

Fennik Life Sciences, LLC

Kansas City, Kansas

www.fenniklifesciences.com



“Our goal is taking 3D cell culture research to the next level.”

Fennik Life Sciences LLC is focused on developing innovative research tools for the life sciences research community. Its first product is a cell culture device that closely models a three-dimensional environment for living tissue.

But when Nikki Cheng and Wei Fang, the two Ph.Ds who founded Fennik Life Sciences, were trying to create the company, they found themselves in the same position as many scientists trying to secure funding to take their innovation to market — they understood the science, but not how to create a business.

Ms. Cheng and Mr. Fang’s research into understanding the role of inflammation in breast cancer and how healing responses regulated the progression of the disease had led them to a fundamental dilemma: finding a better way to visualize immune cells and their reactions to treatments.

3D cell culture models were already being used, which was a huge step forward overdoing in vitro studies, but even current 3D technology didn’t allow them to more accurately model immune responses as they occur in a human patient.

Literally in their spare time — both are still active researchers at the University of Kansas Medical Center — they secured a grant through the University of Kansas to found Fennik Life Sciences. The initial focus was creating TheraKan™, a unique nested chamber system and swiveling mechanism able to culture cells in 3D protein matrices to exact specifications using existing lab equipment.

TheraKan offers limitless potential to create microenvironments that accurately mimic tissues for the validation or analysis of drug targets for treating conditions including cancer and neurodegenerative, respiratory, cardiac, or autoimmune diseases.

But moving the product to market to help others save time and money, and avoid wasted effort, was daunting.

Both Mr. Fang and Ms. Cheng had experience getting grants to fund basic research projects, but funding a business was outside of their expertise. They needed to create a business plan; disclose their technology to the university; find board members; develop a marketing strategy; produce a process to scale up the manufacturing process; and have a clear vision for what their customers wanted and needed.

They put together a board of directors who helped them better understand what their marketing needed to be as well as how to get the technology licensed. They found a resource in Pittsburgh to help them develop their manufacturing.

Mr. Fang and Ms. Cheng learned about SHARPhub and immediately discovered a centralized way for them to find the expertise and resources they needed to succeed, which meant applying for SBIR/STTR funding so they could do further development on TheraKan as well as additional tools for cancer research. “We appreciated how SHARPhub also introduced us to resources like Bio Kansas and BioNexus, organizations we had heard about but had no connections to them,” said Mr. Fang.

“Grant writing for research is far different than writing a grant for commercialization,” continued Ms. Cheng. “SHARPhub showed us what we needed to know, which allowed us to continue doing what we do best — research.”

SHARPhub provided an entrepreneurial environment with one-to-one access to consultants who helped the Fennik founders understand the marketability of their product and helped them position it for the SBIR reviewers.

Another benefit of working with SHARPhub was helping the team figure out how Ms. Cheng in particular could work with the company and remain involved in research at KUMC. The SHARPhub experts were able to walk them through the issue and understand all of the ramifications, including what Nikki could and could not do.

Ms. Cheng and Mr. Fang view SHARPhub as an ongoing resource. “We both have full-time jobs and running the business is also a full-time job.” SHARPhub bridges the gap between their academic work and their business venture.

“In the end, the science has to stand on its own,” said Ms. Cheng. “But SHARPhub is helping us access what we need to make our vision a reality.”

“We have tunnel vision,” said Mr. Fang. “We just want to get this launched; we know questions will come up and it’s great to have a resource like SHARPhub available to us.”

