

# CNIV 2017 « 2ÈME CONGRÈS NATIONAL D'IMAGERIE DU VIVANT » 8 - 9 NOVEMBRE 2017 – INSTITUT PASTEUR (PARIS)



APPEL À MANIFESTATION D'INTÉRÊT
OFFRE DE SERVICES

## INVISCAN































### **Preclinical Imaging Systems**



2ème congrès national d'imagerie du vivant 8 - 9 novembre 2017 - institut pasteur (Paris)



















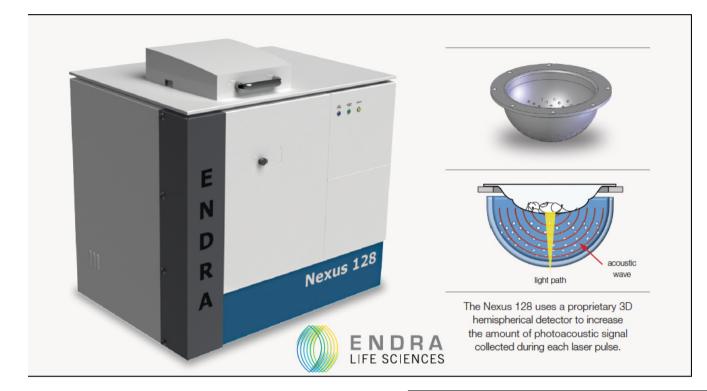










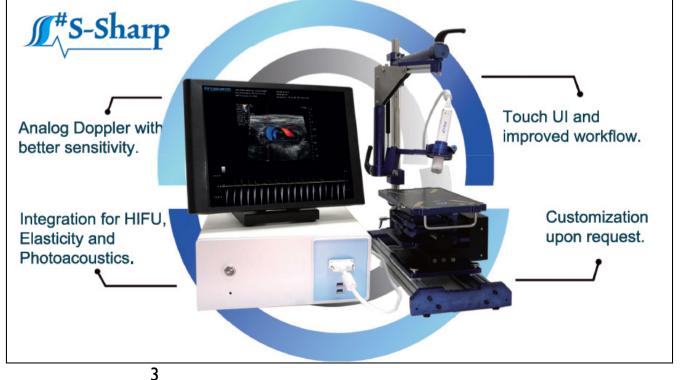


#### inviscan

Imaging systems

### NEXUS 128 3D Photo-acoustic

#### Prospect 3 Ultrasound Imaging Mice / rats platforms







Imaging systems







## **High End system - no compromise!**

Ultra-high sensitivity, throughput Widest FOV in its class.

compare with IVIS® Spectrum

- 10-mouse multi-mode capacity ultra-wide 25cm x 25 cm FOV ( 25cm x 22 cm X-Ray)
- Specialized high throughput 10-mouse manifold
- 14 on-board LED excitation frequencies, 20 on-board Emission filters.
- Ultra-fast cooling, startup times. High productivity, responsive software.







BLI FLI X-Ray







High sensitivity, widest FOV in category Field upgrade to X-Ray

compare with IVIS® Lumina

- 5-mouse multi-mode capacity best in class 25cm x 17 cm FOV
- □ 10 on-board LED excitation frequencies, 10 on-board emission filters.
- Ultra-fast cooling, startup times. High productivity, responsive software.
- Value conscious price and performance. Field upgrade to X-Ray



