

Fellowship Profile

IAEA PROGRAMS
AT ARGONNE NATIONAL LABORATORY

Radiation Oncology in Cancer Management

TRAINING SUMMARY

I participated in a one-month training on radiation oncology in cancer management at the Memorial Sloan-Kettering Cancer Center (MSK) in New York. The training was focused on gaining knowledge of institutional rules and procedures related to motion management techniques and Image Guided Radiation Therapy (IGRT). We also went over quality assurance tests for IGRT from treatment planning image to treatment delivery and training on commissioning and validating IGRT especially dynamic systems (4D), such as CT4D and CBCT4D.

I was able to study and learn more about treatment procedures related to IGRT and motion management for thoracic and abdominal radiotherapy. I also was able to follow several clinical procedures including simulation, planning, plan check verification, and treatment delivery. I observed cases of SBRT (Stereotactic Body Radiation Therapy) for lung and GI (gastrointestinal) diseases using different techniques such as DIBH, gating, or free breathing; and breast treatments using DIBH with the AlignRT system.

WHATS NEXT?

MSK places great importance on registering its procedures, including digital format which makes it easily accessible, and facilitates the execution of tasks by the numerous employees and campuses, increasing the safety of the procedure for the patient, and contributes to the learning process of fellows and residents. The institution where I work (Hospital das Clinicas) also seeks to standardize its procedures, as it is a large institution with numerous employees and 3 campuses. Therefore, I will use the knowledge acquired at this stage to standardize procedures/treatments that can benefit from respiratory motion management techniques.

I intend to use all my new knowledge and skills for the clinical application of IGRT4D for lung and abdominal treatments; teaching about motion management technologies to staff and residents; and conducting dosimetric studies to evaluate the accuracy of the Symmetry system and others.



“ The training was consistent and [offered] a very comprehensive overview of the IGRT technologies. I feel better capable of implementing technologies related to dynamic (4D) treatment, using good methods and tools for validation.”

Victor Bertotti Ribeiro - Brazil

May 6th to May 31st 2024

Hosted by: Memorial Sloan-Kettering Cancer
Center