

Fisica Medica a Pavia

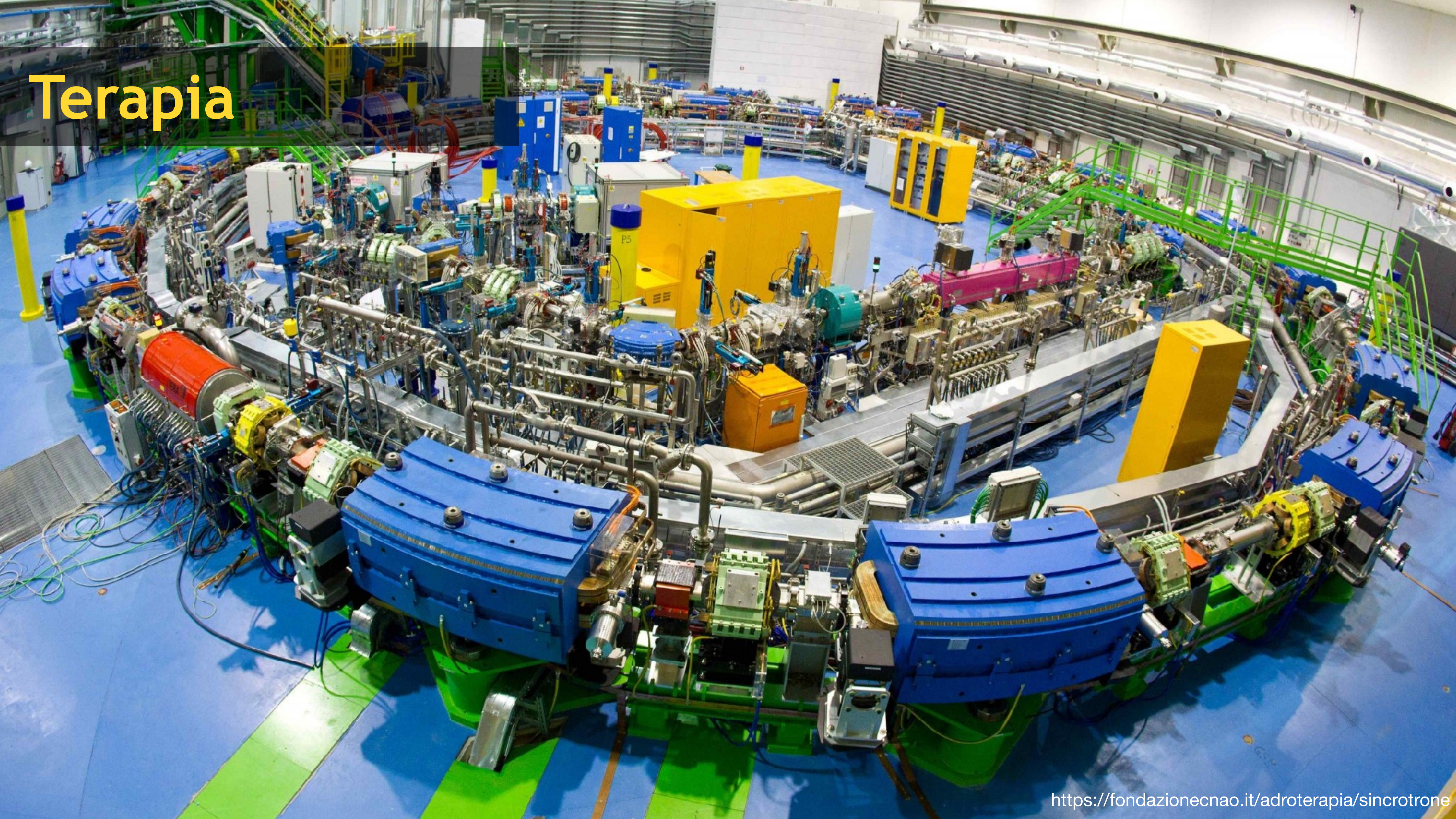
Quello che era ricerca di base...

