

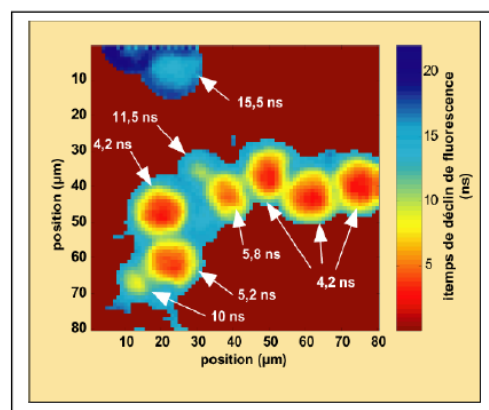
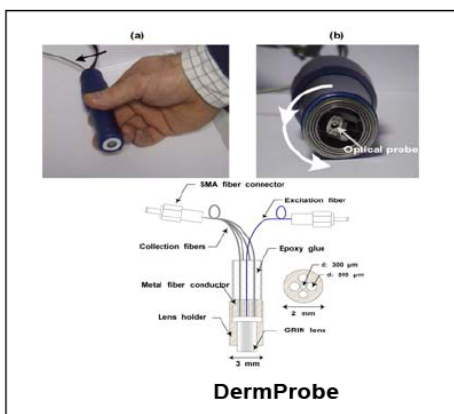
Early Stage Skin Cancer Detection Device

Scope

The DermProbe device innovation applies to *in vivo* human's skin to detect and remove the skin cancer at its earliest stage. This proprietary and unique device would play a huge role in the detection of skin cancer.

Current State of the Art Technology

Dermatologists are still using classical methods based on human eye observation or simple optical magnifiers that do not generally allow them to detect skin cancer diseases before the visual symptoms appear. The DermProbe device is based on the fluorescence caused by the high concentration of the PpIX (**Protoporphyrin IX**) molecules.



Purpose

The DermProbe innovation effectively engineers the fluorescence imaging and time decay techniques in a way that increases the detection of the affected cells with micrometer precision. The DermProbe scans a portion of human body through the Optical fiber emitter. The skin lesions are examined *in vivo* using the blue light issued from a laser diode, with wavelength range of 405 nm. The measuring signal is obtained through four head surrounding optical fibers.

Laboratory & Clinical Advantages

The DermProbe offers a new technique providing :

- Highly precise measurements: About one 12 mm of diameter is explored on skin for each measurement
- Detection of infected cells at their earliest stage before the visual symptoms
- Determination with micrometer precision the position of the damaged cells and therefore enables dermatologists to remove the pre-carcinogen cells.
- No need for experienced physicians and images database

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