## IRIS PET/CT

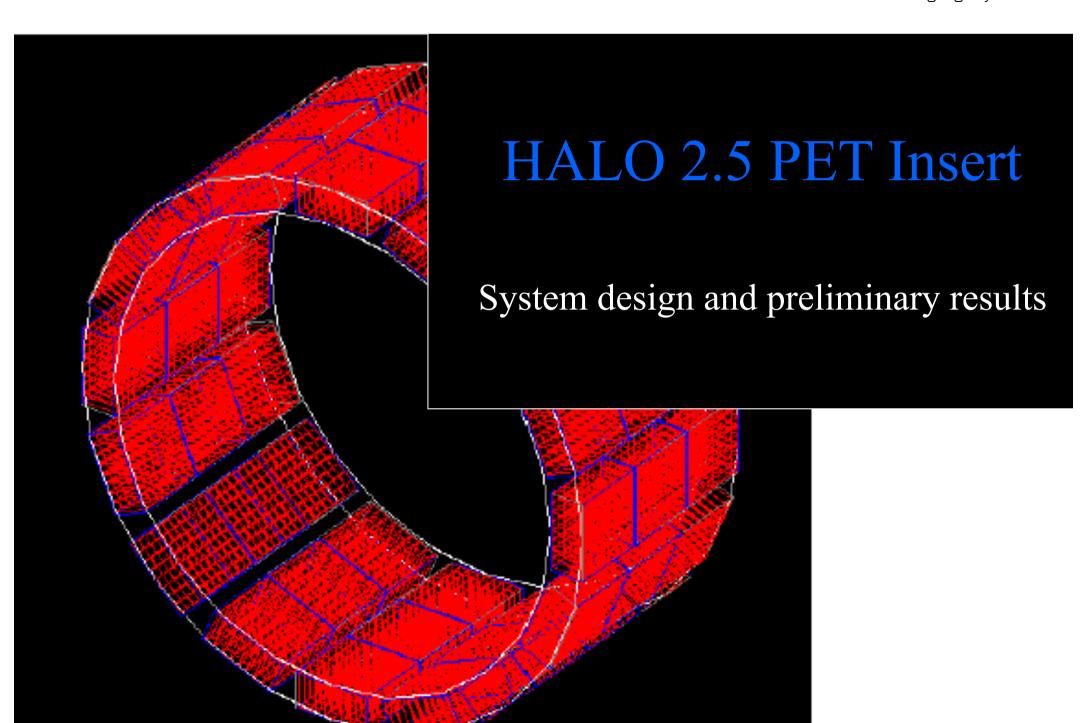




- Collaboration with University Pisa
  - Optimised for mice / rats
  - Fast throughput
  - Friendly user interface
- First system PET/CT at CNR Pisa
- Demo site in CNRS Strasbourg
- First CT system: Shanghai

#### Key specifications:

- Sensitivity = 9%
- Resolution = 1 mm
- Full mouse FOV
- ER = 14%
- Best quality / Price ratio



# Key Features

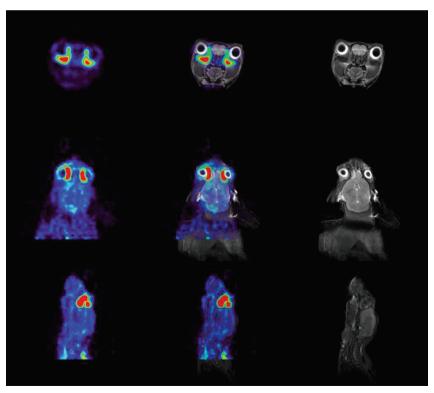
- Fully MRI-compatible, allows simultaneous MRI-PET imaging
- Ultrahigh sensitivity
  - ~ 4% 2-ring system
  - ~ 2.5% 1-ring system
- High resolution (~ 1 mm)
- Full mouse FOV with 2-ring system
  - Ø58 x 80 mm 2-ring system
  - Ø58 x 40 mm 1-ring system
- Also can be used as a stand-alone mouse/rat-specific bench top PET system

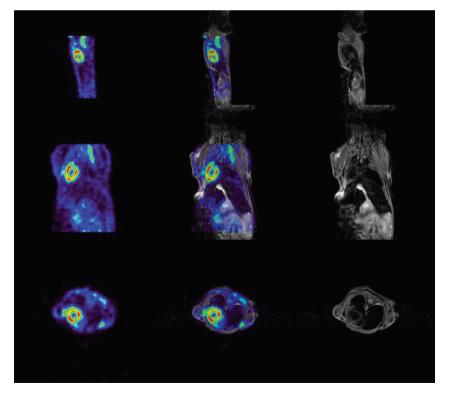
### Simultaneous Mouse Imaging with PET insert inviscan and 9.4T MRI

