

Advanced skills for advanced technology

Collaboration between Siemens and Amstel
Academy VU (Free University) Medical Center
on a study program for radiology technicians





AXIOM Aristos MX

Literally within a stone's throw of the VU Medical Center in Amsterdam is the new and architecturally eye-catching accommodation of the Amstel Academy. The hospital's medical school prepares students for professions in hospital healthcare, such as surgical assistants and anesthesia assistants, and offers advanced nursing training and paramedical studies. Students receive a broad-based education that constitutes the basis for a specialization in specific medical imaging disciplines, such as CT, MRI, angiography, and ultrasonography. For training radiology technicians, an advanced "skills lab" was recently set up jointly with Siemens. "In previous years, the training course ran increasingly into practical problems," relates one of the teachers, Ingena Visser. "The technological developments are progressing super-fast and the options of using diagnostic imaging are reaching further and further. At a certain point we noticed that the contents of the lessons no longer concur with the current practice in hospitals."

Skills Lab

The skills lab in which students practice various imaging modalities was based on conventional imaging techniques using an old-fashioned combination of film and screen. Visser: "In the meantime, however, the day-to-day practice is almost entirely digitalized. Our training facilities no longer represented the reality of imaging equipment used in many Dutch hospitals." This was a good reason for the school to invest in a new building and new facilities. Visser: "We first made a proper list of the requirements that a modern skills lab must meet. Following this inventory, we inevitably arrived at a point of acquiring a Bucky digital system based on flat detector technology. An important requirement in this case is to have a large number of workstations so that several students can work independently with

imaging at the same time. We also wanted to have the option of reconstructing 3D images from CT or MRI modalities."

A different approach

Another important requirement was the functionality of the Bucky system. "A hospital uses this type of equipment in a different way from a training school: while a hospital does not use the whole variety of functions because of logistic efficiency, we do want to utilize all the functions. After all, we want to provide our students with as many skills as possible: students must be able to understand the underlying principles of diagnostic imaging. In this sense, training demands a completely different approach from the pure clinical environment." That also emerged when the training school, armed with a package of requirements, searched for a suitable partner. "We presented our requirements to various parties, including Siemens. What struck us immediately was the fact that from the start they actively helped us in searching for a solution. They indicated that they too regularly ascertained that the information level of laboratory assistants lags behind the progress of technological developments. Therefore, Siemens too was inclined to cooperate with us on providing the training program with the best possible structure according to the most recent insights."

Workstations

According to Visser, the final choice to work with Siemens was made foremost because it became clear that this company was in a position to adequately meet the technical requirements. "Siemens supplied a state-of-the-art Bucky digital system, the AXIOM Aristos MX, and an accompanying acquisition station linked to six workstations. As far as I know, we are the first training school in the Netherlands that offers its students this opportunity. What is

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*Ingena Visser,
Amstel Academy*



special about this system is that it is completely open: the software is so well adjusted that we can retrieve images from the VU Medical Center and subsequently study and process them here. From a technical perspective, therefore, we are completely up-to-date. Furthermore, we can always count on Siemens' technical support both from the Netherlands and from Germany.

Involvement

According to Visser, the decision to select Siemens gave the company the opportunity to be involved in the field of training.

“Many of the parties offering their services can fulfill our technical needs, but Siemens set themselves apart by helping us plan our core activity – namely, offering real training in the area of radiodiagnostics. Consequently, we agreed that Siemens would train the staff lecturers of our training program so they would continuously have current know-how at their disposal. We can also count on the expertise of Siemens in terms of developing new study materials, especially their open approach with respect to the options on the equipment. All in all, you get the sense that both we and Siemens want to make a solid contribution to the development of this profession – and the feeling is welcome and motivating. The collaboration has run smoothly so far,” stresses Visser. “For the time being, the agreement that we have entered is for five years, including an annual evaluation. This may not appear to be excessively long, but relative to the speed of developments in this discipline, it can be considered a relatively long period of time. In any case, from our perspective, we have full confidence that, thanks to Siemens, our training program can continue to be optimal and set up according to the latest insights in technology.”

For more detailed information,
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