

Centre for the Clinical Application of Particles

Mission:

Develop the technologies, systems, techniques and capabilities necessary to deliver a paradigm shift in the clinical exploitation of particles.

Established October 2017

- **So, still finding our feet**
- **Collaboration of:**
 - Clinicians, medical physicists (CXH), radiobiologists, physicists

Long-term vision:

- **Aim to make a step change in delivery of therapy by '2050':**
 - Key focus is programme to reduce footprint, complexity, and cost of particle (proton & ion) beam therapy

Medium- and short-term objectives:

- **Development of CCAP programme in three themes:**
 - Novel accelerator technologies
 - System development
 - Fundamental radiobiology

Emerging flagship: "LhARA":

- **Laser-hybrid Accelerator for Radiobiological Applications**
 - Science:
 - **Explore radiobiology in new regimes**
 - Technology:
 - **Prove the techniques required to drive the 2050 step change**

Seeking to engage at this early stage so that to allow programme to be shaped and benefit maximised in the short-, medium, and long terms.