Internship Program in the Department of Radiation Oncology, Tata Medical Center

Clinical Oncology
Artificial Intelligence and Data Science
Onco-Biology

Introduction

Conceptualized in the year 2004 as a philanthropic initiative for the Eastern and North-Eastern parts of India and the neighboring countries, the Tata Medical Center (TMC) started operations in Kolkata on May 16, 2011. The hospital is governed by a charitable trust – Tata Medical Centre Trust. It is an integrated Oncology facility with well-trained professional staff and equipped with modern facilities and the most contemporary medical equipment. The hospital was designed by Cannon Design, a renowned architectural firm from North America. It is located on 13 acres of land at New Town in Kolkata, West Bengal.

The Hospital, with a capacity of 437 beds, serves all sections of the society, with 75% of the infrastructure earmarked for subsidized treatment for the underprivileged sections. It provides a wide spectrum of services from diagnosis and therapy to rehabilitation and palliative support. The Institution's objective is to excel in service, education and research.

The Department of Radiation Oncology is engaged in several cutting edge research projects in Clinical Oncology. We lead several national and international clinical trials in different cancers. The department is proud to be the host of the first Oncology image bank of India (https://chavi.ai) as well as the first distributed cloud-based autosegmentation system based on deep learning (DRAW - https://draw.chavi.ai). Additionally a translational research portfolio is being developed as a part of the clinical research projects that we run.

The internship program has been designed to provide the opportunity to bright and hard working students to work with us in the following verticals:
Artificial Intelligence and Data Science Internship: Work on active projects on oncology AI, including the use of prediction modelling, image segmentation, radiotherapy treatment planning, and the use of generative AI in oncology.

Onco-Biology Internship: Work on projects related to biologic research in oncology

Clinical Oncology Internship
The aim of the internship will be to provide practical training and hands-on experience to students to enhance their skill and knowledge and prepare them for a competitive job market. These interns will work under close supervision of the Department of Radiation Oncology at Tata Medical Center, Kolkata in real-time projects which will involve practical as well as research applications in Clinical

Oncology. Interns will work with projects that have a direct impact on the treatment and management of patients with cancer. Projects will typically be defined for you and there is an opportunity to co-author research publications if your inputs are substantial.

The three categories of internships are **not mutually exclusive** and it is expected that the interns will closely collaborate with and learn with their colleagues in these internships.

Candidate Profile

Candidates are expected to be enrolled in a Bachelor or Master degree program in the science stream from a recognized college / university or have completed their last graduate / postgraduate degree program in the last 12 months. Candidates especially those interested in Clinical Oncology are also expected to be present on-site during the duration of the internship program. Partial offsite work will be allowed on a case by case basis after the approval of the supervisors. We are looking for candidates who are hard-working and willing to work with a team. Good interpersonal skills are highly desired. If enrolled in a current course the student should provide documentation from the educational institute that they are allowed to be on-site for the duration of the internship program.
Desirable Candidate profiles for the verticals are indicated below:

Artificial Intelligence and Data Science - Undertaking an education in the field of computer science, statistics, mathematics, physics and related subjects. Ideally should be familiar with programming in languages like R, Python. Familiarity with deep learning and generative AI will add strength to your application.

Onco-Biology - Undertaking an education in biology or related subjects. Students who are enrolled in MBBS or who have completed a master's degree in subjects including biological sciences, or similar degree courses are also eligible. Familiarity with wet lab work techniques is desirable.

Clinical Oncology - Undergoing MBBS or equivalent degree with a recognized University. Selected candidates with a bachelor's in science may be considered based on the department requirement and the candidate aptitude.
Program Format

As a hands-on internship program the focus will be on doing practical work and not on didactic teaching. Interns are expected to actively learn while on the job and be a part of the research team. The internship will run over a period of 8 - 12 weeks. Students will be usually inducted in the month of May / June but this is not binding.

Applications will be sought after advertisements placed on the website of Tata Medical Center. Selection will be through a competitive interview process. The total number of candidates to be taken in each vertical is not fixed though the total number of selected candidates will not exceed 6.

How to Apply

Please Email or Post applications to:
Mr. Suvasish Mukherjee, Head-Human Resources, Tata Medical Center, 14 MAR (EW), New Town, Kolkata – 700156. Email – suvashish.mukherjee@tmckolkata.com.