



Media Release

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ANSTO and CSIRO collaborate on medical research

CSIRO¹ and ANSTO² are to collaborate on developing radiopharmaceuticals which will ultimately help in the early diagnosis and treatment of diseases like cancer and Alzheimer's.

The two scientific organisations have signed an agreement to jointly screen and evaluate the chemical properties of new imaging agents developed by ANSTO. The agents will be used for Positron Emission Tomography (PET) and Single Photo Emission Tomography (SPECT) imaging, in conjunction with Computed Tomography (CT).

Dr Marie Gregoire of ANSTO's Radiopharmaceutical Research Institute said: "ANSTO will bring expertise in small animal imaging and provide data using existing and new molecular imaging agents, while CSIRO has the technological expertise to develop software to help analyse these agents and identify the successful ones.

"At the moment it takes a great deal of time to analyse imaging agents. This is delaying the development of new and more sophisticated radiotracers to aid quick diagnosis and ultimately faster treatment of major diseases.

"The quicker we can ascertain a viable product the quicker it can be used in humans," said Dr Gregoire.

The CSIRO biomedical imaging team at the Australian e-Health Research Centre will focus on image processing algorithms and software tools that are dedicated to in-vivo functional and anatomical imaging techniques.

CSIRO team leader, Dr Olivier Salvado said: "We will develop new imaging analysis methods to accelerate the discovery of imaging agents by automatically identifying organs from small rodents, and compute their affinity with tissues and targets."

The collaboration has two key objectives:

- Accelerate the screening of newly developed ANSTO radiotracers, and
- Improve the characterisation of the best existing radiotracers through their ability to detect early changes in diseases and to follow-up the progression or recovery of diseases in animal models.

Dr Gregoire concluded: "Ultimately if we can improve and develop better radiopharmaceuticals for use in humans, there will be earlier diagnosis and treatment of disease."

For more information and to arrange interviews please contact ANSTO Media Relations Manager, Sharon Kelly on (02) 9717 9575 or 0400 394 085 or CSIRO ICT Centre Communications Manager Joanne Finlay on (02) 9372 4309 or 0447 639 688

¹ Commonwealth Scientific and Industrial Research Organisation

² Australian Nuclear Science and Technology Organisation