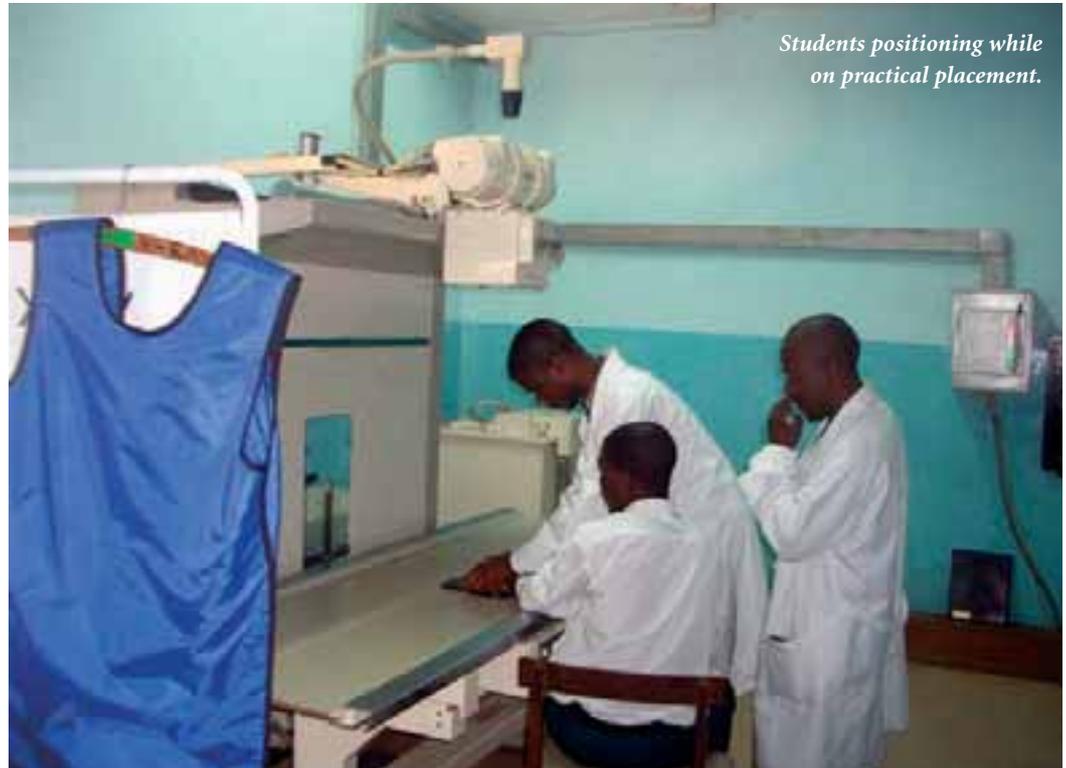


# Radiography in Malawi

**Mary Michaelides, reports from Malawi where she is currently on a year's VSO placement as a lecturer at the College for Health Sciences in Lilongwe.**



*Students positioning while on practical placement.*

## **Introduction**

I had been qualified as a radiographer for three years, and apart from working for eight months in Dublin, I had spent most of my training and qualified life in one hospital – Northwick Park Hospital in north west London. I stayed there for so long, returning after my time in Dublin, because I enjoyed working there. There was a great sense of community, and I had made some good friends from many different departments. However, after a while I realised that my time was made up of endless on-calls and CT shifts, with very little time in between to do much else. Even most of my friendships had been made at the hospital and, although I was still enjoying myself there, I felt that I needed a new challenge.

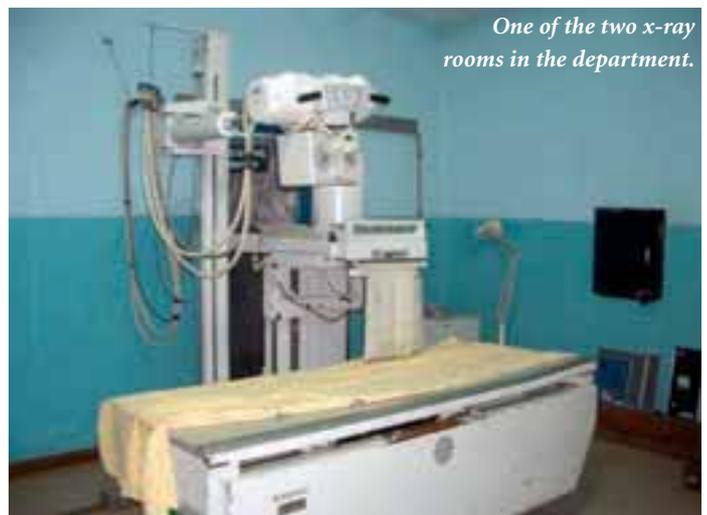
I applied to VSO shortly after Christmas 2002, and I heard about this placement in Malawi about five months later. At the time I didn't even know where

Malawi was, so before I formally applied for the post, I did some research into the country. I discovered that Malawi was in Southern Africa, and was landlocked by Zambia to the west and Tanzania to the east.

