



By Ashley Portero – Senior Reporter, South Florida Business Journal Jan 17, 2025

Bill Hall has multiple degrees from the Massachusetts Institute of Technology and spent years building a career in the aerospace industry.

Then, he lost his younger sister to skin cancer.

The loss was a heavy one for Hall, who said skin cancer runs in his family. It inspired him to change course and devote himself to doing something that could help prevent other people from succumbing to the disease.

That sparked the idea for Triangulate Labs. The Boca Raton-based startup is behind the Skinmap, an Al-powered total body photography system that documents the evolution of moles and other skin lesions on a patient's body to help doctors spot potential signs of cancer.

Diagnosing and treating skin cancer early is a major concern in locations such as Florida, which has one of the highest rates of melanoma – the deadliest form of the disease – in the U.S. About 1 in 5 Americans will develop skin cancer in their lifetime, according to the American Cancer Society.

Last year, Triangulate Labs entered into a licensing agreement with the Mayo Clinic to develop its Skinmap technology. Under the terms of the deal, the Mayo Clinic will offer guidance to Triangulate Labs as it develops the product and remove barriers to patient access.

How does the Skinmap work? The product uses total body photography, which has been around for decades. It involves taking photos of a patient's entire body to help dermatologists identify changes in any moles or skin lesions, which could be a sign of cancer. There are some smartphone apps that can do skin mapping, but it takes 15 minutes or more to scan a patient, and the quality of images isn't always great. With the Skinmap, we can take a smartphone, run it across the skin of a patient, and capture 300 to 400 images from close range with a lot of detail in 1 to 2 minutes. Doctors can use those images to find suspicious skin lesions, compare it to older photos they have on record to see what's changing, and determine if there is anything that should be biopsied and examined closer.

How does it help doctors? Dermatologists usually have a large patient load. They typically spend about 5 minutes doing a total skin check during an annual appointment with a patient. If they added a 15-minute smartphone scan, that adds a lot more time for each appointment. They would be too stretched. We've had dermatologists test the Skinmap, and we saw they could do the scan and still get through their regular patient load without adding extra time to each appointment. Total body photography has been shown to improve diagnostic accuracy, and now we have a product where it can be offered without being an economic disaster for health care providers.

Where will patients eventually be able to access the Skinmap? The target is to have medical providers like a general practitioner provide the service. The ultimate goal is to capture the 100 million people in the U.S. who do not have a dermatologist, screen them for skin cancer, and then send the people who really need it to a dermatologist for follow-up care. The system has to be good enough that GPs are only referring patients who seem like they are at a real risk for cancer.

What you have learned during your experience building Triangulate Labs? Skin cancer is such a major problem that can be easily prevented. If you find it early, it's easy to take care. But we keep missing it. Part of it is because of the way the health care system works. There is no straightforward way to develop an innovation and get it out there easily. Everyone said it would be hard to do – and they were right.

What kind of challenges come with trying to introduce a product like this to the medical establishment? You have to capture a customer, in this case health care providers, when they are ready to make a change. It can take time for a doctor who is already doing well, with a backlog of patients, to adopt a new way of doing things. We've found that dermatologists who are setting up new clinics and looking for a way to distinguish themselves have been very receptive. There are other providers in larger groups backed by private equity that like the economics of the Skinmap.