

Experience exchange visit in IRCCS National Cancer Institute G. Pascale

Activity Report

10th-13th October, Naples, Italy

During the exchange visit to IRCCS National Cancer Institute G. Pascale in Nuclear Medicine, made possible through the PIAONOFORTE travel grant, I had a valuable opportunity to immerse myself in crucial aspects of the Nuclear Medicine field.

With this opportunity, I was able to participate in CZT SPECT/CT system quality control tests such as energy calibration with different isotopes, tomographic uniformity, contrast, resolution, CT-NM image registration, detector registration, absolute quantification evaluations as well as CT quality control. It was a valuable opportunity to experience all phases of quality control, as well as to learn about troubleshooting procedures and maintenance tasks that are essential to ensure the continued and reliable operation of the equipment.

During these days I not only had the opportunity to see the whole image acquisition process, but also to see how the examinations are optimised. I was able to see how radiopharmaceutical activities are adapted to the specifics of the examination and the patient, and how the acquisition protocols are adapted so that patients receive as little radiation as possible, but so that the examinations provide all the necessary information.

There was also a great insight into the production, preparation and quality control of radiopharmaceutical preparations. I gained an understanding of the critical role of quality control and safety measures in ensuring the safe and effective administration of radiopharmaceuticals.

Lu-177 and I-131 therapies were also covered. There was an opportunity to participate in the preparation, SPECT/CT examinations, dosimetry process and the evaluation process before patients were discharged. Throughout the process, detailed attention was paid to the safety of staff, patients, residents and the environment. The radiation doses to staff, patients and the general public were also examined. All safety measures in place for radiation safety, in the production of radiopharmaceuticals, in quality control, diagnostics and therapeutics, were reviewed and discussed.

During the course of the four days, a vast amount of knowledge and experience in the field of Nuclear Medicine was gained. I was able to acquire a deeper understanding of the intricacies involved in ensuring safe practices and maintaining the highest standards of care for patients and staff. In addition, I was able to meet professionals in the field, fostering future collaborations and knowledge-sharing opportunities.

The exchange visit was an enriching and enlightening experience. I am grateful for the opportunity to have participated in and observed various procedures and techniques, gaining valuable insights into

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the field's best practices. This was only possible thanks to the opportunity provided by the PIAONOFORTE travel grant. I look forward to applying this knowledge to contribute to the advancement of Nuclear Medicine in my home institution.

Vineta Vanaga

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