

1. What is the problem?

Skin cancer is the uncontrolled growth of abnormal skin cells. It occurs when unrepaired DNA damage to skin cells (most often caused by ultraviolet radiation from sunshine or tanning beds) triggers mutations, or genetic defects, that lead the skin cells to multiply rapidly and form malignant tumors.

Skin cancers; including melanoma, basal cell carcinoma, and squamous cell carcinoma often start as changes to your skin. They can be new growths or precancerous lesions, changes that are not cancer but could become cancer over time. An estimated 40% to 50% of fair-skinned people who live to be 65 will develop at least one skin cancer. Learn to spot the early warning signs. Skin cancer can be cured if it's found and treated early.

2. What is the purpose of the project?

The purpose of this project is to assist in detecting these cancerous cells early in order to get treatment and prevent the worst. Early detection can save lives and something as simple as a bracelet around your wrist could help.

3. How does it work?

The bracelet comes with a UV sensor, has a battery life of about a year and pairs with an app that gives users a daily forecast and expected UV index.

4. How would this product benefit the patient?

In the tropics we are very much exposed to UV rays on a daily basis, most of us are not even aware as to how much; this could make us more aware and even remind us to take cautious while being exposed.

5. Why just skin cancer; could other forms of cancer be detected?

Skin cancer is the easiest one to detect and prevent thus far, hopefully in the future it could become as easy to detect other , more aggressive types of cancer.