Much of Malawi consisted of the Lake, which also served as the main tourist attraction to this very poor country. I also found out that the country was, like many African countries,

facing an AIDS pandemic. However, unlike many such countries, it had realised the problem and was tackling it head on.

I had a lot to think about. Did I really want to leave the safe haven of Northwick Park, where I was settled and knew everybody? Did I really have the strength to go to one of the poorest countries in the world to teach the next generation of



*One of the two x-ray rooms in the department.*

radiographers? Was I even able to teach? The many pre-departure courses offered by VSO helped me answer most of these questions, and I soon found myself boarding the flight to Lilongwe.

### Getting started

The city of Lilongwe is like nowhere I have ever been. It was designed as a garden city and, as such, is spread out, with tree-lined roads and large distances between the various areas of the city. There are two main commercial areas – the city centre, which has offices and banks, and the old town which has the shops and the markets. The areas are approximately 10km apart and the College for Health Sciences and Central Hospital are between the two.

My placement description was to work as a lecturer at the College for Health Sciences. I arrived to find that my students were all on placement for three months and in that time, I began to prepare my lectures. I had been assigned physics and equipment, two subjects I knew little or nothing of, so I really had to hit the books to revise the content myself before even attempting to teach it. However, there are very few up to date books in the college and some of the physics books are so old that they contain material and

equations I had never seen before. I also wanted to type up my lecture notes so that I had back up copies, but as there are only two computers for general use, I found myself having to take my laptop into the college just to be able to get work done.

My first lecture was on the physics of ultrasound. Now, I am a CT girl and really struggled to make sense of the 'piezoelectric effect' and 'acoustic impedance'. I am sure that my lecture made no sense so was in shock when none of the students had any questions. Either I was a fantastic teacher (highly unlikely) or there was something amiss. After asking one of my colleagues, I discovered that some students don't like to ask questions in case they look stupid in front of their peers. Using my new-found teaching skills, I explained to the students that asking questions was an integral part of the learning process. This seemed to help and the students at once became more forthcoming with their comments and questions.

### A culture shock... but an inspiration

If I thought the college was under-equipped and understaffed, I was in for a shock when I spent my first day at the Central Hospital. This was



The control panel in the general x-ray room.

## Siemens completes its flat plate detector line-up

Siemens' new flat panel detector (FD) technology, which can be seen in a number of Axiom systems (including the Axiom Aristos FX, and now the Axiom Multix M) has the benefits of being cost effective and flexible.

The portable FD technology means that it's possible for exposures of immobile patients to be made from their bed, stretcher or wheelchair. It is that this technology will be used to upgrade existing Multix systems where possible.

The Axiom Aristos FX digital radiography system with flat panel detector.



## Enhanced lung viewing technology increases diagnostic accuracy

Siemens Medical Solutions has introduced syngo LungCARE, the first FDA 510(k) cleared and commercially available enhanced lung viewing technology designed to aid clinicians in the diagnosis of pulmonary nodules.

The technology supports clinicians in the visualisation, evaluation and follow-up of pulmonary nodules and lesions. A significant advance, the nodule enhanced viewing (NEV), a second reader tool based on highly sensitive and clinically validated algorithms, is the first product of its kind validated clinically and available worldwide.

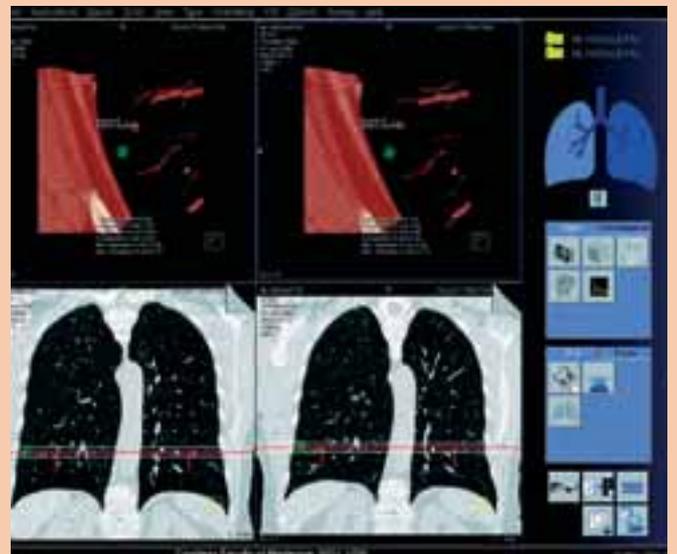


Image acquired using Siemens syngo LungCare.