Ian Postuma - 21.05.2025



Diagnostica





Terapia



SUISSE
FRANCE

CMS

LHCb

CERN Prévessin

ATLAS

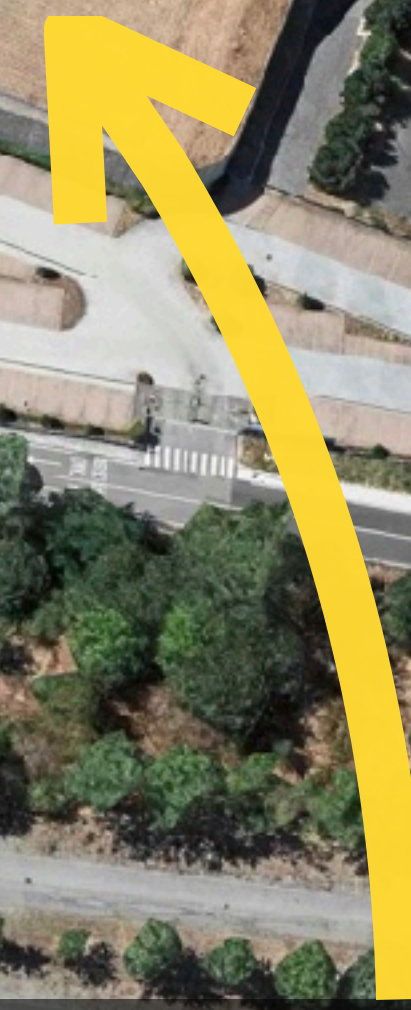
CERN Meyrin

SPS 7 km

ALICE

LHC 27 km

Ospedale



CNAO



Ospedale + CNAO

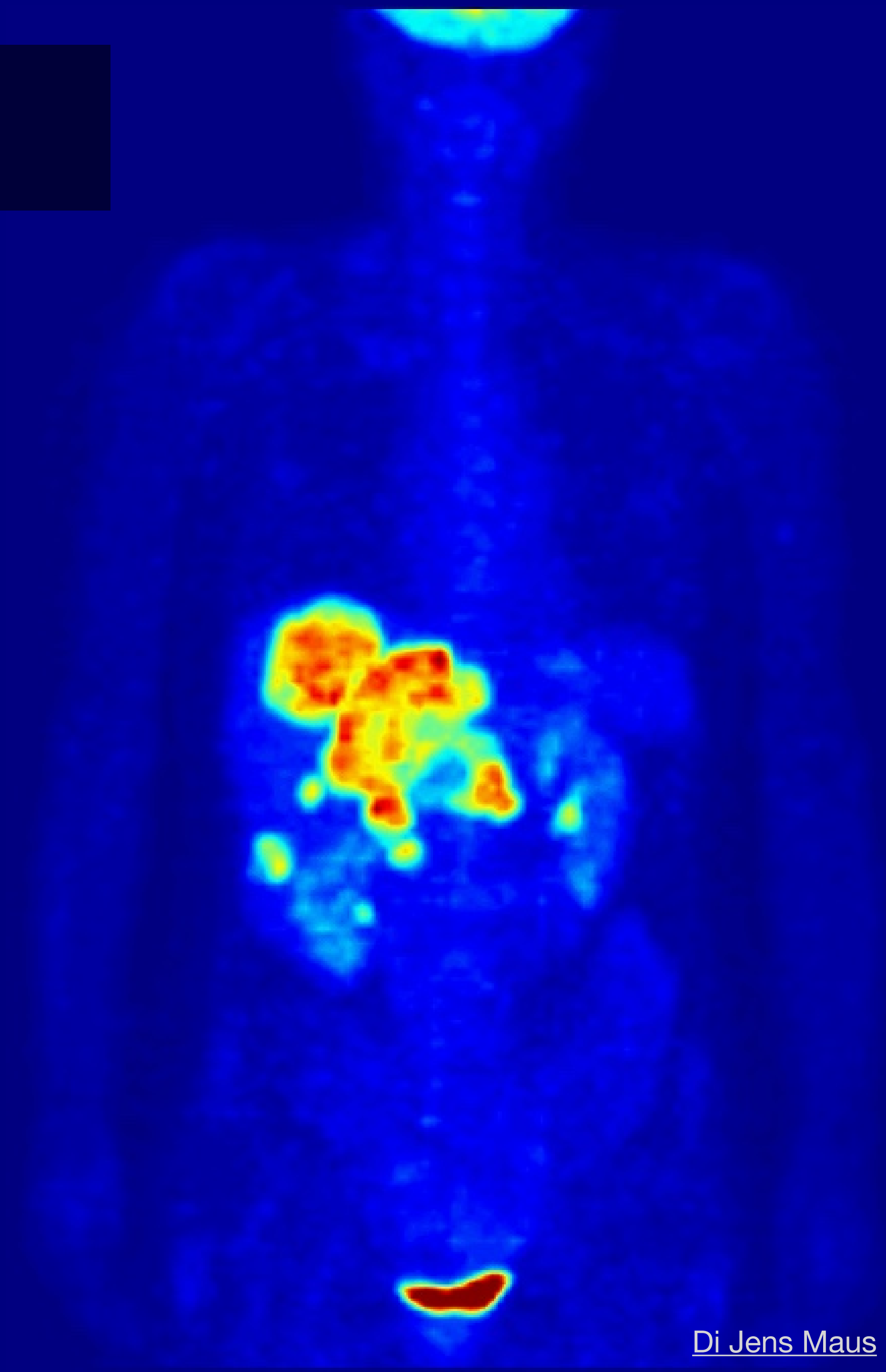


