34th Euro-Global Summit on **Cancer Therapy & Radiation Oncology** 6th International Conference on **Big Data Analysis and Data Mining** 13th International Conference on **Orthopedics, Arthroplasty and Rheumatology** July 25-27, 2019 London, UK



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An integrated platform for developing brain cancer diagnostic techniques

There were 17 million new cases of cancer and 8.2 million deaths from cancer worldwide in 2018. It's estimated that L there will be 27.5 million new cases of cancer each year by 2040. This causes huge social, political and financial pressures. Different from other cancers, brain tumors deaths are rising, representing 2.6% of all deaths from cancer and kill more children and people under 40 than any other cancers. Every two hours, someone is diagnosed with a brain tumour in England alone. Despite intensive efforts, there are currently no effective disease-modifying treatments or preventive strategies for brain cancer in part due to the lack of effective early diagnostic techniques. Developing a reliable, less expensive diagnostic technique with short time intervals is utmost important and required for personalized therapy, which may potentially help patients to avoid harmful biopsy. The long-term fight against cancer and the lack of young interdisciplinary talents in the brain cancer diagnostic field highly requires intensive training of a new generation of researchers. AiPBAND is proposed to provide such an excellent triple-i (interdisciplinary, intersectoral and international) research and training platform with multidisciplinary expertise and advanced technologies for developing innovative diagnostic techniques for brain cancer. Through this platform, a new generation of innovative, entrepreneurial and creative early-stage researchers (ESRs) will be trained with triple-i knowledge/skills and broad vision to maximize their ability of knowledge transformation and employability, and become the future leaders in both academia and industry. Fighting against cancer and other complex human diseases requires complementary interdisciplinary research efforts and intensive intersectoral collaborations.



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Recent Publications

- 1. Kelly J, et al., (2018) Gene expression meta-analysis of Parkinson's disease and its relationship with Alzheimer's disease. Mol Brain. 12(1):16.
- 2. Li X, et al., (2018) Systematic analysis and biomarker study for Alzheimer's disease. Sci Rep. 8(1):17394.
- 3. Li X, e al, (2015) Integrated genomic approaches identify major pathways and upstream regulators in late onset Alzheimer's disease. Scientific Reports 5:1.
- 4. Palles C, et al., (2015) Polymorphisms near TBX5 and GDF7 are associated with increased risk for Barrett's esophagus. Gastroenterology 148(2):367-378.
- 5. Köttgen A, et al., (2013) Genome-wide association analyses identify 18 new loci associated with serum urate concentrations, Nat Genet 45(2):145-154.

Biography

Xinzhong Li has completed his education from Xi'an Jiaotong University, China. He is a Reader in System Biology and Bioinformatics at Teesside University School of Science, Engineering and Design, UK. He has broad research interests with a focus on biomarker discovery for early disease diagnosis including dementia and cancer. He is the Scientific Coordinator of EU H2020 Marie Skłodowska-Curie Action AiPBAND project aiming to train 14 PhD students in the field of early diagnosis of brain cancer.

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