



Registration of  
Scientists

SATiBA Symposium  
5 October 2023

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# Background

In February 2020 the following stakeholders met to discuss the **registration** of workers in blood transfusion, bone marrow, stem cells, tissue banking, and heart valves:

- South African Tissue Bank Association (SATiBA)
- South African Bone Marrow Repository (SAMBR)
- South African National Blood Bank (SANBS) and
- Next Biosciences

Registration implied proof of knowledge, skills, and other competencies on a level as prescribed by a statutory body

## Back ground (con't)

### **SATiBA representing:**

- NextBiosciences
- KZN Cornea and Eye Association
- Gauteng Cornea and Eye Bank
- Bloemfontein Tissue Bank Centre for Tissue Engineering
- South Africa Bone Marrow Registry

# Background (con't)

The outcome of the meeting therefore resulted in the following recommendations:

that two broad registration categories should be established at the HPCSA under Medical Biological Science – 1) Cell Biology and Gene Therapy and 2) Tissue Banking

Council-approved training and assessment, or partial Recognition of Prior Learning, will therefore be a prerequisite for registration

From the onset, it was clear that a wide range of knowledge, skills, and competencies, would have to be addressed in training and that narrowing down these categories was important

# Background (con't)

**And  
that:**

- registration  
in both  
categories  
should be  
possible  
through a 24-  
month  
training  
period with  
an accredited  
training  
facility

- applicable training  
programs should be  
developed for both  
categories since no  
active programs in  
either exist (those  
interested in  
facilitating the  
training should  
investigate such a  
training program)

- qualifying criteria  
should be  
established for  
training facilities

# Background (con't)

- **Guiding documentation - HPCSA**

- Policy regarding the training of Intern Medical Scientists (CMSA)
- National Curriculum: Medical Biological Sciences (CMS 01 MBS)
- Guideline for Submission and Assessment of Portfolio of Evidence: Medical Biological Sciences (CMS 02 MBS)
- Template for the development of a facility-based intern training program (CMS 03 MBS)
- Regulations relating to the qualifications for registration of Medical Scientists, Gov Notice R581 of 22 May 2009
- Regulations relating to the registration of interns in medical sciences, Gov Notice R578 of 22 May 2009



## Background (con't)

- **Recommended to be developed:**

- A policy regarding the training of Intern Medical Scientists, Technologists and Technicians

- A National Curriculum: Tissue Banking Specialists

- Guideline for Submission and Assessment of Portfolio of Evidence: Tissue Banking Specialist

- Creation of a category to accommodate a Grand Father Clause

## Background (con't)

- Momentum was lost during 2020 and 2021
- SATiBA took the initiative to request activation of the Category Cell Biology for registration of Medical Scientists and Technicians with the HPCSA in 2020
- SATiBA appointed a Project Coordinator at the end 2021 with the aim of:
  - Re-establishing contact with the HPCSA
  - The population of learning modules in alignment with the HPCSA requirements
  - Contact with laboratories for practical experience
  - Facilitation of advertising to measure interest for participation
  - Utilising online methods of delivery of theoretical modules



## Background (con't)

- 2022: Contact was made with the HPCSA in February and due to the need for Committee approval, a Task Team was only appointed in June 2022.
- Composition of Task Team
  - Dr Chrisna Durandt, UP – Chairperson
  - Prof Carin Huyser, UP
  - Prof Carola Ulrike Niesler – UKZN and NEXTBiosciences
  - Dr Mae Newton Foot, US
  - Prof Danie du Toit, TUT/CTE
  - Dr Riana Cockeran, SANBS
  - Dr Hans van den Heever, UFS
  - Prof Mariëtte Lowes – Consultant on Teaching and Learning/Project Coordinator

# Background (con't)

- Purpose of the Task Team:
  - development of a national training programme
  - development of a guideline for the submission of the portfolio of evidence
  - provide criteria for the grandfather clause (Health Professions Act 56 of 1974)
- Mandate of the Task Team:
  - As above as well as directives regarding the application of existing guidelines
- A first meeting was held on 22 June 2022, one in-person meeting followed by regular two weekly meetings were held until March 2023
- Frequency of meetings was determined by decisions and responses required from the Committee of the HPCSA

# Progress

The development of a flow diagram of processes to follow during the implementation of the programme was undertaken

This seems premature to refer to implementation at this stage, but having the process set out in this format greatly assisted in obtaining a holistic view of processes and the flow thereof, of what is required in terms of the training program, and in understanding the scope of the work

Programme: Medical Biological Sciences  
Category: Cell Biology and Tissue Banking

Recruit: Potential Interns



Induction Week: 6 weeks



Continue

Register with HPCSA: Intern



### COMPLETE CURRICULUM MODULES

- Professional and Ethical Rules
- Good Laboratory practice (GLP) and Laboratory Safety
- Quality Management
- Scientific Discipline-specific Knowledge
- Practical Competency Training
- Principles of Research



Assessment

Option to Exit



Internship  
Ends

## Internship

### Requirements:

Hons BSc (applicant)  
Training to take place in a registered and accredited facility and under supervision of a registered Medical Biological Scientist (reg for min 3 years)