LENA

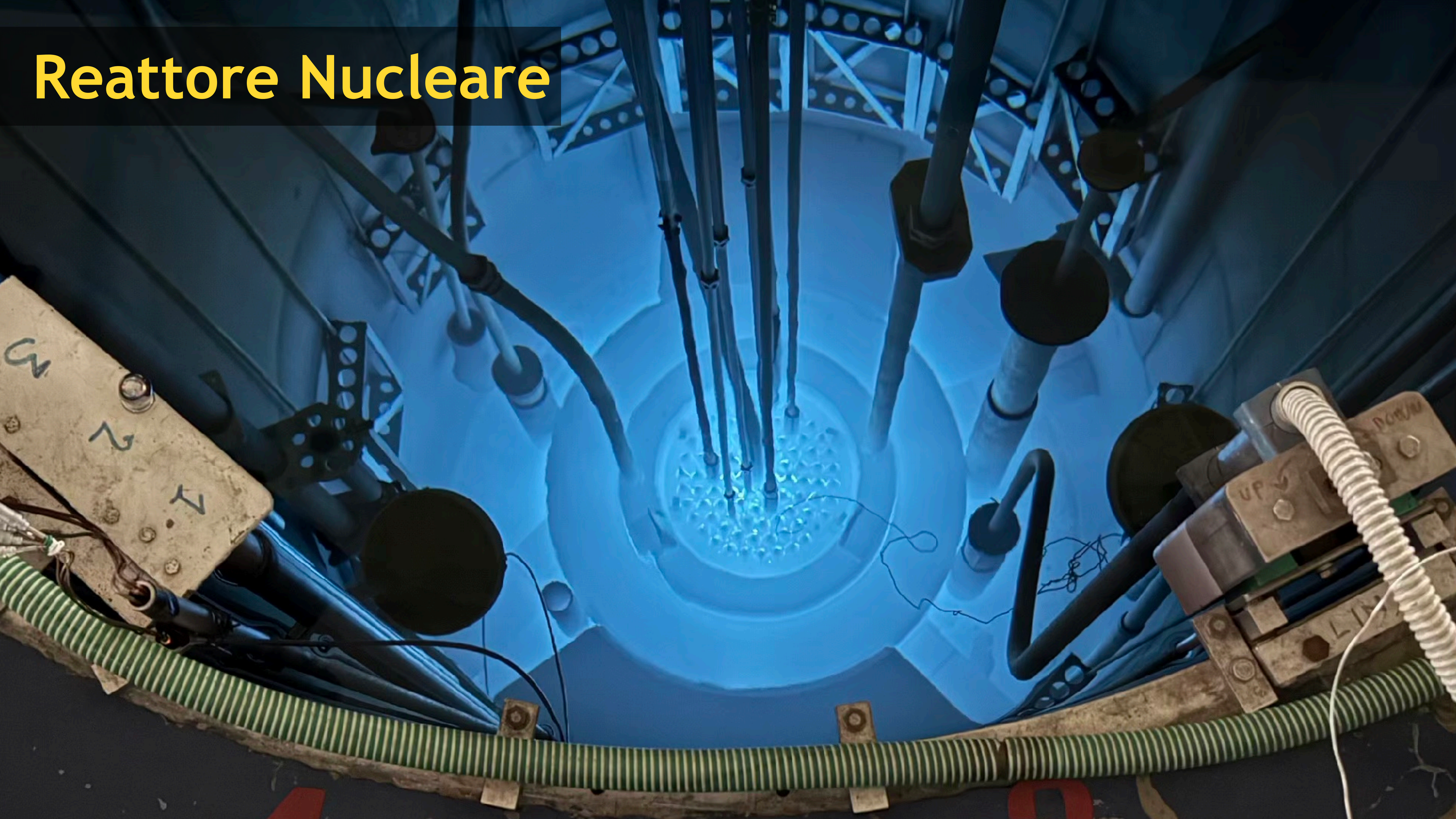
Ciclotrone



Antimateria



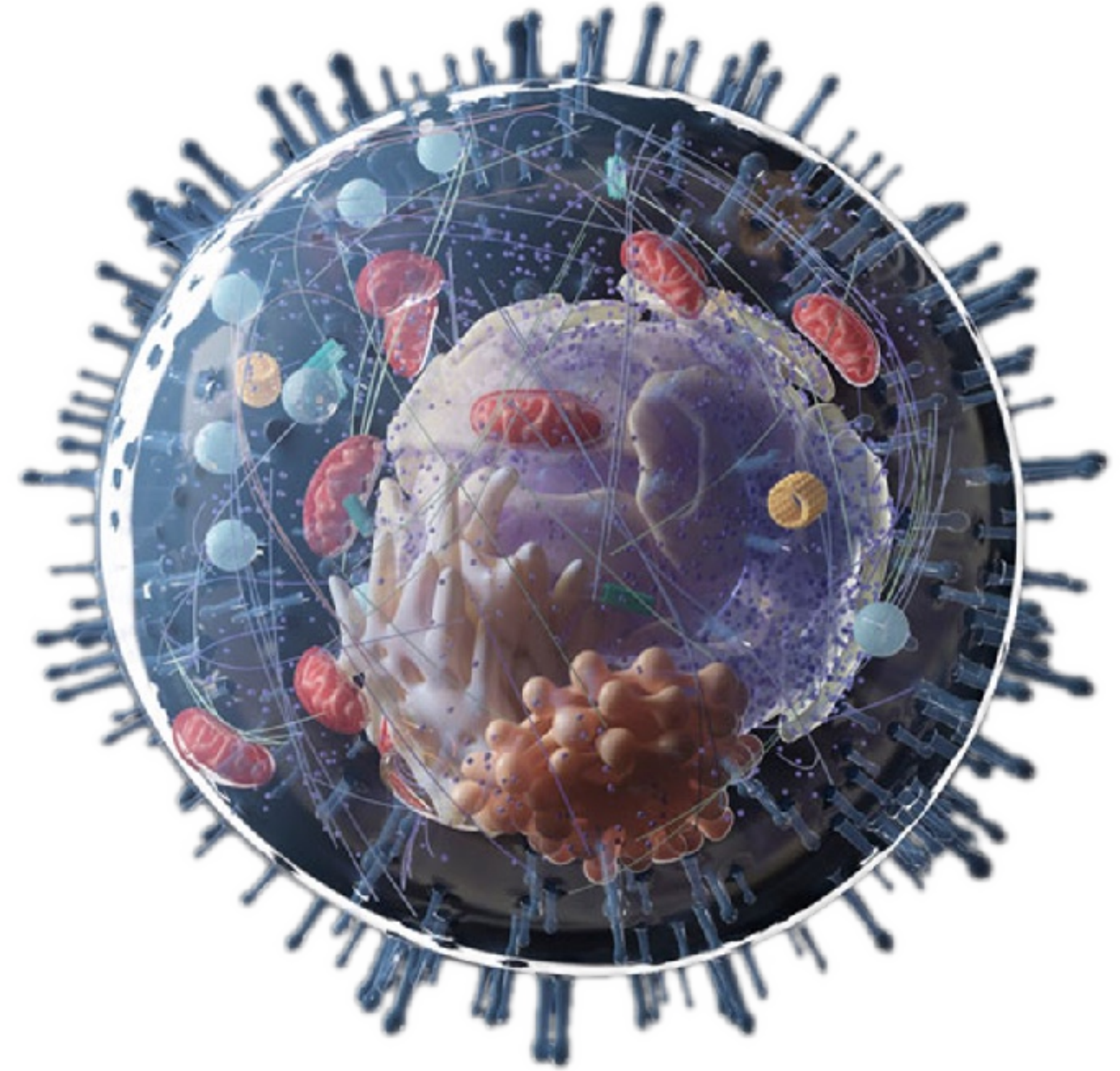
Reattore Nucleare



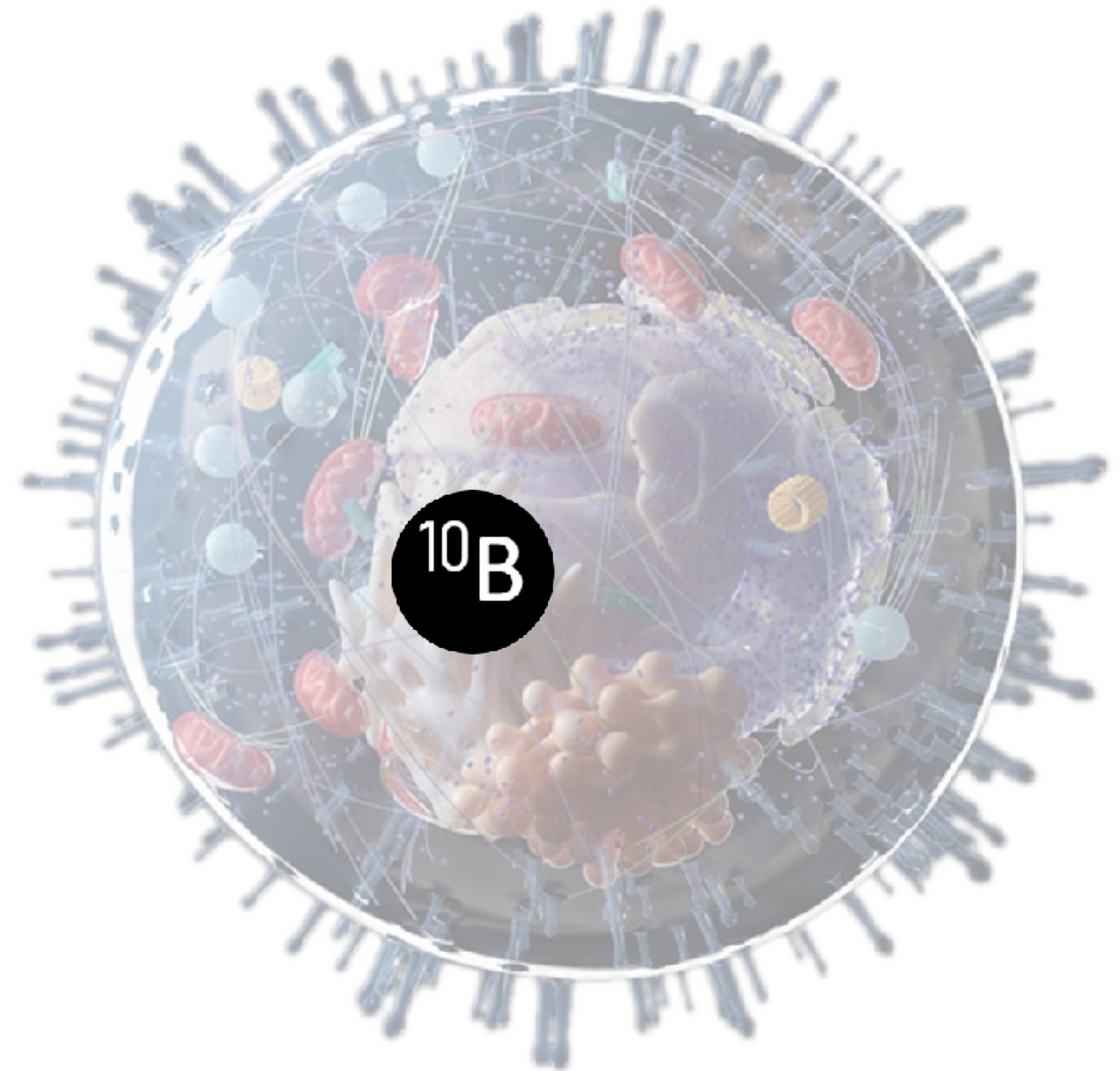
Ricerca



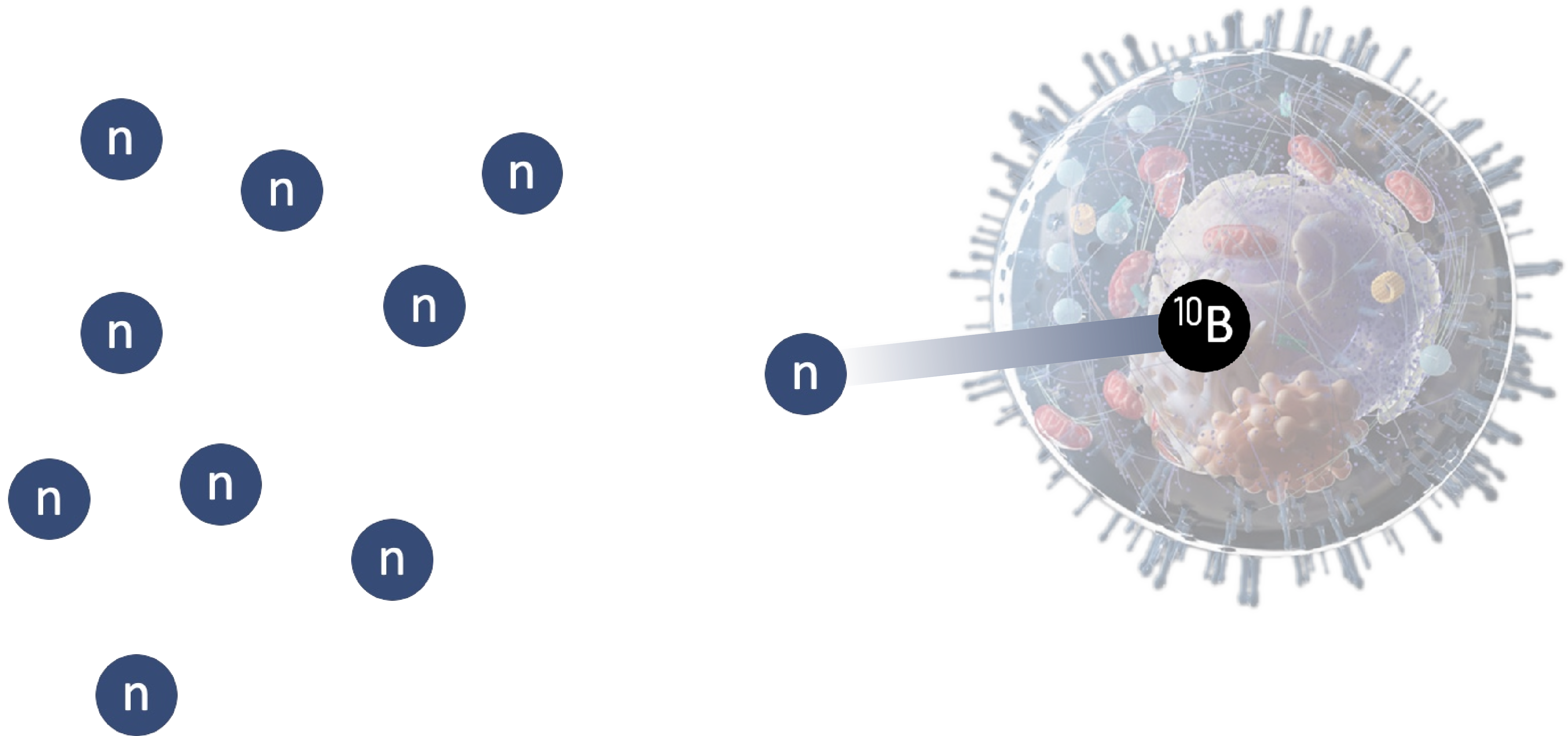
