



*Gustave-Roussy Cancer Center, private institution providing public health services
is seeking a:*

Head of Medical Physics

Under the lead of the Head of the Radiation Oncology Department, your missions will be :

/ Team management : Administrative and operational management of the Medical Physics staff. Leading the delivery of Physics services required to support both the Radiation Oncology (RO) and the Medical Imaging Departments (MI). Taking an active part in the definition of strategic developments in agreement with the Heads of RO and MI. Participating to institutional commissions, forwarding all relevant instructions to the Physics team, ensuring their application within the team and commitment of the team on institutional decisions. Leading regular staff meetings. Being supportive of his /her team, with the willingness to develop and valorize the competences of each personnel, identifying their need in training.

/ Coordination of clinical physics activities: Supervising the application of quality assurance programs for RO and MI, e.g. quality control of treatment and imaging machines, quality control of treatment planning softwares, ancillary devices and softwares used in RO and MI. Coordinating radiation treatment planning activities. Stimulating continuous improvement of QA methods and processes complying with the latest national and international recommendations. Organizing the participation of the Physics staff to the elaboration of new treatment protocols or diagnostic procedures. Implementing a development program for highly specific techniques, e.g. stereotactic irradiations, brachytherapy, total body irradiations or use of new molecules in nuclear medicine. Writing technical specifications for the purchase of new materials/machines in collaboration with the Biomedical Engineering service and the Institution Purchasing department. Keeping a constant technology watch in the fields of RO and MI. Ensuring respect for codes of good practices and collaborating with other institutional services: Quality and risk management department, Biomedical Engineering service, Radioprotection service, IT department...

/ Acting as Medical Physics Expert to ensure compliance with all safety regulations and requests from official bodies (Ministry of Health, Nuclear Safety Agency-ASN, IAEA, French Cancer Center network-Unicancer...). Representing Gustave Roussy Medical Physics at other Hospital structures and industrial entities. Assessing material and human resources to ensure quality participation to Clinical Research programs led by the RO and MI departments. Facilitating and supporting research activities conducted by Gustave Roussy Research Unit UMR1030, *Molecular radiation therapies and Innovating therapies*, of the National Institute of Health and Medical Research (INSERM).

Gustave Roussy Medical Physics staff includes :

11.5 FTE RO-physicists, 3 FTE MI-physicists, 9 planners, 2 prosthetists, 5 physics technicians (4 in RO 1 and in MI), 1 secretary. Some members of the Research Unit UMR1030 are part of the Medical Physics staff.

The candidate should be certified by a Medical Physics Board and should have several years clinical experience in a Radiation Oncology department. A managerial experience, a Physics PhD and an international experience will be favoured. This post requests a good command of French and English language (both written and spoken), as well as a strong sense of organization, anticipation and initiative.

Gustave Roussy RO and MI technical platforms include :

- 1 Varian 2300 C/D linac (for total body irradiations)
- 1 Varian Novalis Tx linac (Varian) equipped with ExacTrac (Brainlab)
- 2 Tomotherapy HD (Accuray)
- 1 Cyberknife (Accuray)
- 5 VERSA HD linacs (Elekta)
- 1 RO-dedicated CT
- R&V : Mosaik (Elekta)
- 6 PDR afterloaders (3 Varian and 3 Elekta)
- 1 HDR afterloader
- Prostate brachytherapy (HDR and iodine seeds)
- Nuclear Medicine: one PET-CT one SPECT-CT, one SPECT ; 2 new digital PET-CT system will be installed in 2020 ; 4 rooms for targeted radionuclide therapy.
- Radiology: 2 diagnostic CT scans, 3 mammographs, 2 angiography systems (including one that is coupled to a CT), 1 interventional CT unit, 2 MRI scans, 2 conventional radiography rooms, 2 RX mobile units, 3 C-arm mobile units for operating rooms.

Treatment planning systems :

- RayStation (RaySearch)
- Precision (Accuray)
- iPlan (BrainLab)
- Brachyvision (Varian)
- Oncentra MasterPlan and Prostate (Nucletron/Elekta)
- Variseed (Varian)

QA materials and softwares :

- In vivo dosimetry Invidos (IBA)
- DailyQA3 (Sun Nuclear)
- 2 ArcCheck VMAT array dosimeters with SNC software (Sun Nuclear)
- 2 Matrixx with Omnipro software (IBA)
- Artiscan (Aquilab) for QC analysis and follow-up
- Numerous ion chambers and diodes (including detectors for SRS)
- Film dosimetry with EBT3 films, FilmQA pro and Scanner Epson 10000XL
- Blue Phantom² water tank with OmniproAccept software (IBA)
- Independant monitor unit calculation software, RadCalc (LSI)
- Various detectors and phantoms for QA in radiotherapy and imaging

Gustave Roussy Cancer Center has a strong policy to facilitate the employment of people with disabilities.

All candidates will be considered on the basis of equal competences.

Full time job _ To be filled as soon as possible

Application letter and resume must be sent to:

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