



# **Online Thematic Colloquium**

In the context of the EU H2020 FET open project Lumiblast (#712921)

# Photosensitizer-based theranostics for cancer with focus on glioblastoma.



https://uoa.webex.com/uoa/j.php?MTID=m27f7c1cb361a38630fecb6c7c1b8ae6e











The Lumiblast H2020 FET-OPEN project consortium would like to invite you with great

pleasure to our one-day thematic colloquium on the 10th of January 2023.

The topic of the colloquium is:

# Photosensitizer-based theranostics for cancer with a focus on

#### glioblastoma.

The meeting will be divided into two sessions:

A. Conventional photosensitizer-based therapy and diagnosis

B. Alternative methods of photosensitizer activation

We look forward to seeing you all on the 10th of January at:

https://uoa.webex.com/uoa/j.php?MTID=m27f7c1cb361a38630fecb6c7c1b8ae6e

# PROGRAM

#### A) Conventional photosensitizer-based therapy and diagnosis

08.00 Welcome and introduction Theodossis Theodossiou

08.15 Dr. George Rotas, Department of chemistry, University of Ioannina, Ioannina, Greece:

Towards Luminol based mitotropic chemiluminescent agents, synthetic and photophysical aspects.

08.45 Dr. Javier Hernandez Gil, Department of Chemistry, Universidad Politécnica de Valencia, Valencia, Spain:

Leveraging synthetic chlorins for imaging mouse peripheral nerves

09.15 Dr. Daniel Roca Sanjuan, Department of Chemistry, Universidad Politécnica de Valencia, Valencia, Spain:

Luminol chemiexcitation, a quantum chemistry approach

09.45.15 Short break

10.00 Dr. rer. nat. Adrian Rühm, Laser-Forschunglabor (LFL) / LIFE-Zentrum, Department of Urology LMU Klinikum, Munich Germany:

Spectral online monitoring during interstital PDT of malignant glioma

10.30 Prof. Hanne Hjorth Tønnesen, Department of Pharmacy, University of Oslo, Oslo, Norway:

Photosensitizer delivery formulation strategies.

11.00 Dr Jan Knight, Knight Scientific Ltd., Plymouth, U.K.:

Quantifying the luminescent potential of mitotropic and other chemiluminescent agents against specific reactive oxygen species (ROS).

11.30 Lunch break

13.00 Dr. Michael Gries, Department of Radiation biology, Institute for Cancer Research, Oslo University Hospital, oslo, Norway:

*Evaluation and characterization of the therapeutic efficacy of multifunctional nanoparticles for interstitial photodynamic therapy applied to glioblastoma* 

13.30 Dr. Lucie Lerouge, CRAN - Research Centre for Automatic Control, Nancy, France:

*Post-photodynamic Therapy Macrophagic response applied to Glioblastoma using Multifunctional AGuIX Nanoparticles.* 

14.00 Short Break

# B) Alternative methods of photosensitizer activation

14.15 Prof. Dr. Luís Pinto da Silva, Chemistry Research Unit (CIQUP), Institute of Molecular Sciences, Faculty of Sciences of University of Porto (Portugal).:

Self-Illuminating Photosensitizers for Photodynamic TherapyBased on a Marine Chemiluminescent System.

14.45 Dr. Beata Grallert, Department of Radiation Biology, Institute for Cancer Research, Oslo University Hospital, Oslo, Norway:

Cancer-targeting bioluminescence PDT.

15.15 Dr. Theodossis Theodossiou, Department of Radiation Biology, Institute for Cancer Research, Oslo University Hospital, Oslo, Norway:

Excitation of photosensitizers from accelerated protons: Protondynamic therapy.

15.45 Short Break

16.00 Dr. Vik-Mo, Department of Neurosurgery, Oslo University Hospital, Oslo, Norway :

5-ALA and fluorescein - based fluorescence guided resection of gliobalstoma multiforme. Opportunities, challenges and future perspectives.

16.30 Prof. Kristian Berg, Department of Radiation Biology, Institute for Cancer research, Oslo University Hospital, Oslo, Norway:

Photochemical internalization (PCI). Any possibilities in treatment of gliobalstoma.

17.00 Prof. Henry Hirschberg, Beckman Laser Institute & Medical Clinic, University of California Irvine, California, U.S.A:

Ultrasound mediated sono-chemical internalization: an alternative to light-based therapies.

17.30. Closing remarks and acknowledgements