Boron Neutron Capture Therapy



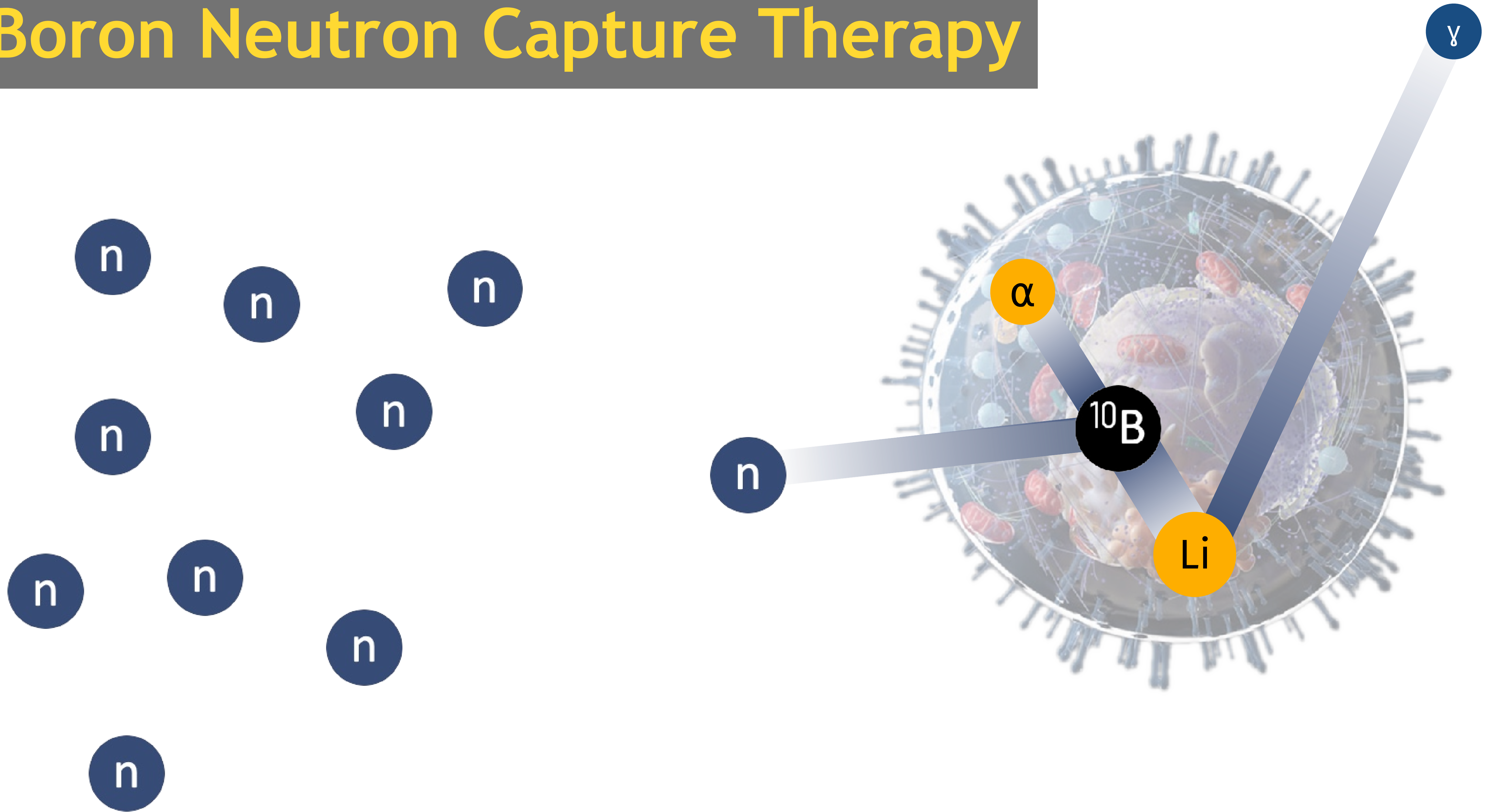
Boron Neutron Capture Therapy



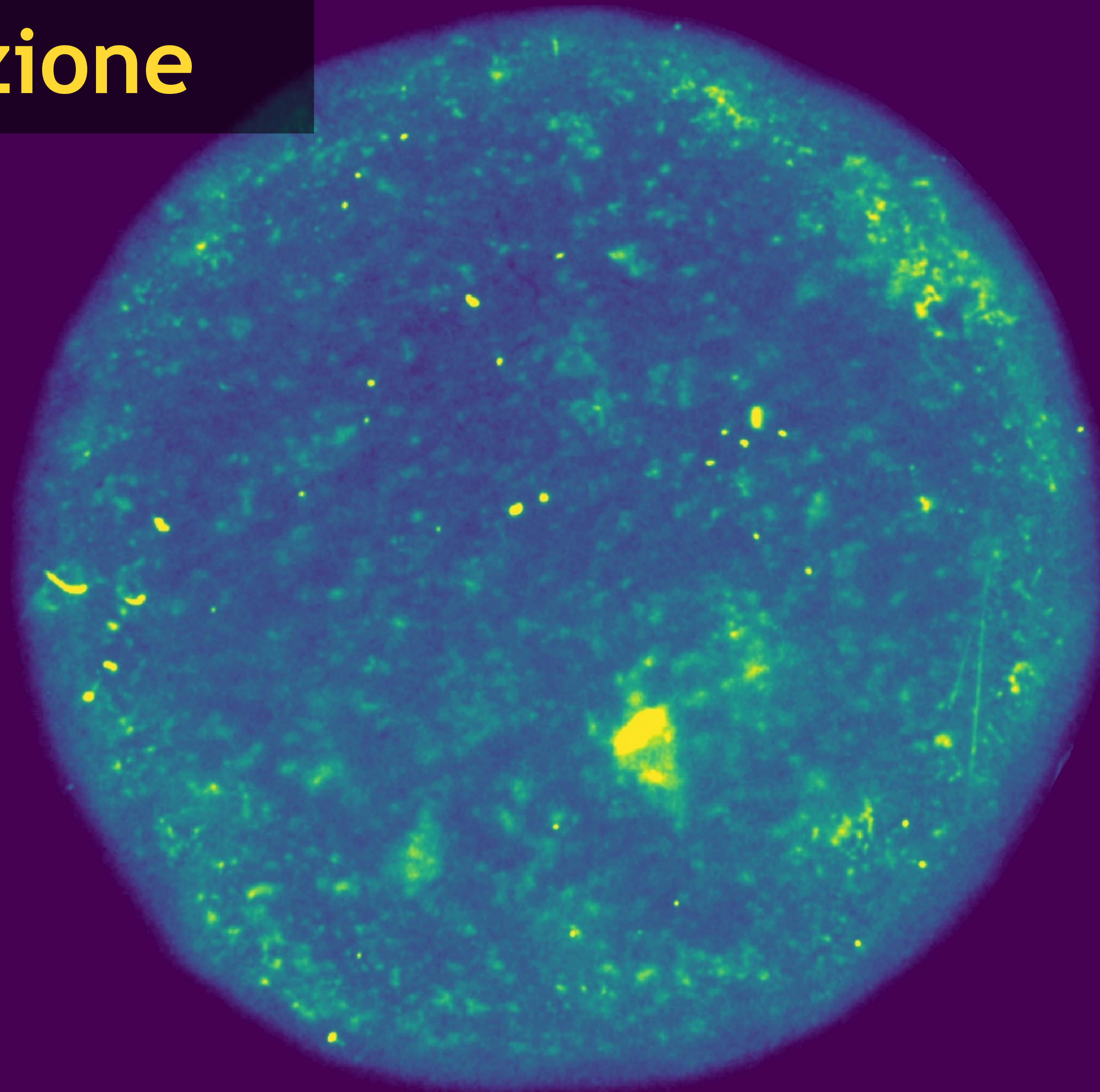
Boron Neutron Capture Therapy



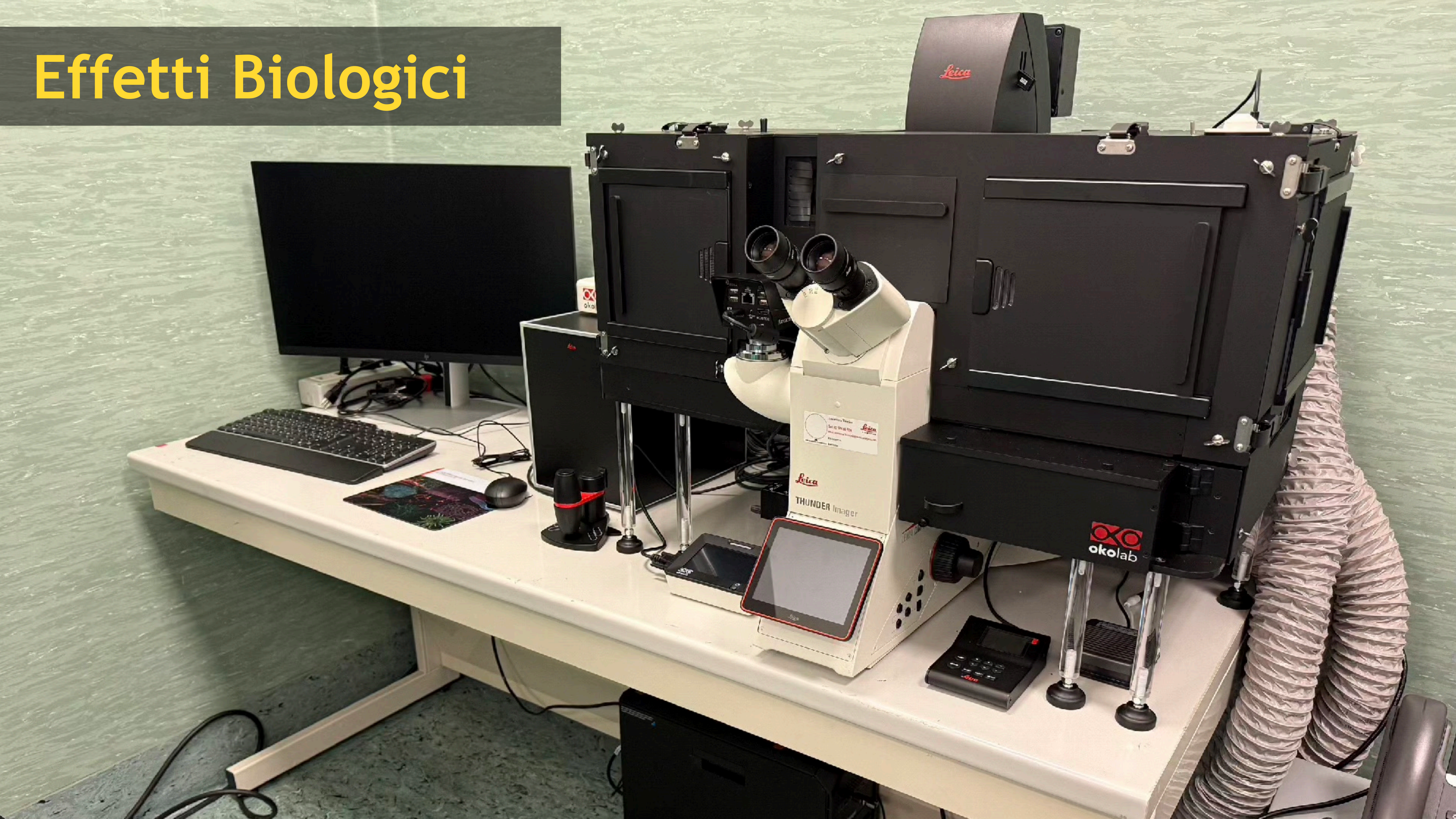
Boron Neutron Capture Therapy



Quantificazione



