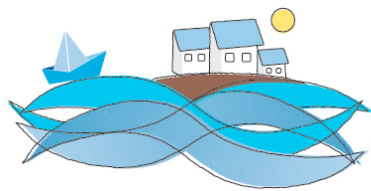


# **MEDAMI 2022 - Multimodality molecular neuro-imaging: clinical and technical state-of-the-art**

Monday, September 5, 2022 - Wednesday, September 7, 2022

Portorož



**Mediterranean**  
Thematic Workshops  
in Advanced Molecular Imaging

## **Book of Abstracts**



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## **Introduction**

**Corresponding Author:** vesna@phas.ubc.ca

**Topic Selection:**

**Introduction / degeneration / addiction / trauma / 2**

## **What we really need in the clinic**

**Corresponding Author:** john.prior@chuv.ch

**Topic Selection:**

**Tracers and other modalities / 3**

## **Current status of brain tracers in the context of (i) other modalities and (ii) neurodegeneration/brain trauma/psychiatry/addiction; new imaging biomarkers and drug targets including proteinopathy**

**Corresponding Author:** r.gunn@imperial.ac.uk

**Topic Selection:**

**Tracers and other modalities / 4**

## **Tradeoffs between Full Kinetic Modeling and Simplified Approaches in Neuropsychiatric PET**

**Corresponding Author:** richard.carson@yale.edu

**Topic Selection:**

**PET and SPECT technologies / 5**

## **Design considerations for (clinical) brain dedicated PET/MR and PET/CT systems”**

**Corresponding Author:** cslevin@stanford.edu

**Topic Selection:**

**PET and SPECT technologies / 6**

## **TOF in brain imaging: advanced and impact**

**Corresponding Author:** paul.lecoq@cern.ch

**Topic Selection:**

**PET and SPECT technologies / 7**

## **Development of photodetectors for the next generation of TOF PET scanners**

**Corresponding Author:** gborghi@fbk.eu

**Topic Selection:**

**PET and SPECT technologies / 8**

## **Revival of BGO with Cherenkov light**

**Corresponding Author:** rok.pestotnik@cern.ch

**Topic Selection:**

**Other techniques/ analysis / 9**

## **Spectral/photon counting/dual energy CT in neuro application**

**Corresponding Author:** tleiter@umm.edu

**Topic Selection:**

**Dedicated preclinical/ brain imagig systems /algorithms / 10**

## **CareMiBrain (PET) and MindView (PET/MR) – the i3M story**

**Corresponding Authors:** agonzalez@i3m.upv.es, jm.benlloch@cern.ch

**Topic Selection:**

**Dedicated preclinical/ brain imagig systems /algorithms / 11**

## **Trimage**

**Corresponding Author:** alberto.delguerra@df.unipi.it

**Topic Selection:**

**Dedicated preclinical/ brain imagig systems /algorithms / 12**

## **Mobile PET developments – brain imaging in motion**

**Corresponding Author:** smajewski@ucdavis.edu

**Topic Selection:**

**Whole body imaging in the context of brain / 13**

## **Whole-body kinetic modeling**

**Corresponding Author:** richard.carson@yale.edu

**Topic Selection:**

**Introduction / degeneration / addiction / trauma / 14**

## **Multimodality in the context of understanding of brain function in psychiatry/addiction**

**Corresponding Author:** ilan.rabiner@invicro.co.uk

**Topic Selection:**

**PET and SPECT technologies / 15**

## **Front-end readout, Data Acquisition and ASICs for the next generation TOF PET scanners**

**Corresponding Author:** stefaan.tavernier@vub.be

**Topic Selection:**

**Preclinical / 16**

## **Round Table**

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## **Multimodality in the context of understanding of brain function in health and dementia/neurodegeneration/brain trauma**

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## **Bridging scales with neuroimaging: challenges and opportunities (MRI talk)**

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## **EEG/MEG talk**

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## **Role of animal models in neurodegeneration and drug development**

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## **Neurobiology of cancer - imaging as a priority in cancer management**

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## **Multimodality as related to brain cancer**

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### **Current status of brain tracers in the context of (i) other modalities and (ii) oncology**

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### **Role of imaging in radiation therapy / theranostics**

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### **Role of imaging in neurosurgery**

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### **Introduction into the topic of spectral/photon counting CT in clinical (neuro)application**

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### **Radiomics and multi-modal analysis**

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Dedicated preclinical/ brain imaging systems / algorithms / 28

## **Technical advances in preclinical imaging**

**Topic Selection:**

**Dedicated preclinical/ brain imaging systems /algorithms / 29**

### **Advanced image reconstruction/how much can AI 'compensate' for lower dose**

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**Topic Selection:**

**Whole body imaging in the context of brain / 31**

### **Brain to organs connection**

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**Whole body imaging in the context of brain / 32**

### **The Explorer**

**Topic Selection:**

**Whole body imaging in the context of brain / 33**

### **UPenn Explorer**

**Corresponding Author:** joelkarp@penmedicine.upenn.edu

**Topic Selection:**

**Accessibility and data sharing / 34**

## **Vision of an efficient/low cost imaging and tracer/imaging distribution model ( includes access to cyclotrons/distribution of cyclotrons/ small ones vs larger one) – description of the major challenges encountered by developing countries**

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### **Data harmonization**

Topic Selection:

Accessibilty and data sharing / 36

### **Regulatory hurdles on data sharing**

Topic Selection:

Accessibilty and data sharing / 37

### **AI analysis of large data sets**

Topic Selection:

Vision / 38

### **Vision for the next 10 years**

Topic Selection:

Vision / 39

### **Summary and discussion**

Topic Selection: