

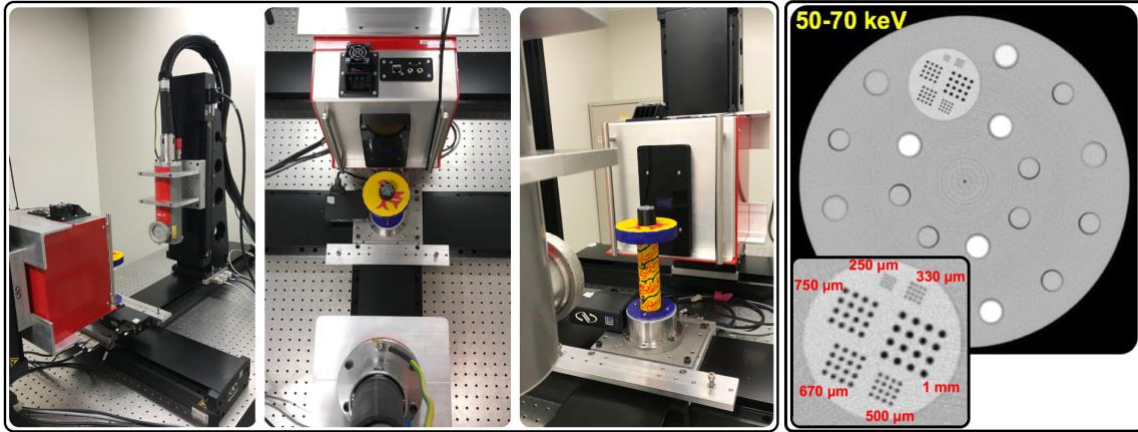


Two Post-Doctoral Research Fellowships in Medical Physics

“Machine learning for photon-counting CT imaging – Application to x-ray medical diagnosis”

X-ray Cancer Imaging and Therapy Experimental (XCITE) lab

University of Victoria



Scientific context: The first computed tomography (CT) scanner employing photon-counting detectors (PCDs) has recently been approved by the Food and Drug Agency (FDA). It is believed that PCD-CT scanners will drastically improve disease diagnosis by offering unprecedentedly high resolution and high contrast. Thanks to its direct partnership with a PCD manufacturer (Redlen Technologies), the XCITE lab has its own PCD-CT bench and is well positioned to make significant contributions to this novel field. The XCITE lab invites applications for two postdoctoral fellows to work on the application of machine learning to PCD-CT image reconstruction, oriented to medical diagnosis.

Profile required: We are looking for enthusiastic and autonomous candidates with strong motivation and interest in multidisciplinary research. Applicants must hold a PhD degree in Medical Physics, Engineering or a related field. A background in radiation physics and medical imaging are essential. Thorough knowledge of machine learning techniques and/or CT reconstruction is desirable. Candidates from underrepresented groups are highly encouraged to apply. Funding is available for two years.

Working environment: The XCITE lab is specialized in x-ray imaging modalities and x-ray radiation therapy techniques. The XCITE lab is an active medical physicist research group of the University of Victoria. It is located on the southern tip of Vancouver Island, in British-Columbia, Canada. Its superb location provides a pleasant living environment and many outdoors adventures.

To apply: Review process will begin immediately and will continue until the position is filled. Please send your curriculum vitae, motivation letter and two letters of reference by to:

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