

PAD-IR & ORD-IR

Technology presented by  QUEST VALORISATION
Ressources d'innovation

PAtient & Operating Room Dose in Interventional Radiology

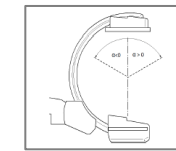
#Interventional radiology

#Dose calculation

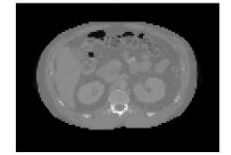
#Prevention

- PADIR & ORD-IR technologies aim at developing dose simulation tools for cardiac and vascular cathlab interventional procedures. These simulations can be used for the **planification** of interventions to minimize patient dose exposure and in particular safeguarding organs at risk, **dose reporting**, as well as being used to **trigger real-time alarms during interventions** to safeguard patient and interventional radiologists alike.
- The first approach results in a **3D dose map specific to the patient's** morphology and organ composition, as well as the settings of the X-ray machine. Using the second method, we generate a **radiation map for every area of the operating room's workspace**. The staff can identify zones with high levels of radiation and take appropriate measures to avoid or minimize exposure.

Partnership : Licensing

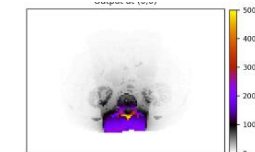


X-ray machine characteristics

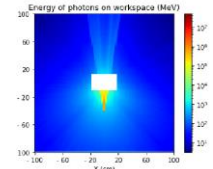


Patient CT scan

Neural Network DCNN



Patient specific 3D dose distribution



Operating room radiation map

IP : Patents