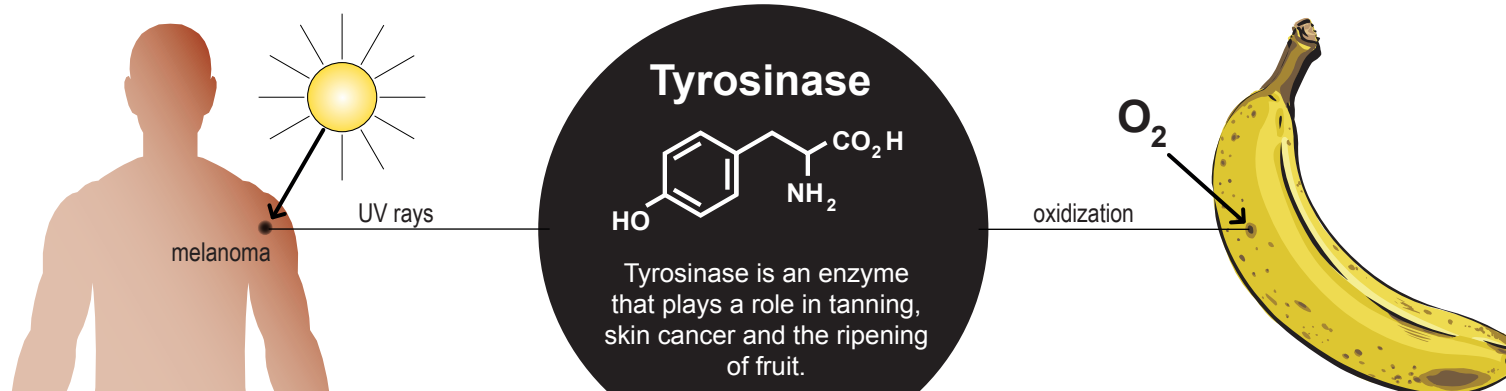


Cancer: diagnosing melanoma with the help of bananas

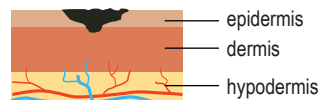
From banana peels to melanoma: EPFL researchers used the dark spots on the fruit to develop their diagnostic approach.



Tyrosinase and the stages of melanoma

I. Melanoma in situ

The tumor is still superficial.



low level

II. Invasive melanoma

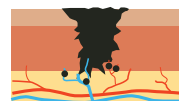
The tumor reaches the dermis.



high level and homogeneous

III. Local/regional melanoma

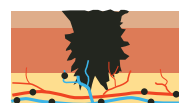
The tumor reaches the blood stream.



lower level and heterogeneous

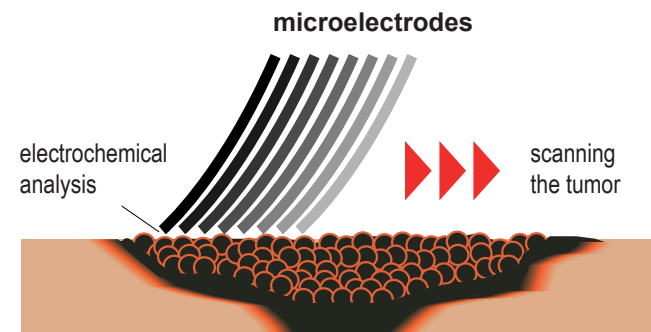
IV. Metastatic melanoma

The tumor spreads to the organs (liver, lungs and bones).



Imaging method

The scanner is passed over the surface of the skin and detects whether any tyrosinase is present. This method provides a non-invasive stage-2 diagnosis of the tumor, when there is a high level of tyrosinase.



Graphic Pascal Codéray