job would entail but emerged with a newfound interest and career aspiration. She set her sights on engineering and ended up at Penn State.

Throughout her three years here, Batcha has impressed both her teachers and her peers with her work ethic.

Brad Sottile, Teaching Assistant for her AERSP 309 Aeronautics class praised her dedication to her major.

"Amelia is determined and persistent. If she does not get a grade she is happy with, she works at the material to become more proficient," he said.

On top of her rigorous coursework, Batcha devotes much of her time to the Lunar Lion, for which she is the propulsions captain. This team is competing against adult engineers from around the world for Google's Lunar X prize, and Batcha plays an integral role in this endeavor.

"I'm a hands on person, and I get to see exposure to stuff I'm seeing in my classes, which is really helpful" she said.

She is in charge of building the propulsions system and making sure all the parts fit together properly. One mistake could destroy all of their hard work and even result in disastrous consequences.

"It can be very dangerous. Rocket fuel can really screw up your day," Batcha said with a smile.

Through her experiences with the Lunar Lion and her extensive coursework, Batcha has distinguished herself as a force to be reckoned with, regardless of gender.

Her father, Jerry Batcha, is proud of his daughter for defying gender stereotypes and is confident that she will succeed wherever she ends up.

"While she represents women well, I think she bristles at being distinguished by gender," he said. "If she's good at something, she wants to pursue it, and does not believe gender should be an obstacle."

She wants to be known as the best—not just the best woman.

Batcha hasn't always had the opportunity to distinguish herself based on merit, which, in the end gave her the motivation to land her dream job at NASA.

Batcha's father recalled her frustration when he wouldn't let her go out for the middle school football team.

"She threw better than most of the boys on her fifth grade co-ed flag football team, so she couldn't see how being a girl should matter going into middle school," he said. "Well, now she is competing on the intellectual field, and going into aerospace.

"Not even the sky is the limit."