

Deep Inside

Hidden Deep Inside The future has arrived in Dar es Salaam and it can be found in a little room on Ocean Road. The room glows with an orange light as technicians watch through one-way glass. It throbs and pulses with a sound as deep as the universe. The sound coming from that room is a primal force – magnetism – and the machine that generates it creates a force field several thousand times the strength of planet Earth’s. The machine responsible for all this is called a Magnetic Resonance Imaging machine, or MRI, and it is the latest advancement in medical technology’s quest to see inside the body without having to break the skin. The Aga Khan hospital now has one of these machines, and – with the exception of Nairobi – that makes Dar es Salaam the only place in all of East Africa with this critical new device. While the one at Aga Khan is barely a year old, the demand for the MRI is already such that it is in almost constant use. Basically, the device is a vastly improved x-ray that takes dozens of pictures that show the soft tissue rather than just the bones. The ability to show the structure of the underlying tissue makes it especially useful for looking for cancerous tumors and other problems that are hard to visualize without exploratory surgery, problems like brain disease, tendons and ligaments, or problems with the spine. Unlike surgery, imaging itself is completely painless – except that the patient must remain motionless for up to an hour, and the machine itself can be frightening as it is confining and also very loud. Fortunately, the specially designed room in the hospital has a two-way speaker system so that the patient and the radiologist can be in constant touch, and – although the machine contains a superconducting magnet chilled with liquid helium to well below -200 degrees – the room remains comfortable and warm. But what’s most important is the diagnostic value of the machine, its ability to improve a patient’s chances for recovery. Dr. Sandeep, the in-charge radiologist, explains the benefits like this: “If someone comes to the doctor and says ‘I have a headache that just won’t go away’ the doctor will normally prescribe pain-killers because he is forced to treat the symptom rather than the disease. But the MRI allows the doctor to look inside where he might see that it is actually a tumor that is causing the patient’s pain. The early detection provided by the machine allows the doctor to see the problem and then to address the cause rather than the symptom of the disease.” Everyday, patients arrive at the Aga Khan hospital from across the country and around the region bringing their worry, hopes, and cares to place beneath this seer of a machine. And, “Everyday someone leaves here with his life changed,” the doctor says in a tone which conveys his awe. “Sometimes it is good news and sometimes it is bad – that is not for us to decide – but whichever way it is, this machine can change their lives…” because the MRI reveals to us that which the body held in secret, hidden deep inside. Michael Gehron