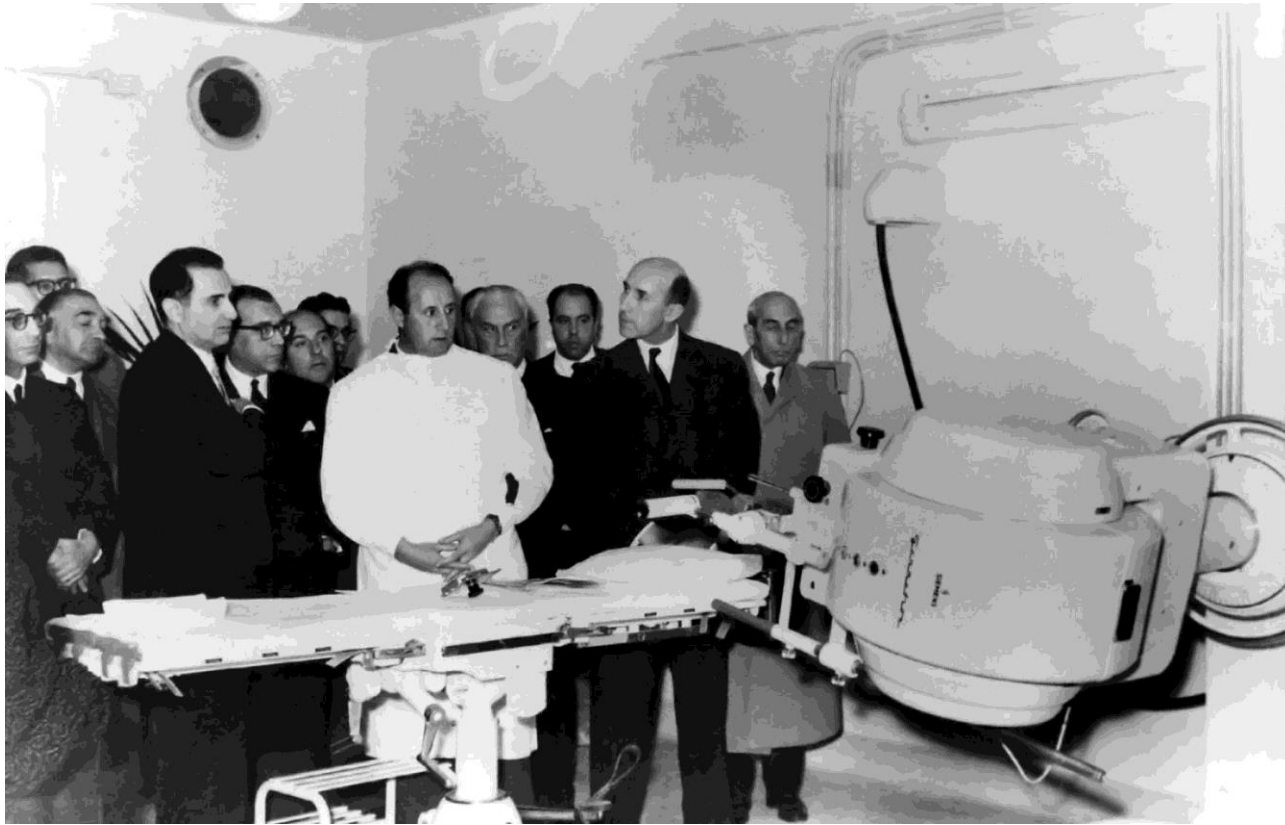


Particle Physics: From Fundamental Science to Society
Tribute to Gaspar Barreira
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Portuguese Roadmap for Proton Therapy in Portugal

José Marques
Campus Tecnológico e Nuclear
Instituto Superior Técnico

Once upon a time...



Inauguration of the first Co-60 therapy unit at IPO-Lisboa in 1958. The physicist António Manuel Baptista is guiding the visitors.

Proton therapy in Portugal

- The network for radiation therapy in Portugal has currently about 60 linac and 68 brachytherapy units in public and private units.
- The inclusion of a proton therapy unit was already considered in the 2015 revision of the national network for radiation therapy promoted by the General-Directorate of Health.
- Gaspar actively promoted this idea, well within the title of this tribute “Particle Physics: From Fundamental Science to Society”.
- Working group established by Ministers for Health and Science in October 2017.

Proton therapy in Portugal



Particle therapy facilities in operation and under construction/planning stage (CERN Courier, January 2018).

Proton therapy in Portugal

- Working group charged to identify and plan:
 - the optimal number of treatments required;
 - the necessary clinical support for the operation;
 - the technical and scientific basis in support of fundamental research activities;
 - the necessary support for R&D activities (with FCT);
 - the development of an effective national network of research, training and health care infrastructures for the treatment of cancer patients using new technologies;
 - the required conditions to stimulate scientific, technical and clinical cooperation at international level;
 - the required human and financial resources.

Proton therapy in Portugal

- Resolution of the Council of Ministers 28/2018:
 - Proton therapy will be available in the national health system, with initial capacity to treat 700 patients/year.
 - National network: first unit to be located at the *Campus Tecnológico e Nuclear* of IST, taking advantage of available human and technical infrastructures.
 - Financing conditions to be agreed.
 - FCT allocated 10 M€ for training of physicians and researchers in the period 2018-2023.
 - FCT, IPOs and other hospitals involved in cancer treatment authorized to create a not-for-profit association to install and operate proton therapy unit.

Proton therapy in Portugal



Typical multi-room configurations units for proton therapy from IBA (left) and Varian (right). These configurations can accommodate 2-3 rooms for patients and 1 room for research. Single room solutions are also available.