



INSTITUT  
**JULES BORDET**  
INSTITUUT



**IAEA**

*60 Years*

*Atoms for Peace and Development*



# International Course on THERANOSTICS AND MOLECULAR RADIOTHERAPY

**A Joint Initiative of IAEA – BELNUC - JULES BORDET INSTITUTE**

**OCTOBER 2 - 6, 2017**

Venue: Auditorium Tagnon  
Jules Bordet Institute  
Boulevard de Waterloo 121  
1000 BRUSSELS  
BELGIUM



## MONDAY October 2, 2017

- 9:00-9:30 AM** Pre-Course knowledge evaluation IAEA participants - Multiple Choice Questions
- 9:30-10:00 AM** Welcome by the 3 hosts: Patrick FLAMEN (Institut Jules Bordet, *IJB*, Brussels)  
Christophe DE ROOSE (BELNUC)  
Rodolfo NUNEZ MILLER (IAEA, Vienna)
- 10:00-10:45 AM** Theranostics *Richard BAUM (Zentralklinik Bad Berka, Germany)*
- 10:45 AM** **Coffee Break**
- 11:00-12:30 PM** Basic Aspects: Nuclear Medicine and Theranostics:
- Physical Bases: which isotopes? *Silvano GNESIN (CHUV, Lausanne)*
  - Radiopharmacy *Zéna WIMANA (IJB, Brussels)*
  - Radiobiology of Radionuclide Therapy *Sarah BAATOUT (SCK, UZ Ghent)*
- 12:30 PM** **LUNCH**
- 2:00-2:45 PM** Targeted Radionuclide Therapy using Alpha Emitting Radioisotopes  
*Michael ZALUTSKY (Duke Univ., U.S.A.)*
- 2:45-3.00 PM** Discussion
- 3:00 PM** **Coffee Break**
- 3:15-4:30 PM** Regulatory Aspects: new tracer developments
- Regulatory aspects: Radiopharmacy (GMP) *Guy BORMANS (KUL, Leuven)*
  - Regulatory aspects: European Directives *Marleen VAN DE CAPELLE (FANC, Brussels)*
- 5:00 PM** **OPENING RECEPTION**  
**Cafeteria of Institut Jules Bordet**

## TUESDAY October 3, 2017

### Neuroendocrine Tumors

9:00-10:30 AM

- Oncology *to be confirmed*
- Molecular Imaging of NET *Christophe DE ROOSE (KUL, Leuven)*
- PRRT in Management of NET *Ioannis KARFIS (IJB, Brussels)*

10:30 AM

Coffee Break

11:00-12:00 AM

Intra-arterial Treatments:

- SIRT in Neuroendocrine Tumors *Marnix LAM (UMC, Utrecht)*
- Intra-arterial Applications of PRRT *Georgios LIMOURIS (NKUA, Athens)*

12:00-12:30 PM

Predicting Efficacy and Toxicity of PRRT *to be confirmed*

12:30 PM

LUNCH

2:00-3:00 PM

- Dosimetry *Silvano GNESIN (CHUV, Lausanne)*
- Activity Quantification for Dosimetry *Gwennaëlle MARIN (IJB, Brussels)*

3:00-3:30 PM

Radiopharmacy of SSTR targeted Theranostics *Zéna WIMANA (IJB, Brussels)*

3:30 PM

Coffee Break

4:00 – 4:30 PM

Neuroblastoma: MIBG Therapy *Boudewijn BRANS (UZ, Ghent)*

4:30-5:00 PM

IAEA Nuclear Medicine Initiatives *Rodolfo NUNEZ MILLER (IAEA, Austria)*

**WEDNESDAY October 4, 2017**

## **Radio-embolisation Liver Tumors**

**9:00-10:30 AM**

- SIRT in HCC
- Oncology: SIRT in Colorectal Cancer
- SIRT: State of the ART

*Vincent DONCKIER (IJB, Brussels)*  
*Alain HENDLISZ (IJB, Brussels)*  
*Marnix LAM (UMC Utrecht)*

**10:30 AM**

**Coffee Break**

**11:00-11:30 AM**

Interventional Radiology:  
Radiation lobectomy / Segmentectomy *Michael VOUCHE (IJB, Brussels)*

