

Department of Orthopaedic Surgery

Professor Robert Dunn



When GSH originally opened in the late 1930's, no provision was made for Orthopaedic surgery due to the dominance of General Surgery. Despite this, Orthopaedic surgeons Hamilton Bell and Pieter Roux established a fracture clinic in a converted kitchen in the basement and performed the surgery in casualty.

Once the Pieter Moll and Nuffield Chair of Orthopaedic surgery was established, Prof Lewer-Allan was the first incumbent in 1955. He had an interest in prosthetics, developing the UCT Prosthetic limb, and wrote on modern strategies in scoliosis surgery. He ran the department for 21 years during a time that GSH provided a general Orthopaedic service consisting mostly of trauma, whilst the elective surgery took place at Princess Alice Orthopaedic Hospital in Retreat.

Drs JG du Toit, AD Keen and AB de V Minnaar were the first three Orthopaedic Registrars to train at GSH. Dr Keen obtained his ChM in 1944 and continued to work at GSH until he left to farm in the 1950's before moving to Windhoek to practice Orthopaedic Surgery.

In 1974 he was asked to return to GSH to resuscitate the ailing Orthopaedic Department which he did with his work ethic, efficiency, and organisational skills. Ward rounds started at 06:45 where he saw every inpatient daily expecting the same from his junior staff. He revitalised theatres with patients were asleep and ready for surgery by 08h00 – a pioneer of the current 8am start time initiative! His theatre lists ran between 14 and 18 cases a day with a massively positive impact on the huge orthopaedic surgical backlog. Dr Keen insisted that every outpatient be seen on the day that they arrived - clinics often ran until after 6 PM. He reorganised post- and undergraduate teaching. He was instrumental in persuading Professor George Dall to take the Chair of Orthopaedic surgery, not wanting it due to his aversion to administrative work.



Professor Lewer-Allan was succeeded by Prof Des Dall, Brookes Heywood, Sakkie Learmonth and Johan Walters. Their focus remained largely on Princess Alice Orthopaedic Hospital where rapid surgical developments were taking place in the realms of joint replacement and spinal surgery.

During this period GSH was largely trauma orientated with consultants sharing roles both in the Orthopaedic and Trauma Units. With all this trauma, a need for a dedicated Hand unit was identified. This was initially conceived by Orthopaedic Surgeons Dr's Kling, Jaffe, Heywood and Plastic Surgeon Engelbrecht in a document dated 1964. It took the vision and drive of Martin Singer to realise this goal. After obtaining his MBChB at UCT in 1944, Dr Singer completed his orthopaedic training at the Royal National Orthopaedic Hospital in London. He

returned to Cape Town in 1956 commencing private practice with public sessional involvement at the local hospitals – Princess Alice, Maitland Cottage and GSH. He was responsible for starting the Hand Unit in 1966, building this over the years into the multi-disciplinary practice with Plastic Surgery as it is today.

The GSH Hand Unit was the first in the country and today still bears his name. He worked in it from 1966 to 1998 with passion and referred to it as his "love affair with hands". This initiative was again difficult, starting behind a screen in the old trauma unit without even rudimentary equipment. He later invited plastic surgeons to be part of the team to realise his

inherent visionary approach as a multidisciplinary speciality. Singer made it mandatory for all hand registrars to train in microvascular techniques in the small animal lab, operating on rats.

Singer

REPORT AND RECOMMENDATIONS ON
THE FORMATION OF A HAND UNIT
AT GROOTE SCHUUR HOSPITAL.

Four surgeons, three Orthopaedic (Mr. Kling, Jaffe, Heywood) one Plastic (Mr. Engelbrecht), are agreed to undertake the treatment of hand injuries and disabilities attending the Groote Schuur and Red Cross Hospitals.

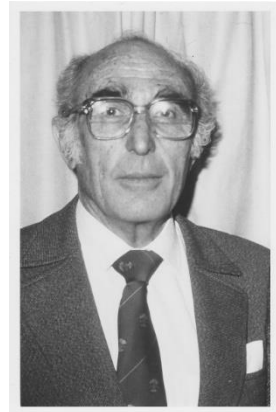
The following report issues from their final meeting held on Friday 5.00 p.m., 16th October, 1964.

Under Singer's guidance, the hand clinic introduced a number of firsts: the first hand replants in South Africa and the first Brachial Plexus injury clinic.

Singer also had an influence on the management of lower limb trauma, introducing a cast bracing technique at GSH in 1981 to shorten hospital stay after femoral and tibial plateau fractures; a "hot box" therapy to manage hand patients in an atmosphere of dry heat to prevent spasms; and stockinette sleeve dressings enabling patients to move their hands straight after surgery.

His vision of a dedicated internationally recognised high volume Hand Unit has been realised under the current leadership of A/Prof Michael Solomons, consulting 18881 outpatients and performing 1710 surgeries per annum.

