

STARTING SMALL



THINKING BIG

Is it possible that artists and musicians get too much of the credit when it comes to being creative and cool? What about someone who wears a lab coat and spends most of her day peering through a microscope?

From her days in graduate school at the University of Vermont and then postdoctoral training at the University of Arizona and Moffitt Cancer Center, Lori Hazlehurst, Ph.D., knew exactly where she was headed. And nothing about research seemed boring to her because of its opportunities to do something new. “My passion has always been drug discovery and development,” says the president and co-founder of Modulation Therapeutics, Inc., a Moffitt startup and early-stage company dedicated to creating new ways to target difficult-to-treat tumors. The company’s journey began with the discovery of a new molecule under the watch of William S. Dalton, Ph.D., M.D. (former Moffitt CEO), who Dr. Hazlehurst worked for as a postdoc and now serves as a board member. Developing this molecule, now patented as MTI-101, Dr. Hazlehurst and her team worked with Moffitt’s Office of Technology Management and Commercialization and are now transforming her passion into reality.

What can MTI-101 potentially do? It could possibly help solve the difficult puzzle of cancers that metastasize to the bone. It was specifically designed to disrupt bone metastasis seen in multiple myeloma and other blood cancers, which are very

“MTI-101 targets a cell adhesion molecule that is required for cancer cells to travel to the bone.”

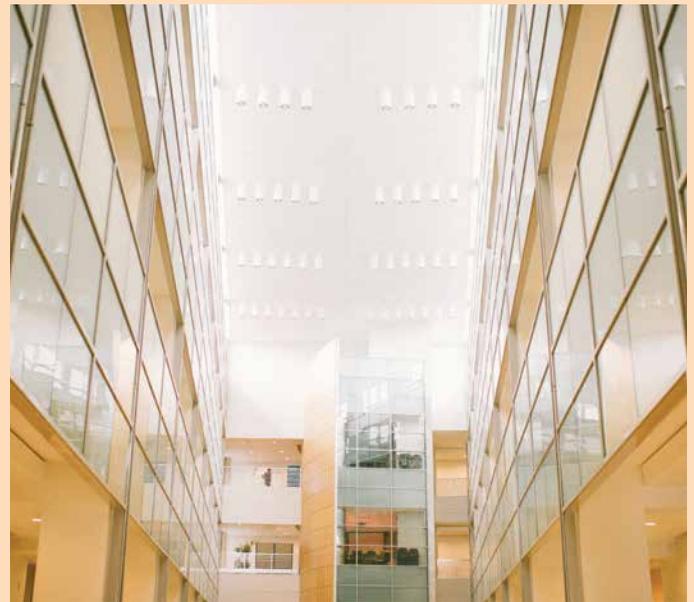
hard to treat successfully. “MTI-101 targets a cell adhesion molecule that is required for cancer cells to travel to the bone,” explains Dr. Hazlehurst. “It disrupts the tumor-host interaction by targeting alternative pathways not used by standard chemotherapies to induce programmed cancer cell death.” Because the treatment has been so promising in laboratory tests, Modulation Therapeutics has received more than \$1 million in funding from a variety of sources in order to continue developing MTI-101 and other compounds that may have application for a broader range of cancers. For example, early test results have shown that the molecule could also be very effective for treating lung cancer.

According to Dr. Hazlehurst, Modulation Therapeutics plans to stay true to its roots as a drug discovery and development company. Dr. Hazlehurst and her partners realize the need and urgency to develop strategic partnerships with pharma, the National Cancer Institute and cancer foundations. Strategic partnerships will allow for a more rapid FDA approval process, ultimately getting the treatment to patients who need it.

While certainly excited about this molecule and the progress of her very creative company, Dr. Hazlehurst really perks up when talking about her team. She stresses the importance of collaboration across disciplines as well as interactions with clinical scientists to move discoveries forward. And perhaps remembering her own path, she emphasizes the critical role

played by grad students and postdocs. Talking with Dr. Hazlehurst gives you the sense there’s definitely something great about being small and nimble. Describing the other members of her team as two chemists, two pharmacologists and a “Jack of all trades,” she grins about the different personalities and smiles about the possibilities.

So perhaps cancer researchers are cool after all. And anyone who still disagrees should consider heading to the beach on a windy weekend day. Look out toward the horizon. You might just see Lori and her husband. They’ll be the ones shredding the waves on their kite boards like a couple of semi-pros. Pretty cool indeed. 🌀



Moffitt’s Office of Technology Management and Commercialization

Established in 2004 and recently celebrating its 100th licensing deal, the OTMC helps facilitate, launch and grow faculty startup companies that license Moffitt technologies. The goal is simple: move ideas along the development process and get discoveries to the patient’s bedside as quickly as possible. Not only does this help pay off the time and effort expended by Moffitt researchers like Dr. Hazlehurst, it also brings us that much closer to the goal of defeating cancer.



LORI HAZLEHURST, PH.D.
MODULATION THERAPEUTICS, INC.