## Siemens unveils new MR technology

The Magnetom Avanto is Siemens' first product to incorporate the company's Total imaging matrix (Tim) technology. Tim is the first whole body surface coil concept to combine up to 76 coil elements and 32 RF channels, which produces high-res full body images in a shorter acquisition time.

The first Avanto installation was completed late last year at the NYU Medical Centre. Associate Professor and Vice-chair of Research in the Department of Radiology Dr Vivian Lee said: "We don't have to change coils on the patients, so we can obtain accurate full body examinations more quickly and with less stress to our patients... The new design will mean a much quieter examination too, which will be wonderful!"

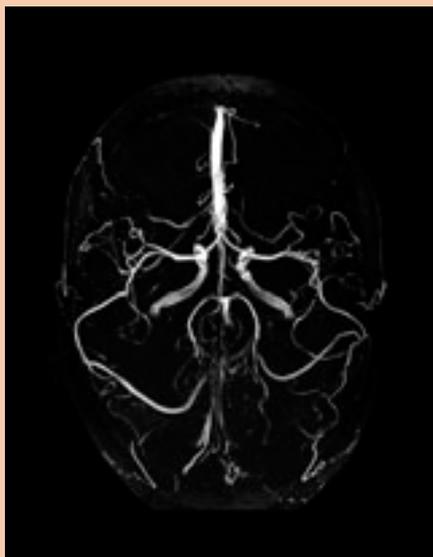


Image acquired using Siemens' Magnetom Avanto.

## Medway Maritime Hospital champions Ziehm C-arm technology

Medway Maritime Hospital in Kent has ordered its third Ziehm mobile image intensifier from Xograph Imaging Systems. The recent order is for a Ziehm Vista 'Ortho' C-arm that will be used in theatre for orthopaedic surgery.

"We are real advocates of Ziehm C-arm technology," said Stephen Griffiths, Radiology Services Manager at Medway Maritime Hospital. "The units are easy to use, have fantastic mobility and provide quality imaging."



Pictured from left are John McMahon, South East Territory Manager at Xograph; Brenda Doherty, Superintendent Radiographer and Mike Cotter, Superintendent Radiographer at Medway Maritime Hospital in Kent.



The team works hard with the most basic equipment and resources, and always put the patient first.

my first real culture shock and the point at which I wondered why I ever left London.

Casualty did have a waiting room, but it was so small and so busy that patients sat outside in the searing midday sun for hours waiting to be seen. And most of these patients were really ill... None of this coming to A&E with a sore back at two in the morning because you figured that it would be quicker than going to see the GP – these patients travelled here, some of them from miles away, without any form of transport because they were, quite literally, dying.

AIDs is a huge problem here, and nowhere is it more evident than at the hospital. The patients that are ill enough to be kept in are so closely packed on the wards that you can barely walk between the beds. I even saw some patients on the balconies, as there was no space left in the ward. The most ill patients are looked after by relatives, or guardians, who bathe and cook for the patient and sleep outside the ward on mats.

The department carries out over 600 examinations a month, most of these being plain films, in one of the two rooms. One of the rooms is used for most extremity work, but as it has a fixed tube it is very difficult to

do HBLs or any views which require angulation of the tube.

The second room is used for bucky work and also to do barium exams and HSGs, although the fluoroscopic equipment rarely works and often we have to rely on plain films only. Neither of the rooms have such luxuries as pillows, spare sheets or sponges and I don't want to think about how old the lead screens are.

But saying this, the exams get done. The radiographers work hard, in often-swelting conditions, and produce diagnostic images with the minimum of complaint and fuss. And surely that is what this job is all about? It's not about who has the newest scanner, the best uniforms, or the least busy on-calls. It is about using the resources you have to assist in the diagnosis of injury and disease. And seeing this done with the most basic of equipment and resources, where radiographers, who barely earn enough to support their families, often have to be on call every second night – but still put the patient first – is definitely an eye opener. It is also one of the most rewarding experiences I have ever had and I feel privileged to be able to work with this dedicated and hard working group of radiographers and students.