

Walter Sisulu University



Department of Anatomical Pathology

Head: **Prof Andrej Stepien**

Diagnostic services

The department received 4,200 surgical pathology cases during the reporting period from the Nelson Mandela Academic Hospital Complex and several referring hospitals in the north-eastern area of the Eastern Cape Province. Several cases were referred to the Department of Anatomical Pathology, University of Stellenbosch/NHLS laboratory at Tygerberg Hospital for special stains and second opinion.

Seventy-nine autopsies were performed in 2008.

Research

The departmental research centered on the following themes:

- Telemedicine/telepathology application in diagnostic work of the pathology department.
- Co-operative research on pathogenesis and diagnosis of oesophageal carcinoma.
- Cancer registry-based research on cancer in the region.
- HIV-associated diseases and rare disorders.
- Pathology of infectious diseases.

Teaching and training

Undergraduate

Eighty-eight students registered for four integrated blocks and achieved a 90% pass rate. The departmental staff participated in teaching activities and examinations at various levels in line with the policy of vertical integration of teaching.

No postgraduate programme in anatomical pathology is offered, but staff participate in other approved programmes in clinical disciplines.

Research output

Published publications: 1
Conference presentations
 International: 4
 National: 5

Department of Chemical Pathology

Head: **Prof Ernesto Blanco-Blanco**

Diagnostic services

The Department of Chemical Pathology provides a service to the Nelson Mandela Tertiary Laboratory as part of the core laboratory at the Nelson Mandela Academic Complex, the Bedford Orthopaedic Hospital in Mthatha, as well as to various secondary hospitals and clinics in the region. The 24-hour service consists of routine chemical pathology

assays and a basic repertoire of endocrine assays. Routine bench analyses averaged 400 specimens per day and special chemistry ran approximately 450 tests per week.

The department offers systematic consultancy support to special clinics such as the endocrine, cardiac and prostate clinics. Clinical interaction is also regularly maintained through follow up of abnormal results.

Research

The department has been involved in collaborative research projects with the internal medicine and general surgery departments. Ongoing projects during 2008 included rheumatic heart disease in black South African high school children, population screening for prostate cancer and HIV- and AIDS-associated hypoadrenalism.

Teaching and training

Undergraduate

The department participates in the medical undergraduate training through problem-based learning by being involved in the case selection, facilitation, supporting lectures, tutorials, practicals and examinations. A comprehensive course is offered during the third year of the MBChB curriculum which fully integrates anatomical pathology, chemical pathology, microbiology and pharmacology. During the 2008, 88 registered students were taught.

The department also supports undergraduate teaching vertically integrated to the preclinical and clinical years of the medical career with regular sessions shared with the main clinical services throughout the year. An elective course in chemical pathology for final year students is also offered; in 2008, four students successfully completed the course. Supportive teaching was also given on a weekly basis to the medical technology students during their internship/practical in the Nelson Mandela Tertiary Laboratory.

Postgraduate

Postgraduate courses offered include the MSc in chemical pathology with two students registered during 2008, both being successfully promoted to the second year and are currently engaged in their research projects.

Research output

Conference presentations
International: 2
National: 4

Department of Haematology

Head: **Prof Basil Ogunsanwo**

Research

Departmental research projects include:

- Prevalence of deep vein thrombosis in patients with HIV/AIDS;
- Prolonged remission in chronic myeloid leukaemia patients treated with a tyrosine kinase inhibitor;
- Leukaemia in evolution: cytogenetic evaluation as a tool for early diagnosis;
- Retroviral-induced aplastic anaemia and other cytopenias in Mthatha;
- Factor VIII inhibitors in patients with haemophilia A in the Transkei region; and
- ITP in patients with AIDS: prevalence and response to standard therapy.

Clinical services

In-patient and out-patient consultations are offered to Nelson Mandela Academic Hospital as well as referral consultations to patients from surrounding hospitals. Cytology reports on bone marrow aspirates are done for Nelson Mandela Academic Hospital and surrounding hospitals.

Teaching and training

Lectures in haematology are offered to MBChB II, III, IV and V students.

Division of Medical Microbiology

Acting head: **Prof Sandeep Vasaikar**

Diagnostic and clinical services

The department delivers comprehensive laboratory services to the Nelson Mandela Academic Hospital, Mthatha General Hospital, Bedford Orthopedic Hospital as well as to various secondary hospitals and clinics in the region. These services include bacteriology, mycology, parasitology and serology.

The epidemiological reports for antibiotic sensitivity pattern in Nelson Mandela Academic Hospital are presented to the Nelson Mandela Academic Hospital Complex infection control committee and the multidisciplinary TB task team/committee.

Research projects

- Enhancement of surveillance for invasive respiratory, meningial and diarrhoeal diseases in South Africa for the Group for Enteric, Respiratory, Meningitis disease Surveillance in South Africa; and
- National sexually transmitted infections surveillance programme.

Teaching and training

Undergraduate

Members of the division are engaged in the problem-based learning and community-based education and service curriculum of MBChB students. This entails the identification of core material, student facilitation, lectures, and assessment of student performance. There were 88 students with a 90% pass rate.

The course in microbiology and infectious diseases was taught to nursing science (BCUR II) students and examined in an integrated manner by problem-based learning. Students totaled 73, of which 68 (93%) passed.

Research output

National conference presentations: 6

Professional development

Postgraduate candidates enrolled: 2 (1 PhD, 1 Msc)