Imaging systems

#### Imaging workflow

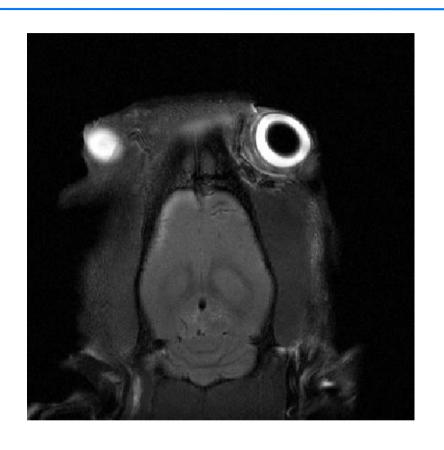
Animal	Injection dose	Injection time	imaging target	PET acquisitions	MR acquisitions
Nude mouse 16 g	167 uCi (6.2 MBq)	13h53	upper body	Start at 14h43, 900 sec	Start at 14h43 T2 - RARE, 300 sec
					Start at 14h50 T1 - RARE, 300 sec
					Start at 14h54 FLASH, 300 sec
			lower body	Start at 15h05, 900 sec	Start at 15h05 T2 - RARE, 300 sec
					Start at 15h11 T1 - RARE, 300 sec
					Start at 15h16 FLASH, 300 sec

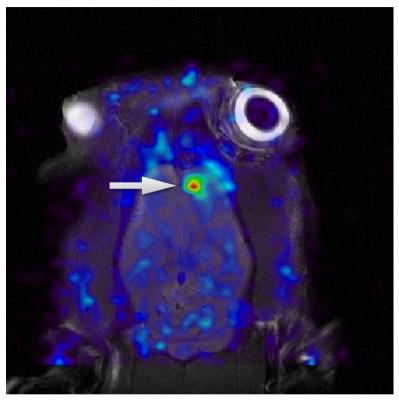




### Simultaneous Rat Brain Imaging with PET insert inviscan and 9.4T MRI

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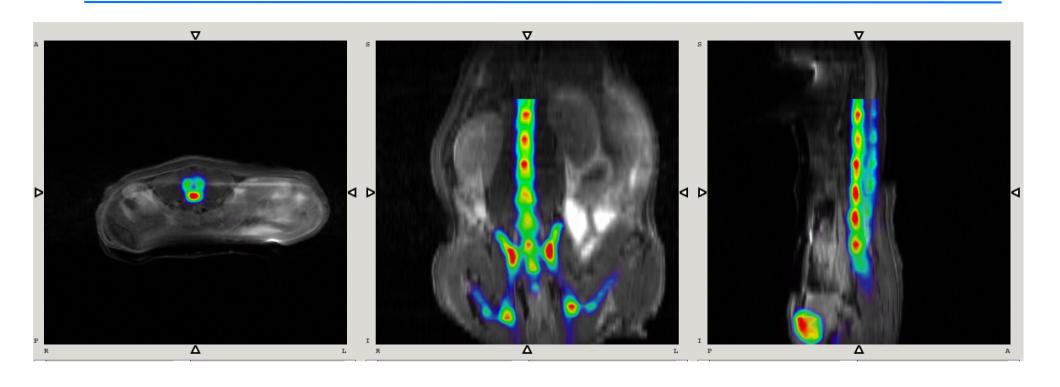




- Rat with C6 brain tumor model, 245 g
- Injected activity: 37.4 MBq FDG
- Acquisition start: 70 min post inj.
- Acquisition time: 30 min
- MRI sequence: RARE (TR: 4300 ms, TE: 26.8 ms)

### Simultaneous Mouse Imaging with PET insert inviscan and 9.4T MRI

Imaging systems



#### Study protocol

Animal model	Nude mouse, 25g			
Injected activity	190 μCi, 18F-NaF			
PET acquisition	40 min, acquisition start 65 min p.i.			
MRI acquisition	40 min, T2-RARE, TR 4300 ms, TE 26.8 ms			
PET and MRI are acquired simultaneously				

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## Thank you for your attention

Contact us at info@inviscan.fr www.inviscan.fr