

**WORKSHOP ON NANOMEDICINE AND IMMUNOTHERAPY**

8 am – 18 pm

Coordinators Andris Figueiroa Bakuzis - GO
Romualdo Barroso de Sousa - DF

MODULE 1

8 am – 8:40 am Designer nanoparticles for magnetic hyperthermia
Speaker: Hao Zeng - USA

8:40 am – 9 am Magnetic hysteresis Tailored for Nanomedicine applications
Speaker: Flávio Assad Garcia - RJ

9 am – 9:20 am Layer-by-layer engineered MnFe₂O₄ nanoplatfoms for magnetic-assisted
release of curcumin.
Speaker: Marcelo Sousa - DF

9:20 am – 9:30 am Magnetoliposomes for heat-induced drug delivery
Speaker: Emilio Cintra - GO

9:30 am – 9:40 am Core-shell nanoheaters for low field magnetic hyperthermia
Speaker: Marcus Araujo – GO

9:40 am – 10 am Hybrid Nanostructures as Multifunctional Tools for Thermal Sensing,
Photothermal Therapy and Controlled Magnetic Heating
Speaker: Ueslen Rocha - AL

10 am – 10:30 am Break

MODULE 2

10:30 am – 11 am History and evolution of Cancer Immunotherapy
Speaker: Romualdo Barroso de Sousa - DF

11 am – 11:30 am Immunotherapy with check point blockade and the 2018 Nobel Prize in
Medicine
Speaker: Simone Fonseca - GO

11:30 am – 11:50 pm Specific T cell induction using iron oxide based nanoparticles as subunit vaccine
adjuvant.
Speaker: Ana Paula Junqueira Kipnis - GO

11:50 am – 12:30 pm In situ vaccination for tumor immunotherapy: treat locally, respond
systemically
Speaker: Steven Fiering - USA



12:30 pm – 12:50 pm Immunogenicity of 4T1 and CT26 cancer cells treated with photodynamic therapy

Speaker: Luis Muehlmann - DF

MODULE 3

2 pm – 2:40 pm Prospect of Magnetic Particle Imaging for Breast Cancer Detection

Speaker: Frank Wiekhorst - GER

2:40 pm – 3 pm Combining ultrasound and magnetism in a multi-purpose imaging system

Speaker: Theo Pavan – SP

3 pm – 3:20 pm Recent progresses in fluorescence and thermal images with applications in nanomedicine

Speaker: Carlos Jacinto - AL

3:20 pm – 3:30 pm Multifunctional nanohybrids for thermal therapy, near infrared imaging and nanothermometry

Speaker: Navadeep Shrivastava - GO

3:30 pm – 3:40 pm Infrared thermometry for non-invasive detection of the intratumoral temperature during magnetic hyperthermia

Speaker: Harley Rodrigues – GO

3:40 pm – 4:00 pm Magnetoalbumin-based nanocarrier for photothermal therapy

Speaker: Elisangela Silveira-Lacerda - GO

4 pm – 4:30 pm Break

MODULE 4

4:30 pm – 4:50 pm Understanding the role of immune system components on the clearance of drug delivery nanoparticles from circulation

Speaker: Eliana Lima – GO

4:50 pm – 5:05 pm Erythrocyte membrane-coated magneto-fluorescent nanocarriers for thermal therapy and heat-induced immunological responses

Speaker: Ailton Sousa Junior - GO

5:05 pm – 5:25 pm Lymphocytes tumor infiltrated in metastatic lesions treated with Liposomes containing Doxorubicin and Paclitaxel.

Speaker: Joao Paulo Longo - DF

5:25 pm – 6 pm Immunotherapy in Breast Cancer: Where are we, and where are we going to?
Romualdo Barroso de Sousa - DF