



[Entrepreneurs compete at Hilton Head MEMS Conference](#)

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As I prepare to attend the [Hilton Head MEMS conference](#) from June 5-9, the [Shark Pup Tank pitch competition](#) is sure to be one of the highlights of this year's event. The competition rewards the top pre-funding ideas for MEMS/NEMS-based products and technologies with the potential to visibly impact the global economy in 2025. One of the most important aspects of the competition is the ability for a handful of entrepreneurs to showcase their technology and receive feedback on their business models from a group of supportive industry leaders.

This year's lineup includes:

- Calorimetrix - Glucose/Creatinine meter
- Medichip - Blood diagnostics in 2 hours
- OSCP Motion Sensing - Fiber Optic Gyro (FOG) inertial sensors
- UltraStim - Ultrasound depression healer
- CoulSense - Heavy metal sensing in water



Not surprisingly, three out of the five entrepreneurial teams are developing technology for healthcare applications, a common theme in today's MEMS startup world. Some of our most brilliant innovators are using sensor and microfluidics technology to change the face of point-of-care delivery, health awareness, and medical treatment - so our MEMS Shark Pup Tank competitors are in good company.

As I contemplate the event, I can't help but think about my own startup experience, which began back in 2003. I remember thinking to myself, "How hard can this be?" By the time I had the answer to that question, it was too late to turn back.

Most entrepreneurs can rattle off the things that they should have done differently, and we're no exception. Our first funding source was a home equity line of credit, which we used to buy our first pieces of equipment at auction. The auction was held 3000 miles away so we decided to bid for equipment sight unseen. Our largest purchase was missing parts and bared no resemblance to pictures listed on the auction site. That was the last time we made that mistake, but of course there were plenty of other challenges.

Looking back on the experience I can now say that I was completely unprepared for the actual volume of work required to make the company a success. We weren't starting a consulting business.

We were starting a MEMS foundry, and we had serious capital expenditures. There were times when I don't know if I even went home. I think we worked every day of the year for probably the first three years including Christmas, New Years, Thanksgiving, etc. Even our families questioned whether or not it was worth the effort.

Amid the mistakes we made and the grueling schedule, there were many people that went out of their way to support us. Everything from letters of engagement to price breaks when cash flow was extra tight. We even had a few colleagues donate fab equipment to our cause. Although building a MEMS foundry was difficult, having people who were willing to help and support us made a huge difference.

In spite of the many people you connect with during the startup phase of a company, it's still a lonely road for a lot of CEOs. At the end of the day you are the one who is ultimately responsible for your successes and your failures. Having a feeling of community behind you can be really comforting. For me personally, starting [Rogue Valley Microdevices](#) was one of the most difficult things that I have done, but also incredibly rewarding.

I am really excited to see events like the Shark Pup Tank competition becoming more popular within the MEMS industry. The challenge that entrepreneurs face as they present their ideas is part of the initiation process. I feel compelled to be a supportive figure, to pay it forward by encouraging them, and I hope that other Hilton Head attendees will embrace these competitors and their ideas as well.

As this year's Shark Pup Tank plays out, come and give these entrepreneurs the recognition and support that they deserve. This is an exciting time to be an entrepreneur in the MEMS industry. It's important to not lose sight of the global impact that innovation in this industry can have. Even though many companies struggle and may even fail to find their footing, we are all better off for their effort.

If you're competing this year, good luck in the event. If you're mulling over your own ideas for a startup, sometimes you just need to take a leap. Maybe we'll see you in a future Shark Pup Tank event. In either case, keep creating! For more information on the event, [click here](#).

Also see:

- [Advances make MEMS sensors easier to integrate](#)
- [Avoid these common MEMS failure mechanisms](#)
- [Facial-recognition sensors adapt to track emotions, mood, and stress](#)
- [Validating MEMS and other sensors](#)