Effetti Biologici



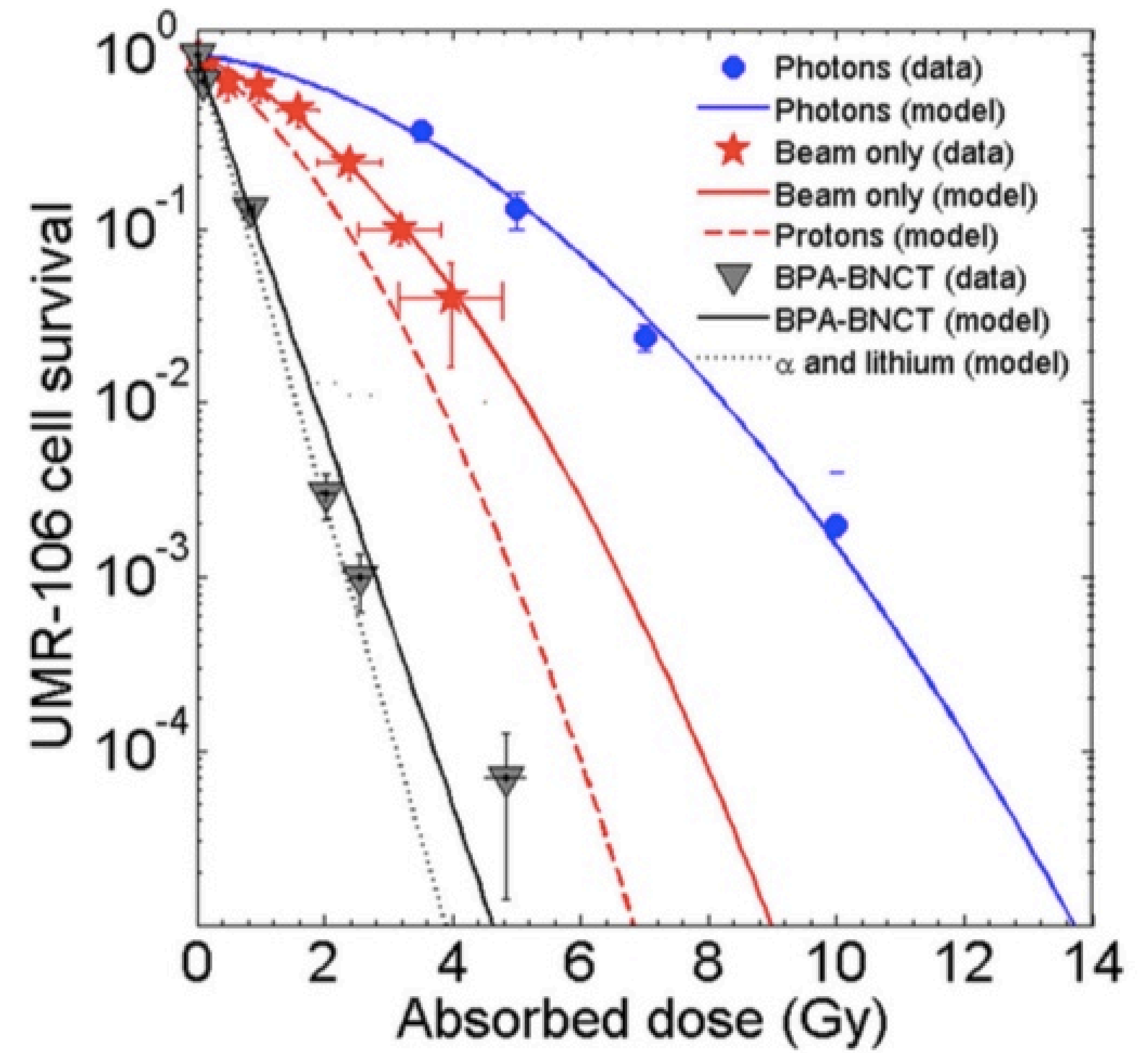
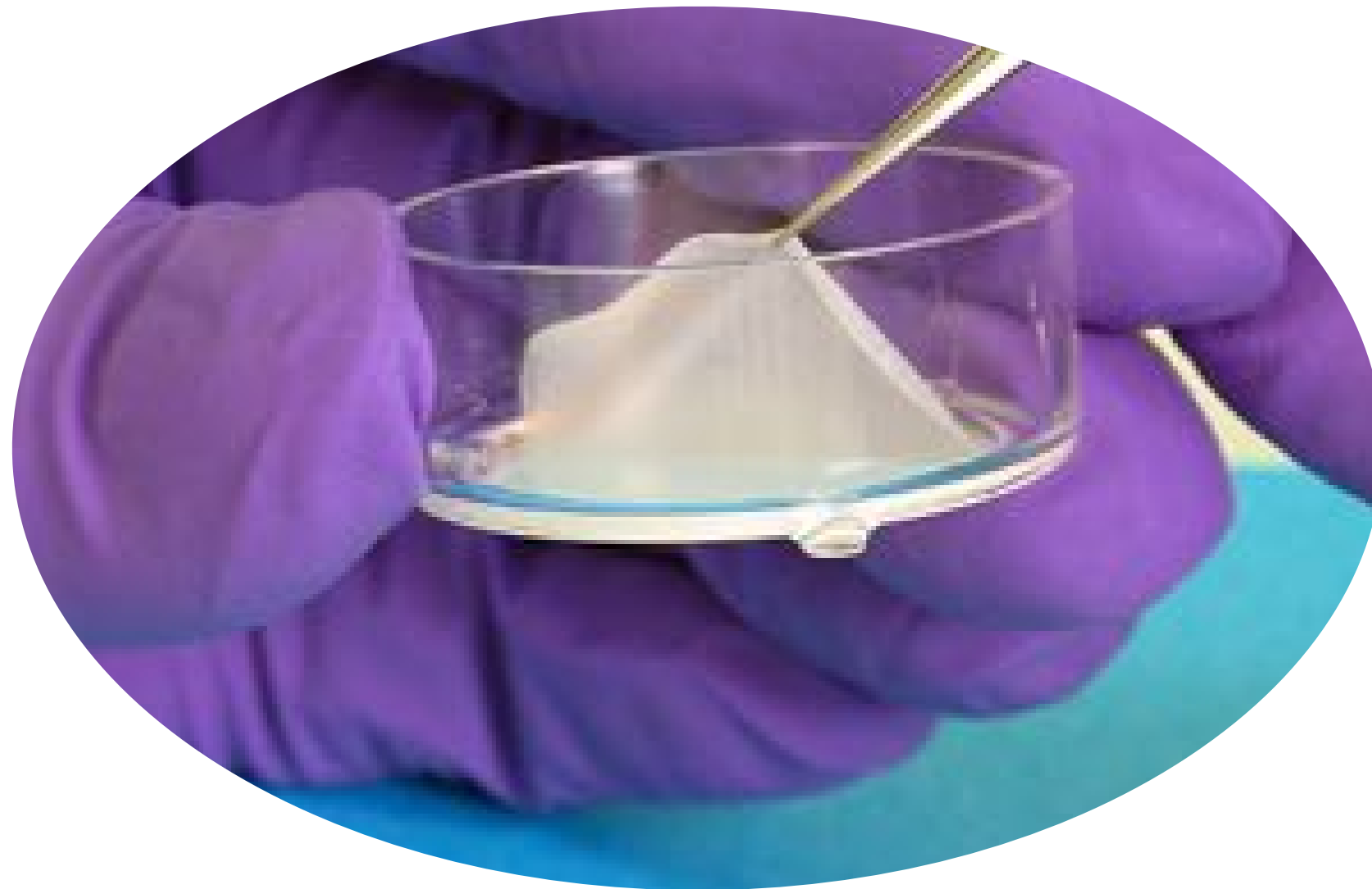
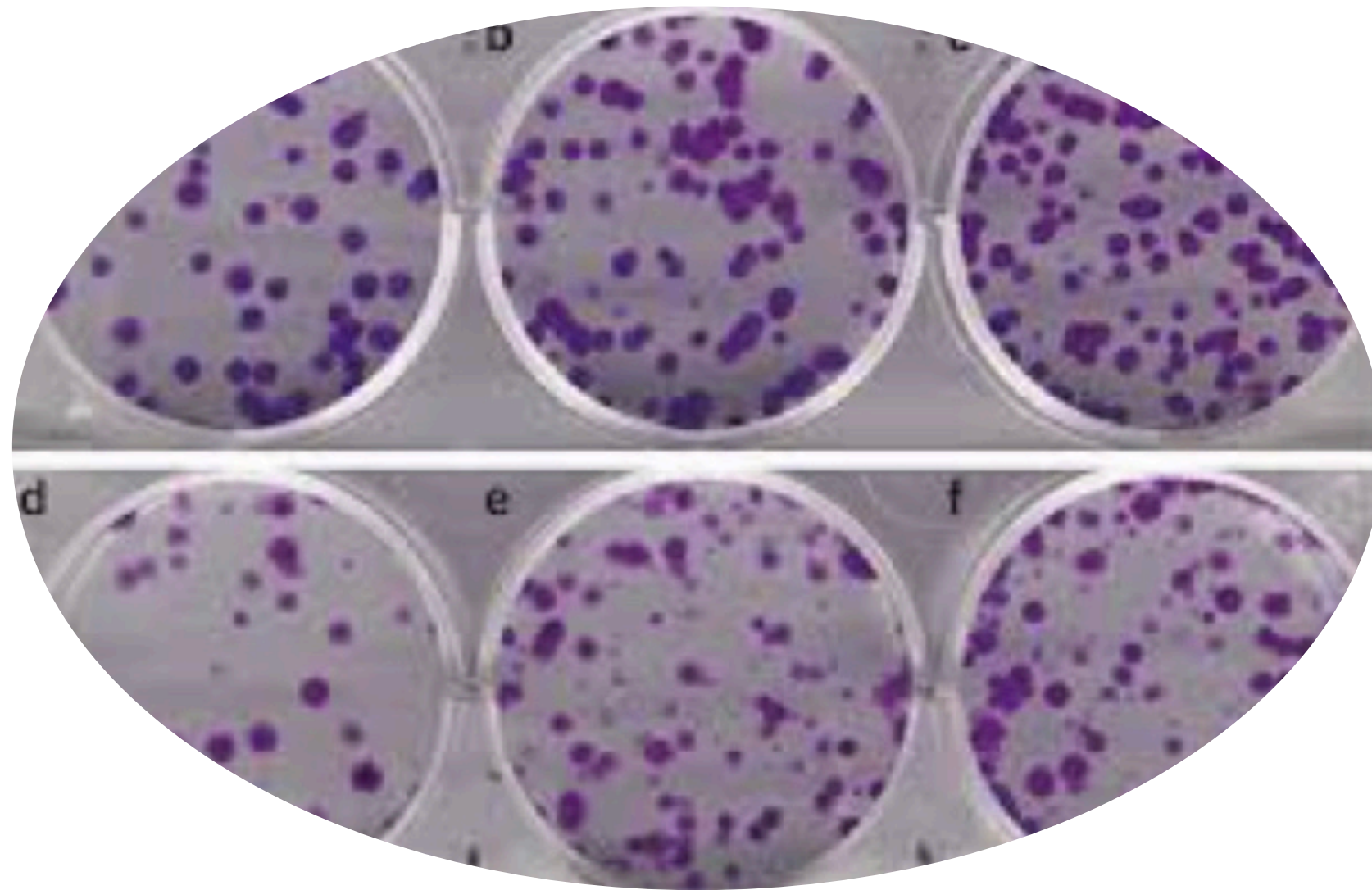
The image shows a Leica THUNDER Imager microscope system set up on a laboratory bench. The microscope is a white, upright model with dual eyepieces and a camera. It is positioned in front of a large, black, rectangular environmental chamber, which is branded with the 'Okolab' logo. The chamber has its doors open, revealing the interior where the microscope is mounted. To the left of the microscope, there is a computer monitor, a keyboard, and a mouse. A tablet is connected to the microscope via a cable. A large, flexible, light-colored tube is connected to the side of the chamber. The background is a green wall.

