



SOUTHERN AFRICAN BIOMANUFACTURING TRAINING HUB



**science, technology
& innovation**

Department:
Science, Technology and Innovation
REPUBLIC OF SOUTH AFRICA

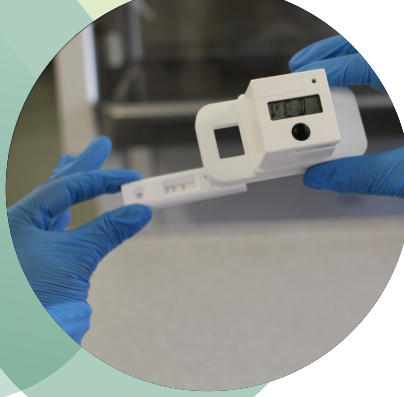


CSIR

Touching lives through innovation



**SOUTHERN AFRICAN
BIOMANUFACTURING TRAINING HUB**



The CSIR-hosted **Southern African Biomanufacturing Training Hub (SA-BTH)** is pleased to announce the commencement of a course titled **Biomanufacturing for point-of-care diagnostics: From design to scale-up (A-BTH07)**, scheduled to start on Monday, **2 November 2026**, as part of its Strengthening biomanufacturing capabilities in Southern Africa (BIOcapSA) programme, supported by KfW Development Bank.

The programme aims to support training and development in the biomanufacturing sector, focusing on developing a skilled and competent workforce in Africa.

BIOMANUFACTURING FOR POINT-OF-CARE DIAGNOSTICS: FROM DESIGN TO SCALE-UP

The BTH's goal in providing this course is to help grow and develop the biomanufacturing sector in Africa through cutting-edge training in partnership with local and international stakeholders.

The course is offered to African scientists, engineers, researchers, technical specialists and industry professionals involved in the

development, scale-up, quality assurance and translation of point-of-care diagnostic products. It is particularly suited to individuals seeking to strengthen their technical expertise in diagnostic product development and contribute to the growth of Africa's biomanufacturing ecosystem. A key aspect of this programme is to provide theoretical and hands-on training and skills development that will enable the local manufacturing of biologics, vaccines, recombinant proteins, diagnostics and therapeutics. This programme is aligned with several other initiatives that focus on establishing vibrant biomanufacturing industries in Africa.

COURSE DESCRIPTION

The **Biomanufacturing for point-of-care diagnostics: From design to scale-up** course provides participants with practical knowledge and skills in diagnostic assay design, development, optimisation, biomanufacturing, scale-up, quality management and technology translation to support the development of locally manufacturable point-of-care diagnostic products.

This course will be delivered through an online and on-site model of applied and advanced knowledge transfer in the form of interactive lectures, pre-recorded sessions, onsite hands-on training and demonstrations.

KEY AREAS OF DEVELOPMENT INCLUDE:

- **Diagnostic assay design and development**
 - Biomarker selection and assay design principles
 - Lateral Flow Assay development and optimisation
 - Molecular diagnostic technologies, including Loop-Mediated
 - Isothermal Amplification-based assays
 - Assay performance evaluation and optimisation
- **Biomanufacturing process development and scale-up**
 - Reagent bioproduction and characterisation
 - Conjugation technologies and reagent optimisation
 - Batch preparation and pilot-scale process development
- **Quality management and regulatory readiness**
 - ISO 13485 Quality Management Systems for in vitro diagnostics
 - Design controls, risk management and Design History File documentation
 - Regulatory pathways and product development documentation
- **Product development and technology translation**
 - Diagnostic product lifecycle management
 - Technology transfer and scale-up considerations
 - Product performance monitoring and quality control
 - Case studies in diagnostic innovation





COURSE DATE AND DURATION

DATES: 2 – 6 November 2026 (online) and
16 – 20 November 2026 (on-site training)

DURATION: 10 days (five days online and five days onsite
at the CSIR Pretoria campus)

COURSE DELIVERY

The course is delivered using a blended format to transfer advanced knowledge, which includes:

- Interactive lectures and pre-recorded sessions (online*); and
- Hands-on training and demonstrations (onsite)

* Please note that a reliable internet connection is required to participate in the online sessions. It is recommended that a download and upload speed of at least 5 – 10 Mbps be available



COST AND FINANCING

Please note that a maximum of 20 candidates will be selected. For South African candidates, the funding package includes:

- Course fees;
- Travel expenses and accommodation for on-site training; (flights for 10 participants from outside Gauteng)
- One return ground transport trip from the airport to the accommodation; and
- Daily ground transport from the accommodation to the CSIR, the designated course venue.

Scholarships will be awarded to five participants from Africa based on the motivations submitted.

Subsistence and travel allowance will not be covered.

WHO SHOULD ATTEND?

Preference will be given to the following candidates:

- Scientists, engineers and technical personnel currently employed in the biomanufacturing, biotechnology, diagnostics, medical device or life sciences sectors who require advanced skills development;
- Researchers, laboratory scientists and product developers involved in the design, development and optimisation of point-of-care diagnostic technologies;
- Technical staff supporting biomanufacturing process development, reagent production, quality management systems (ISO 13485), technology transfer and regulatory activities; and
- Personnel from research institutions, universities, start-ups, small and medium enterprises and established organisations developing or scaling biomanufacturing capabilities for diagnostics.

APPLICATIONS from qualified persons from all African Union member states will be accepted. Young African women are encouraged to apply. Participation will only be available to candidates holding a Master's degree or PhD.

For enquiries, please email BIDC@csir.co.za.

IMPORTANT DATES

- **Deadline** for submission of applications: **28 September 2026**
- **Selected candidates** will be notified by **5 October 2026**

Applications should be submitted by completing the application form available [here](#).

