waiting lists and the worry that comes with that prolonged wait. We have also perceived that patients, due to behavioral problems inherent to dementia (fear, panic, disorientation), also contribute to same day cancellations and artifacts and poor quality images due to movement during the acquisition. **Conclusion:** In conclusion we assess that although the department has been very successful in amyloid PET scanning, a more dementia-friendly environment (colour coding rooms and doors, large clocks on the walls, a more relaxing waiting area) and developed training in dementia awareness for staff would definitely improve patient experience and consequently lead to a more efficient department. **References:** 1. Filippi, L. et al. '18F-labeled radiopharmaceuticals for the molecular neuroimaging of amyloid plaques in Alzheimer's disease', Am J Nucl Med Mol Imaging, 2018, vol.8, no.4, pp. 268-281.

## **OP-553**

## Opening minds to Lean management in Nuclear Medicine

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Aim/Introduction: Nuclear Medicine (NM) is in constant technological evolution, challenging often professionals to be up to most recent standards and practices. In this sense, teaching NM should not be limited on the transmission of technical and scientific knowledge but also on opening minds to, for example, different management philosophies. Therefore, Nuclear Medicine students should be capable to change behaviours/ practices and be concerned to search continuous improvement. To reach this standard, NM Department at our institution decided to implement the application of Lean Philosophy (management culture/philosophy focused on reducing various types of waste) in NM, in a process involving students, teachers and alumni. Materials and Methods: We used several Lean tools: Gemba walk to detect problems; Brainstorming to "label" 12 wastes (1.Over production, 2.Stock, 3.Transport, 4.Waiting, 5.Motion, 6.Over processing, 7.Defects, 8.Human capital, 9.Design of products and services, 10.Inappropriate systems, 11. Energy, 12.Materials); A3 thinking, 5S (Sort, Set in order, Shine, Standardize, Sustain) and Visual management to solve/ minimize the problems/wastes detected. Surveys were used to assess satisfaction degree amongst students, teachers and alumni related to changes implemented in NM laboratory and office, and with Lean Philosophy Workshops. Results: Students and teachers walked in NM laboratory (place of practical classes) and identified many problems or "wastes" (such as wasting time looking for materials or excess of material boxes). After applying 5S and visual management, students and teachers considered that Laboratory use was optimized resulting in more productive practical classes. Teacher's office was also a Lean intervention target. This approach developed a Communication Board that contributed to improve communication between teachers (reflected in shorter and more productive meetings). We organized two Lean Philosophy Workshops open to alumni and professionals. Workshop participants evaluated provided training actions positively and showed motivation to engage participation in future sessions. **Conclusion:** Students have expressed great interest about Lean Philosophy, reflected in 3 major points: the large number of students who participated (voluntarily) at Lean workshops; good results obtained in the satisfaction surveys; students considering doing their final course work in LEAN Philosophy by submitting projects in this subject to viability analysis. We sow the seeds of Lean management on their minds and we are already reaping the first fruits. **References:** None.

## **OP-554**

## Barriers And Limitations For Nuclear Medicine Technologists' Research In Spain

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Aim/Introduction: We conducted a qualitative cohort study aimed at detecting possible determinants of the low scientific production of Spanish radiographers. A survey was designed to characterize the profile of the professionals and the work environment. We also sought to establish a relationship between perceived barriers and different variables such as work experience, contractual situation and type of work center. Materials and **Methods:** After receiving the acceptance of the research ethics committee of the Alfonso X El Sabio University, an online survey (Google Forms) was distributed from January to February 2019. The global sample was composed of 595 Medical Imaging and NM Technologists recruited from Spanish Hospitals. For the statistical analysis we use the SPSS 20.0. Results: Results showed that 37% (n=220) of participants detect the existence of research barriers meanwhile 63% (n=375) couldn't identify any kind of research barrier in hospitals where they carry out their activity. Participants identify 17 different research barriers related to environment situation (extrinsic barriers) and personal situation (intrinsic barriers). It was found that 35% (208) of the participants were men, compared to 63.2% (376) who were women, 1.8% (11) preferred not to indicate their gender. Grouped by age intervals, 61.4% of the participants were older than 36 years (p <.001). Regarding the ability to find barriers, we observed significant differences when analyzing years of experience (p < .000), type of contract (p <.000) and work in a University Hospital (p <.001). No differences were found, both by sex and type of management of the work center or job position performed by the professionals (p> .05 in all cases). Based on years of experience, we observed that starting in the 21st year, a greater number of barriers are detected. The most significant are; Access to research resources (p <.016); Lack of funding (p <.043); Lack of dedicated time to clinical level (p <.003). On the other hand, a significative relation was found between work in a University Hospital