Effetto biologico della BNCT

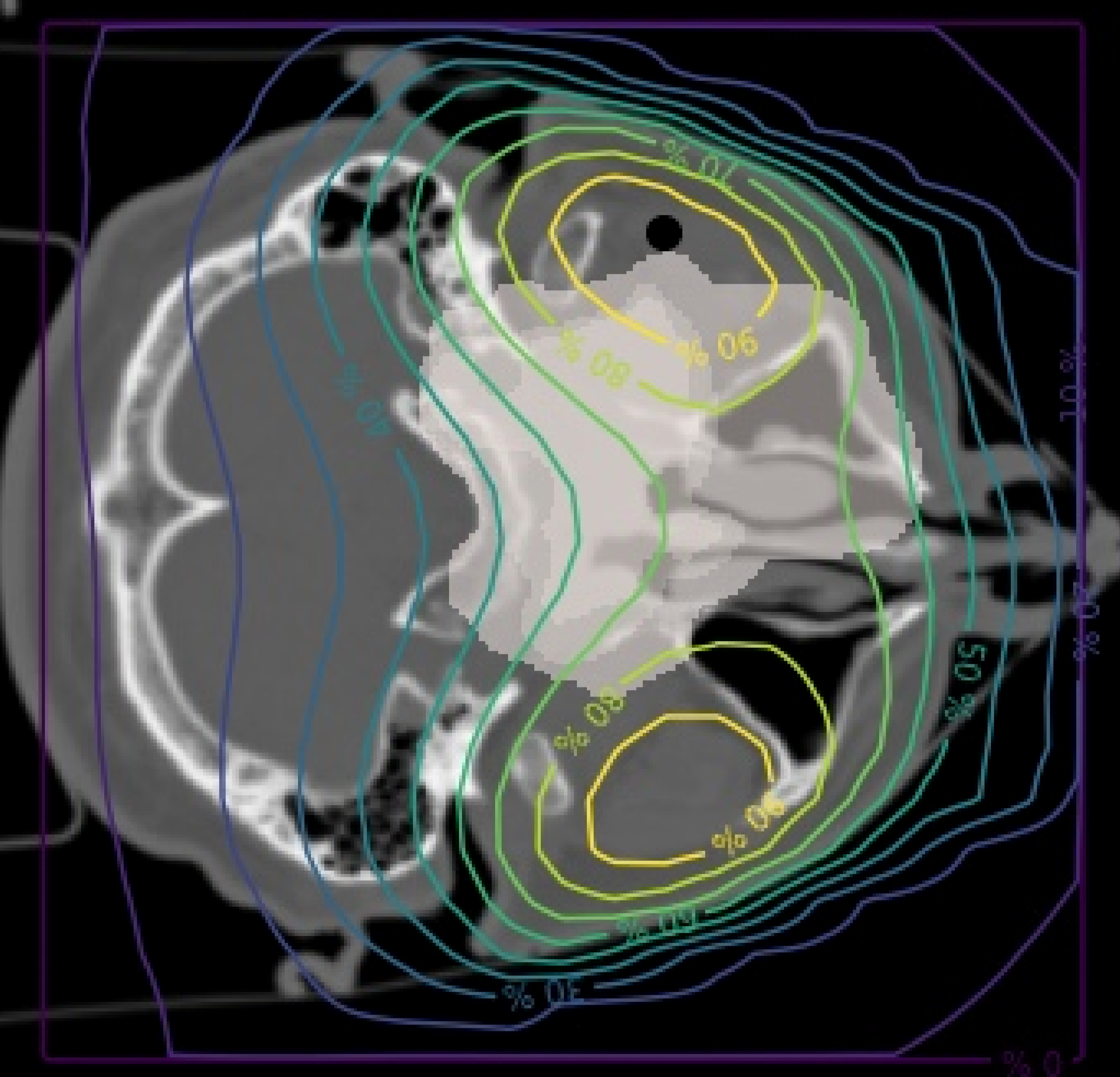
$$D_W = \sum_{i=1}^{i=4} D_i W_i$$


$$D_{isoE} = \frac{\alpha_R}{2G_R\beta_R} \left(\sqrt{1 + \frac{4G_R}{\alpha_R(\alpha/\beta)_R} \left(\sum_{i=1}^4 \alpha_i D_i + \sum_{i=1}^4 \sum_{j=1}^4 G_{ij} \sqrt{\beta_i \beta_j} D_i D_j \right)} - 1 \right)$$









Valutare il **danno**
determinare il
danno massimo
che un **organo a rischio**
è in grado di sostenere
valutare **l'effetto**
terapeutico



**In
conclusione**

Medicina

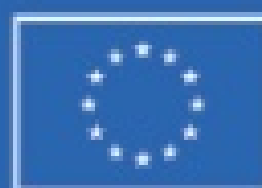
Ingegneria

Chimica

Biologia

Fisica





Finanziato
dall'Unione europea
NextGenerationEU



Ministero
dell'Università
e della Ricerca



Italiadomani
PIANO NAZIONALE
DI RIPRESA E RESILIENZA



Per la costruzione di un centro clinico da tecnologia INFN
Primo centro totalmente basato su Ricerca Pubblica