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Phase 2 Expansion of St. Luke's Radiation Oncology Centre at Beaumont Hospital

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Event Website: <https://www.globalcea.org/icehtmc>



The Team / Workgroup

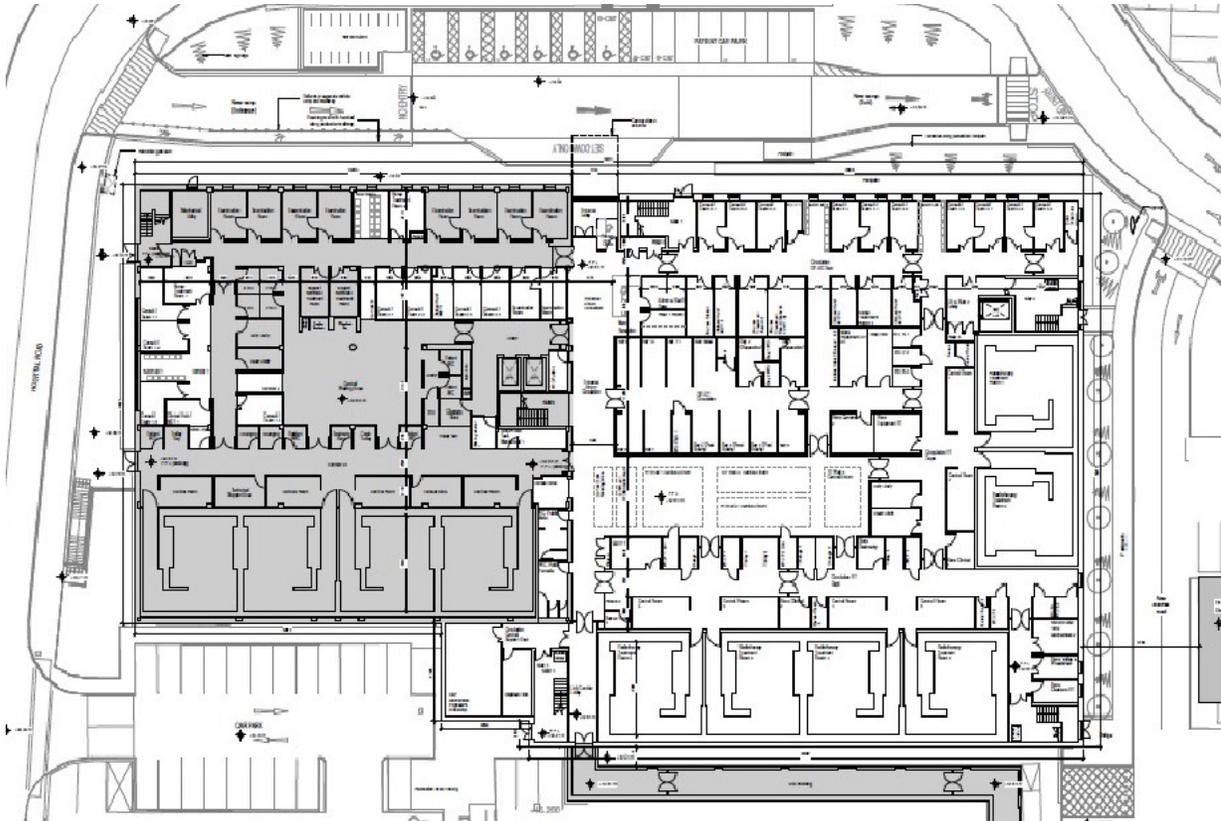
- John McGivney, Head of RT ICT & Clinical Engineering, St. Luke's Radiation Oncology Network
- Paul Davenport, Chief Physicist, St. Luke's Radiation Oncology Network
- Prof. Brendan McClean, Director of Physics, St. Luke's Radiation Oncology Network

Multidisciplinary Team Approach

Overview

- SLRON – 3 Site Network
 - St. Luke's Hospital Rathgar
 - St. Luke's Radiation Oncology Centre @ St. James's
 - St. Luke's Radiation Oncology Centre @ Beaumont
- Equipment
 - 14 Linear Accelerators
 - 6 CT Simulators
 - 2 Mri
 - 1 x HDR & 1 x DXT
 - 2 x OIS
 - 4 x Treatment Planning Systems TPS
- Approximate 30% increase in new RT Cases in next 20 Years
- Re-treats?
 - X 1.2
- The Expansion of Radiotherapy services in the Dublin Region has been ongoing since 2006
- 14 Linacs to 17 Linacs (2026)
- Decision to expand SLROC @ Beaumont to provide additional capacity
- The focus of the Beaumont Radiation Oncology Expansion project is to provide a building which will facilitate delivery of a world class and innovative Radiation Oncology Service
- It is the national centre for Stereotactic Radiosurgery, a specialist radiotherapy technique.

Project



- Late 2017 Design Team Appointed
 - Architects – Michael Collins Associates (MCA)
 - Civil/Structural
 - M&E
 - Quantity Surveyors
 - Project Supervisor Design Process
 - Fire Safety Engineers
 - Planning Consultants
 - EED Expert
- June 2018 – Design Brief Issued by HSE Estates & SLRON
- The new designed accommodation will include the addition of
 - 6 Linear Accelerator Bunkers
 - PET/CT Simulation suite
 - Day Procedures Suite including Brachytherapy
 - Space for Planning, Administration, Offices, Meeting Rooms, Teaching & Research etc.
 - Additional Staff Areas including Roof Terrace

Goals of The Project

- Provide a World Class & Innovative Radiation Oncology Service to our Patients
 - Fit for purpose
 - Modern & Latest Techniques
- Align with National Equipment Replacement Programme
 - 1st Multi-year RT equipment programme in Ireland
- Expand provision of SABR & Cranial SRS as the National referral centre
- Integration of PET-CT & Mri into RT treatment Delivery
- Use of the latest Information systems to streamline workflows and gather information for Data Analysis

Results



- Completed Stage's 1A, 2A, 2B & 2C of Project
 - Planning Permission Granted – Dec 2020
 - Building Design Complete
- Design developed to meet future needs of Radiotherapy treatments
 - Adaptive Radiotherapy Treatments
 - Access to internal radiotherapy
 - Better identification of Primary & Distant Nodes
 - If you cant see it you cant hit it!
 - Faster patient setup & real-time positioning

Conclusion

- Covid-19 & Cyber Attack
- Enabling Works & Building Tender under Development – Stage 3
- Multi Disciplinary Approach led to a well developed design
- On Schedule for Project completion in 2024



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Biomedical Engineering Association of Ireland (BEAI)

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