



easyPET – A NEW APPROACH FOR AXIAL PRECLINICAL PET

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INTRODUCTION

Preclinical PET systems are used for small animal imaging to study human diseases and validate new drugs and therapeutics in animal models. Despite the high sensitivity and diagnostic power of PET imaging, particularly for oncologic and neurologic diseases, there are two strong limiting factor to the adoption of preclinical PET technology: excessive complexity and cost.

CURRENT SOLUTIONS (PRECLINICAL PET SYSTEMS) ARE NOT ACCESSIBLE TO:

-**RESEARCH CENTERS** - preclinical research applications; R&D of new therapies for cancer/neurodegenerative diseases, as well as diagnostic methods and radiopharmaceuticals;

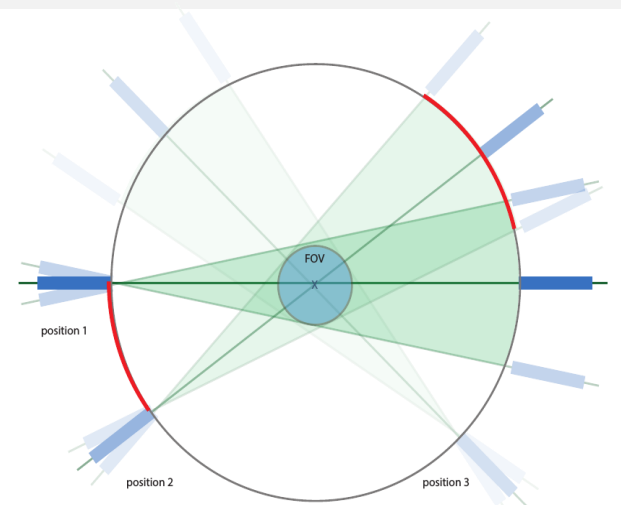
-**HEALTH SCHOOLS** – education and advanced training of healthcare professionals in the areas of nuclear medicine, medical imaging or radiopharmacy.

SO, WE WANT TO... **DEMOCRATIZE PET TECHNOLOGY**

easyPET – the new PET concept

- **ACQUISITION METHOD** - based on **2 ROTATION AXES** for the movement of detector modules
- **Allows FULL AXIAL IMAGING** (full animal body) with a small number of crystals
- **HIGH SPATIAL RESOLUTION AND UNIFORMITY** over the **whole FOV**
- **ELIMINATE THE PARALLAX ERROR** due to depth of interaction (DOI):
 - does not impose limitations on the proximity of the detector elements to the FOV;
 - favours system sensitivity.

PATENT PENDING PCT/IB2016/051487



HIGH RESOLUTION
LOW COST

BENCHTOP SYSTEM
portable

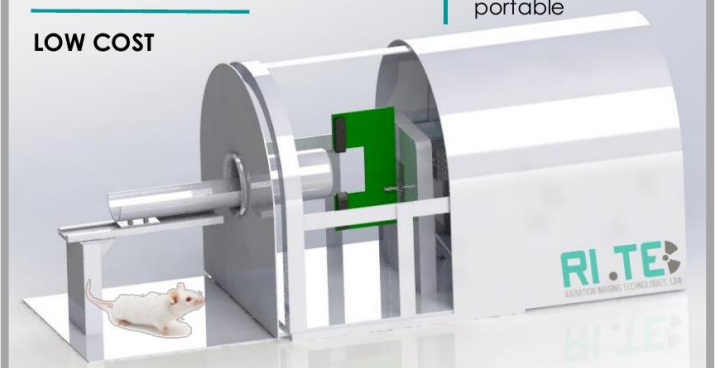
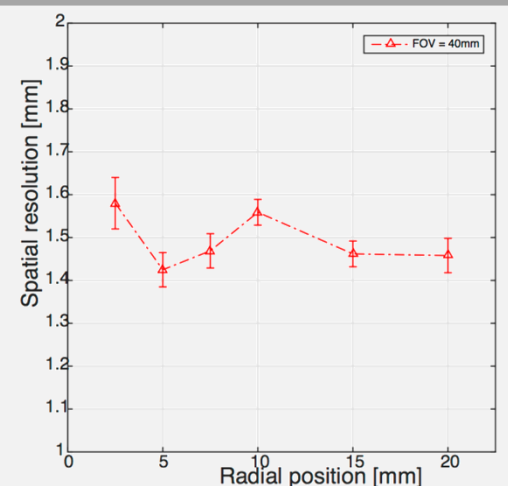
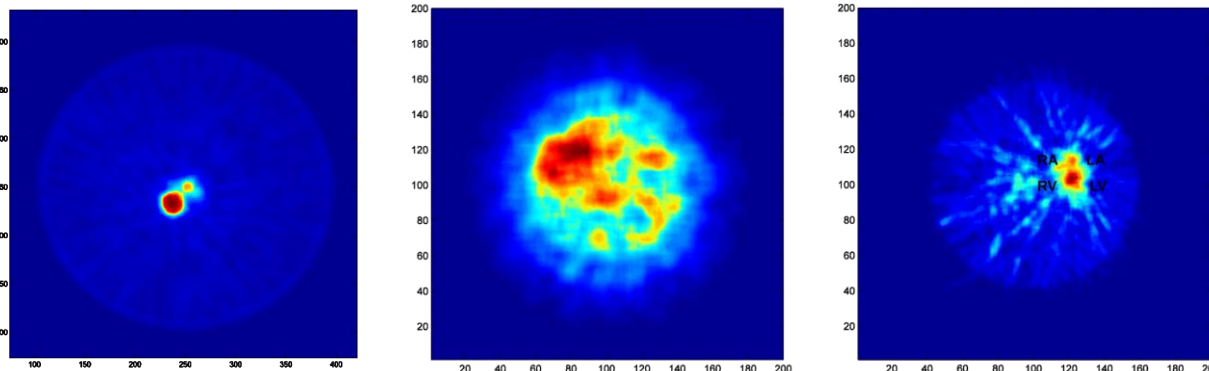


IMAGE EXAMPLES, SPATIAL RESOLUTION AND SENSITIVITY



POTENTIAL IMPACT

- **LICENSED TO CAEN** only for educational purposes → **MARKET ENTRY 2016**
- Preclinical PET **ANNUAL MARKET** → **130 M€**
- New market segment → **ADVANCED TRAINING OF HEALTH PROFESSIONALS**
- Democratization of PET technology → **MEDICAL RESEARCH ACCELERATION**

