

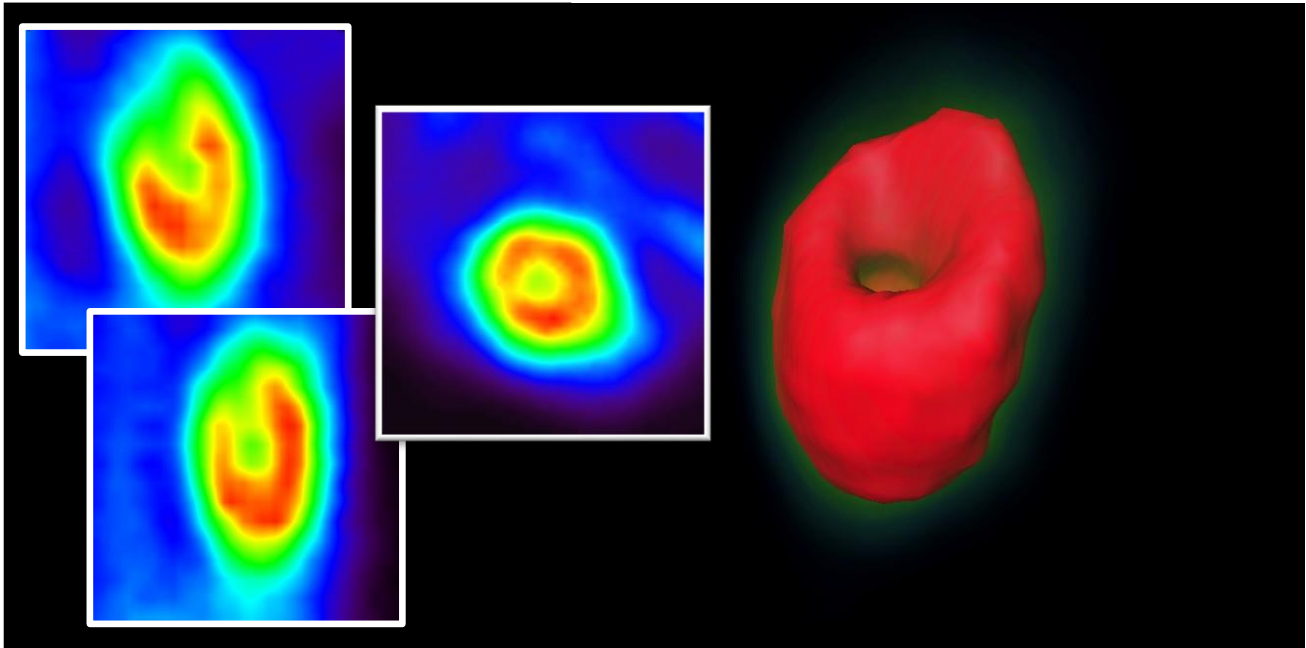


# [The Persian Gulf Nuclear Medicine Research Center]

[Bushehr University of Medical Sciences]

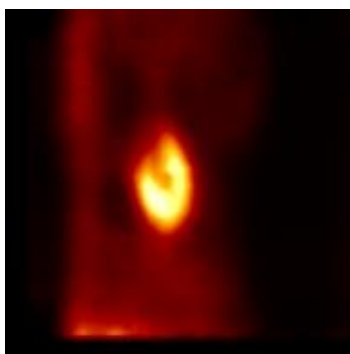
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Small-animal models of cardiac disease play an important role in cardiovascular research and translate the findings to the clinic. Preclinical cardiovascular research using noninvasive radionuclide imaging systems has been extensively developed in recent years. The Persian Gulf nuclear medicine research center has been working on preclinical research using small-animal radionuclide imaging for 4 years.



## Cardiac SPECT

The images show the transverse, coronal and sagittal views as well as the 3D reconstructed images of the Rat's heart radionuclide scan.



[Coronal view of the Rat's heart]

### Scan details:

Four hours after injection of the radionuclide, the animal anesthetized using a combination of Ketamine and Xylosine. SPECT imaging performed with 60 projections in 360 degrees. After the image reconstruction, the images processed with Amira image analysis software.

Radionuclide: **[Tc99m-MIBI]**

## HiReSPECT; Small-animal SPECT

Radionuclide scan Imaging was conducted using HiReSPECT, a small-animal SPECT. The imaging system consisted of two gamma cameras. The image spatial resolutions and the planar spatial resolution of the system at the head surface is 1.2-1.6 mm and 1.7 mm, respectively.



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