

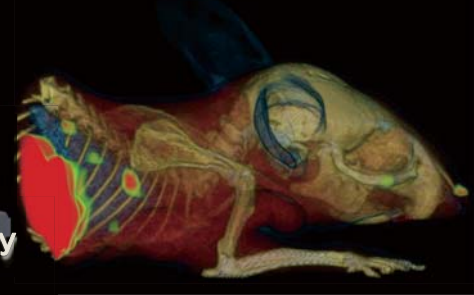
# Instruments at Okayama Medical Innovation Center (OMIC) for Molecular Imaging Researches

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## OMIC Okayama Medical Innovation Center

Molecular Imaging  
Provides Innovation in  
Future Life Science and Drug Discovery



## About us

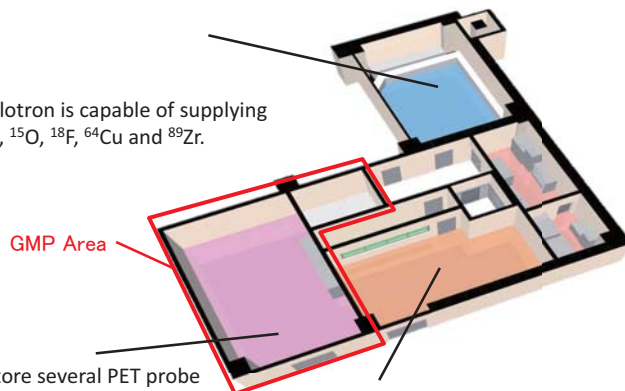
OMIC is a collaborative research center at Okayama University utilizing molecular imaging techniques. We support the various stages of the drug discovery process.

## Molecular Imaging Facilities at OMIC

### Cyclotron



The cyclotron is capable of supplying  $^{11}\text{C}$ ,  $^{13}\text{N}$ ,  $^{15}\text{O}$ ,  $^{18}\text{F}$ ,  $^{64}\text{Cu}$  and  $^{89}\text{Zr}$ .



GMP Area

### Hot Laboratory

Two unit-type hot cells that store several PET probe synthesizers are installed.



### PET imaging systems

By obtaining the distribution as a tomographic image by PET, the system enables the analysis of pharmacokinetics and pharmacodynamics.



### SPECT/CT imaging system

Combination of SPECT/CT in a single modality smoothly facilitates analysis with SPECT and CT imaging.



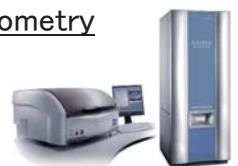
### IVIS workstation



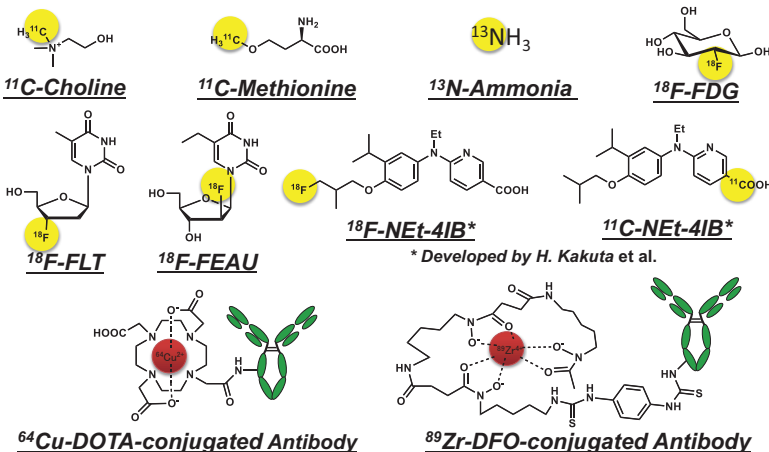
Facilitates non-invasive chemiluminescence/fluorescent imaging of small animals.

### Mass imaging spectrometry systems

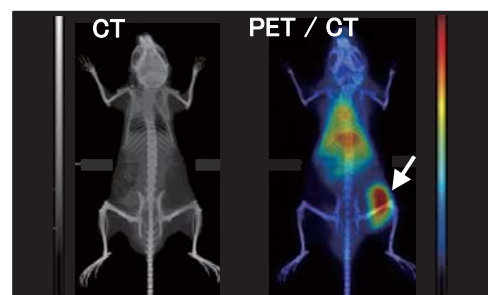
Displays 2-D distribution of intended biological information on tissue section.



## PET probes



## PET/CT imaging



### PET imaging of tumor bearing mouse with the $^{64}\text{Cu}$ -DOTA-anti-tumor antibody

The antibody-labeled with  $^{64}\text{Cu}$  binds to a specific tumor antigen and radioactivity accumulates in tumor lesion (white arrow).

About our Information on Website ▶ **OMIC**

Search <http://www.crc.okayama-u.ac.jp/>

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