

Les mardis de
L'IAB

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**IRMaGe facility and focus on
the new
SAXO equipment:
The preclinical radiotherapy**


13.FEBRUARY 2024 – 11 AM – LECTURE HALL

During this presentation, a broad overview of the IRMaGe facility will be presented by his director, Dr Emmanuel Barbier. In the second part, the focus will be dedicated to the newly installed SAXO (Small Animal X-ray Platform) which is now available to the scientific community. H el ene Elleaume and Servenaz Keshmiri will present the possibilities offered by this state-of-the-art equipment in the field of preclinical radiotherapy.

IRMaGe is an academic service unit dedicated to in vivo exploration and intervention. It is labelled by UGA, Inserm, CNRS and CHUGA. IRMaGe gathers 22 people, mostly engineers. It is structured as three main platforms: the EEG/TMS platform for electrophysiology and transcranial magnetic stimulation in human subjects; the human MRI facility, dedicated to in vivo MRI in human subjects and organized around a 3T MRI system; and the preclinical facility. The latter hosts two preclinical MRI scanners dedicated to rats and mice, a focus ultrasound system for MRI-guided opening of the blood-brain barrier, and preclinical X-ray devices: radiotherapy and computed tomography. Surgery rooms are also available to prepare animal models.

SAXO encompasses a preclinical radiotherapy unit (SARRP, XSTRAHL) and a high-resolution CT scanner (10  m) (VIVA-CT, SCANCO). The SARRP is an image-guided radiotherapy system dedicated to preclinical and radiobiology research. It allows to create and deliver simple or complex beam arrangements on preclinical animal models, in a clinically relevant manner. A treatment planning system is available to precisely determine the dose distribution and replicate modern clinical treatments. The SARRP also offers to perform in vitro studies and radiobiology research. The performances of this state-of-the-art system and examples of research will be given during the presentation.

Invited by : Anne-Laure Bulin

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All ee des Alpes, 38700 La Tronche (tram line B, stop : Grand Sablon)
The seminar is followed by discussions and exchanges with the speaker and a sandwich buffet is offered