With the late 70's planning of the New Groote Schuur Hospital there was the usual bartering for beds against the powerful General Surgical Department under Prof Jannie Louw. Des Dall motivated for a minimum of 140 Orthopaedic GSH beds based on the rapidly increasing service demand. Despite initial agreement by Prof Louw to accommodate us, this did not come to pass and we were allocated 128 beds.



In the 90's Orthopaedics led the way in Surgery in terms of transformation with the two full time GSH consultants being Chris Maraspini and Gordon Siboto. Dr Maraspini was the first female Orthopaedic Surgeon to qualify at UCT and Dr Siboto the first black Orthopaedic consultant. They ran the GSH trauma service at a very difficult time of continuous cost cuts



despite increasing workload. Dr Maraspini ensured every trainee obtained a complete trauma education. Dr Siboto developed the service at GF Jooste and subsequently Mitchell's Plain Hospital despite obstruction from the administrators. He developed the pelvic and acetabular reconstruction service for which GSH is locally and internationally recognised. This has been taken over by his mentee, A/Prof Sithombo Maqungo following Gordon's premature death.

In the 1990's there was increasing pressure by the province to rationalise services with the closure of Princess Alice Orthopaedic Hospital. Despite protestation by the Orthopaedic department, the result was inevitable with less and less support for our elective service. In 1998 PAOH closed and the service relocated to GSH with no additional beds – the service had to be absorbed by GSH with a few sessional staff and additional lists.

This was a tragedy for Orthopaedic Surgery and our patients due to the severe contraction of the service. Our 197 PAOH beds was lost. Our 128 GSH beds were re-organised into 32 adult elective, 21 Paediatric and the rest in two trauma wards. The only way to protect the elective service and training was for trainees to operate on trauma at night – all night. Today “after midnight” remains the Orthopaedic registrar's preserve when the other disciplines tire and we gain access to theatre. Within a few years the paediatric ward was closed leaving 2 adolescent beds of the 21.

One of the strengths of the Orthopaedic department has been the involvement of many highly skilled private practitioners participating as sessional staff despite poor remuneration. This has allowed our patients access to the best treatment and the trainees exposed to the highest level of skill training. With PAOH closing much of this was lost, but fortunately there was a loyal contingent that kept things going initially and then rebuilt.

Despite the massive reduction in beds, orthopaedics had dramatically changed, with more aggressive surgical intervention and post-operative mobilisation allowing shorter admissions. Lack of funding hampered growth however into the mid 2000's.

This lack of funding resources forced the closure of the Spinal Unit at Conradie Hospital in 2003, but provided an opportunity. Robert Dunn, the resident GSH spine surgeon at the time, realised that if well managed, this would bring additional resource to GSH. Despite some local resistance, a proposal was put together which the province had no choice but to accept, as there was no alternative offered. A 6 bedded High Care unit with 3 ventilated beds plus a 15 bedded acute care ward was established with 3 additional lists for spinal cord injured patients. With this came a principal specialist and MO post. This was the start of the rebuild at GSH. The province needed the management of acute spine injury



patients to work well after the closure of the world renowned Conradie Unit. So it did. The unit has gone from strength to strength with 180 admissions per annum and remains a regional asset. A second MO post was added. With Robert Dunn taking on the Head of department / Chair in 2012, the ASCI unit is now run by Nick Kruger.

The value of Orthopaedic Surgery has increasingly been realised by management, with an understanding that the care of the musculoskeletal patient is much more than merely fixing fractures. The GSH based Princess Alice Adult reconstructive Unit, as it is now known, is flourishing once again. The province now better understands the burden of disease and participates actively with additional arthroplasty lists. Local government has invested, together with the private sector, in arthroplasty waiting list reduction initiatives.

GSH is currently well recognised for its spine, upper limb, hip and knee arthroplasty and musculoskeletal oncology units, which attract patients from all over. This recognition is manifested by an increasing number of national and international visitors as well as supernumerary trainees. The private sector currently funds 5 full time fellowship posts where junior consultants receive sub-speciality training, to their own benefit and that of our patients.



Under current leadership, the department has taken a much more local evidence based approach – asking hard questions on resource allocation for maximal benefit via appropriate audits and research. To this end the iQual initiative runs with projects

by trainees assessing Quality of care, management of waste, water, theatre time – all in an effort to stretch what we have further. Research has been consolidated under the Orthopaedic Research Unit, accredited by UCT and slowly drawing funding. Multiple locally appropriate themes such as Gunshot trauma, infection, HIV, osteoporosis, are the envy of other units country wide. A recent addition of MSc in Global surgery is attracting foreign students to come and research uniquely SA problems for SA solutions.



Currently the GSH Department of Orthopaedic Surgery is annually servicing 32 532 outpatients and performing 7428 surgeries. This represents a 20% p.a. increase over the last 5 years.



Despite this massive clinical load, our research output remains high and we have maintained a 100% pass rate amongst our candidates in the specialist exam for the last 10 years. For this, we thank our hard working, committed staff and the support of the current hospital management.