**11:30-12:00 AM**

Resin vs Glass Microspheres: physical Aspects *Stephan WALRAND (UCL, Brussels)*

**12:00-12:30 PM**

Predictive Dosimetry: BSA vs Partition Model *Silvano GNESIN (CHUV, Lausanne)*

**12:30 PM**

**LUNCH**

**2:00-2:30 PM**

Y90-PET vs Y90-Bremstrahlung SPECT *Stephan WALRAND (UCL, Brussels)*

**2:30-3:00 PM**

Precision of pre-SIRT predictive Dosimetry *Hugo LEVILLAIN (IJB, Brussels)*

**3:00-3:30 PM**

Hepatic Scintigraphy for Liver Function reserve pre-SIRT *Marnix LAM (UMC Utrecht)*

**3:30 PM**

**Coffee Break**

**4:00-4:30 PM**

How to organize a Clinical Theranostics Trial? *Julie GAYE (IJB, Brussels)*

## Thursday October 5, 2017

### Thyroid Cancer

9:00-10:30 AM

- Current Guidelines related to I131-Therapy  
*François JAMAR (UCL, Brussels)*
- Recurrent differentiated Thyroid Cancer: towards personalized Treatment based on Evaluation of Tumor Characteristics with PET  
*Andreas BOCKISH (Essen Univ., Germany)*
- Oncology: new Developments in targeted Treatments  
*Giuseppe COSTANTE (IJB, Brussels)*

10:30 AM

Coffee Break

11:00 - 12:30 PM

- Dosimetry: Guidelines and Case Study  
*Bruno VANDERLINDEN (IJB, Brussels)*  
*Silvano GNESIN (CHUV, Lausanne)*
- Dosimetry: clinical Considerations *Pierre BOURGEOIS (IJB, Brussels)*
- Clinical Controversies / Round Table Discussion / Cases / Questions from the Audience  
*Moderator: Rodrigo MORENO-REYES (Erasme Hospital, Brussels)*

12:30 PM

LUNCH

2:00-4:30 PM

Theranostics Applications of radiolabeled Antibodies:

- Radio-immunotherapy in Lymphoma *to be confirmed*
- Radiopharmacy of Antibody Radiolabeling *Zéna WIMANA (IJB, Brussels)*
- Use of radiolabeled Abs as Theranostics *Liesbeth DE VRIES (UMCG, Groningen)*
- Radiolabeled Antibodies in Breast Cancer *Géraldine GEBHART (IJB, Brussels)*

6:00 PM

MEET THE INDUSTRY *tbc*  
Hotel Manos, Brussels

8:00 PM

CONGRESS DINNER  
Hotel Manos Restaurant, Brussels

## FRIDAY October 6, 2017

### Bone Metastasis

9:00 - 10:30 AM

- Molecular Imaging of Bone Metastasis *Hojjat AHMADZADEHFAR (University, Bonn)*
- B-emitting Radionuclides: Sr-Sm-Rh *Francesco CICONE (Milano, Italy)*
- Multidisciplinary Treatment of Bone Metastasis *to be confirmed*

10:30 – 11:00 AM **Coffee Break**

11.00 - 12:30 PM

- Alpha-emitting Radionuclides: Ra-223 *to be confirmed*
- The Evolution of PSMA PET/CT Imaging with different Ligands, the Heidelberg Experience *Frederik GIESEL (Heidelberg Univ., Germany)*

12:30 PM **LUNCH**

### Prostate Cancer:

2:00-4:00 PM

- <sup>68</sup>Ga PSMA versus <sup>18</sup>F-PSMA PET/CT Imaging in Prostate Cancer *Frederik GIESEL (Heidelberg University, Germany)*
- Molecular Imaging of Prostate Cancer *Carlos ARTIGAS (IJB, Brussels)*
- PSMA targeted Radionuclide Therapy *Hojjat AHMADZADEHFAR (Univ. Bonn)*
- Roundtable Discussion *Moderator: Patrick FLAMEN (IJB, Brussels)*

4:00 PM **Coffee Break**

4:30-5:00 PM Post-Course Knowledge Evaluation *IAEA-participants*

5:00 PM **CLOSING CEREMONY**