

OPEN CALL FOR PARTICIPANTS: MOLECULAR BIOLOGY SKILLS TRAINING COURSE

The Centre for Advanced Training and Innovative Research (CATIR) invites eligible Postgraduate students with a background in biology, life sciences or genetics to apply for its hands-on Applied Molecular Biology Training Course.

Build practical capability. Strengthen your research. Advance science in Africa.

START

14 October 2026

END

20 November 2026

DURATION

6 weeks

VENUE

**CATIR laboratory, SAMRC, Pretoria,
1 Soutpansberg Road, Pretoria**

About CATIR

CATIR is designed to help bridge the gap between academic knowledge and practical laboratory capability by providing emerging scientists with access to advanced molecular technologies, practical experimentation and expert-led training. Preference will be given to students who currently require these skills and have research activities planned in the near future.

Programme Overview

A comprehensive, hands-on training covering genomic expression tools and molecular biology fundamentals.

Week 1: Laboratory Fundamentals

- Pipetting techniques
- Essential lab calculations,
- Buffer and reagent preparation
- Standard curves

Week 2: Nucleic Acid Extractions and PCR

- Automated and manual RNA/DNA extraction
- Gel electrophoresis
- Conventional PCR

Week 3: Advanced PCR Methods

- Quantitative PCR (qPCR)
- Digital PCR

Week 4: DNA Sequencing

- Sanger sequencing
- Fragment analysis

Week 5: Next-Generation Sequencing

- Manual library preparation
- Sequencing workflows (Ion Torrent platform)

At the End of the Programme,

You will be able to apply practical molecular biology and genomics techniques, including nucleic acid extraction, PCR, qPCR, digital PCR, Sanger sequencing, fragment analysis and next-generation sequencing workflows, to support your own genomic research.

Important Information

CATIR will cover the programme fees and all required laboratory reagents and consumables for the duration of the training.

Participants are responsible for covering their own accommodation, travel, meals and other daily living expenses for the full six-weeks of the programme.

Who Should Apply

MSc and PhD students, postdoctoral fellows, scientists, technicians and lecturers in molecular biology, biochemistry, microbiology or related fields who want to strengthen technical and analytical capabilities in genomic expression.

Click this Link to apply

Applications close on the 21 September 2026