**Number of interns permitted is determined by HPCSA and is based on:**

1. Capacity of Laboratory
2. Number of HPCSA-registered training personnel  
The number

### Curriculum Components

Theoretical, Practical Rotations, Research

### Minimum Time

24 months (full time)  
[not credit bearing]

### Assessment:

1. Submission of Portfolio of Evidence  
(Various components: Theory/Clinical/Lab)

## Grandfather Clause

### Requirements:

Hons BSc (applicant)  
Accredited Facility  
Prior Learning: 5 years,  
full-time, paid  
Good Standing

### Complete Missing Curriculum Components

Theoretical,  
Practical  
Rotations,  
Research

### Assessment:

1. Submission of Portfolio of Evidence
2. Board Assessment

## NOTES:

1. HPCSA training must take place in an HPCSA-registered facility
2. The program is not credit-bearing – SAQA requirements
3. Accredited facility must:
  - Meet all the requirements of the intern program (HPCSA)
  - The number of HPCSA-registered individuals will determine the number of interns that the facility will be permitted to train.
  - Includes rotations through laboratories for various modules - If the rotations can not be facilitated by the accredited unit, then the unit must link with another unit (s) in order to meet the requirements of the intern program

## NOTES (con't)

4. Recognition of prior learning (RPL) can occur via the Grandfather Clause
  - 5 years experience (minimum)
  - Salaried full-time position
  - Good standing
  - Candidates must be in possession of BSc Honours (minimum)
  - Grandfather Clause will initially also serve the purpose of providing the necessary capacity for HPCSA-accredited facilities



## Progress (con't)

2. A Manual for Medical Biological Scientist Interns was developed to provide an overview of the program and guidance through the process (in draft form)

This again seems to be premature but again it assisted in the meantime structuring of the modules and the necessary information and guidance adult learners would require to master the material

3. Module Study Guide development

In developing the module study guides, the National Curriculum document (CMS 01 MBS, Nov 2022) with its stated Specific Learning Outcomes was adhered to



## Progress (con't)

### Developmental issues:

Although the modules would not be credit-bearing as they will not be SAQA registered, notional learning time and credits were allocated to each module to determine content and learning time allocation according to the Higher Education Qualifications Sub-Framework (1 notional hour = 10 credits)



# Progress (con't)

## Structure of Module Study Guides

- Introductory information on content, contact details of Head of training and Supervisor
- Learning outcomes
  - Prescribed readings
  - Teaching and Learning activities
  - Notional hours
  - Assignments
  - Assessment
  - Evidence of learning

# Progress (con't)

Specific Learning Outcomes (headings of the Module Study Guides)

LO 1: Professional and Ethical Rules

LO 2: Good Laboratory Practice (GLP) and Laboratory Safety

LO 3: Quality Management

LO 4: Scientific Discipline-specific Knowledge

LO 5: Practical Competency Training

LO 6: Principles of Research

## Progress (con't)

4. November 2022 - 2 of the 5 completed draft module study guides were submitted to the Committee (Medical and Dental Professions Board: Medical Sciences) for preliminary approval

- **Module 1: Professional Conduct and Ethical Rules**

- **Module 2: Good Laboratory Practice (GLP) and Laboratory Safety**

5. March 2023 – confirmation received from the Committee that the two submitted modules are in line with the National Curriculum for Medical Biological Sciences (CBS 01 MBS) and that Minimum Discipline specific competencies in Cell Biology be addressed in the next module

6. March – June 2023 - Task Team time was spent on the development of the module study guide for Scientific Discipline-specific Knowledge and Practical Competency Training

# Progress (con't)

During development it became clear that sufficient knowledge and skills were available for Cell Biology BUT insufficient knowledge and skills for Tissue Banking modules

A request to co-opt 2 experts in Tissue Banking resulted in the appointment of Ms Sandra Venter as a co-opted member of the Task Team

Work on the incomplete module study guide on Scientific **Discipline-Specific knowledge and Practical Competency Training** will resume ASAP

The 2 other draft module study guides already developed - **Quality Management and Principles of Research** are currently being finalised by the Task Team and will be submitted to the Committee for preliminary approval

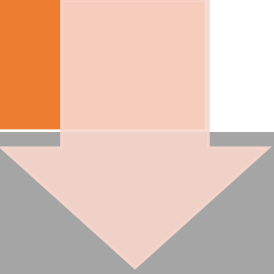
# Way forward

- Submission of 3 outstanding draft module study guides for preliminary approval by the Committee
- Submission of completed 5 module study guides to the Committee
- Acting on further recommendations of the Committee regarding the development of the program
- Finalisation of Manual for Medical Biological Scientist Interns
- Outcomes thus far achieved to be aligned with the stated Task Team purpose and mandate – i.e. Grand Father Clause
- Outstanding actions to be identified and scheduled for action and completion
- Outstanding outcomes as envisaged by SATiBA be identified and scheduled for action and completion

# Way forward (con't)

Discrepancies between intended outcomes and current outcomes i.e. that training should provide for the training of technicians and technologists– currently only Medical Scientists catered for - actions to be decided upon

The need for a curriculum for Tissue Banking Specialists and portfolio guide now catered for



The initial need for a National Curriculum: Tissue Banking Specialists and Guideline for Submission and Assessment of Portfolio of Evidence: Tissue Banking Specialist – now one curriculum providing for both Cell Biology and Tissue Banking

**NOT YET THE END....**