

*Barcelona, Spain*

## **CME 4**

Radiopharmacy + Drug Development + Translational and Molecular Imaging Therapy + Oncology & Theranostics Committee

**Sunday, October 13, 16:30-18:00**

## **Session Title**

**Role of Extracellular Matrices in Cancer and Other Diseases**

## **Chairpersons**

Martin Behe (Villigen, Switzerland)

Margret Schottelius (Lausanne, Switzerland)

## **Programme**

16:30 - 17:00 Martin Behe (Villigen, Switzerland): Extra Cellular Matrix - A Target in the Future?!

17:00 - 17:30 Peter Caravan (Charlestown, United States of America): Molecular Imaging of Collagen and Oxidized Collagen in Fibrosis

17:30 - 18:00 Uwe Haberkorn (Heidelberg, Germany): Imaging of Activated Fibroblasts in the ECM

## **Educational Objectives**

1. Understand the role of ECM within diseases
2. Understand which targets are available in ECM
3. Learn about the possibility to target the ECM in pathological tissue specifically for diagnosis and therapy

## **Summary**

The role of the extra-cellular matrix (ECM) in the development of diseases like cancer, fibrosis, arthritis and further diseases was underestimated for a long time. Today it is recognized that it plays an important if not a crucial role. Therefore, it is an interesting subject in research today and Nuclear Medicine imaging may play an important role in understanding the process *in vivo* in pathological ECM. The first presentation gives an overview about the crucial role of ECM in different diseases. Peter Caravan will present a possibility to target and image the changed protein structure exemplified with collagen. Uwe Haberkorn shows an example to target structures which are embedded within the ECM and show a strong interaction. Therefore, he will exemplify it by target the serine protease fibroblast activation protein (FAP) which are overexpressed on the cancer associated fibroblasts which constitute a vital subpopulation of the tumor stroma.

## **Key Words**

Extracellular matrix, fibroblast activating protein, extracellular matrix proteins, collagen