# FUTUREPHARMA

## **RESPONDING TO THE NEED FOR LOCAL PHARMACEUTICAL PRODUCTION**

AN OPEN INNOVATION FACILITY INTEGRATING CONTINUOUS PHARMACEUTICAL MANUFACTURING AND BIOPHARMACEUTICAL PRODUCTION

#### **PRIVATE SECTOR**

**16% of the population (9 million people)** can afford high quality private healthcare



**PUBLIC SECTOR** 

Services 84% of the population (48 million people)

#### **9 MILLION PEOPLE**

#### **48 MILLION PEOPLE**

**84%** of the total pharma expenditure

Private healthcare is available through medical aid schemes



**16%** of the total pharma expenditure

Public health is financed through the government, primarily through taxes



### **CROSS-CUTTING: BUSINESS DEVELOPMENT AND COMMERCIALISATION SUPPORT**

- Manufacturing "bays"
- Hub pilot (CMO work)
- Networking centre
- Theoretical, technical & trade training facilities

**SME** support

cGMP pilot and production facilities
 R&D laboratory
 cGMP ready scale-up facility
 Plant
 Plant
 Biopharma process development

#### **PROTOTYPES GENERATED**

- Broadly neutralising antibodies for HIV treatment
- Anti-Covid-19 antibodies
- Cancer antibodies
- Rabies prophylaxis
- Veterinary vaccines for food security
  - R&D laboratory
    Translational R&D



#### AN INDUSTRY LIKE ENVIRONMENT WHERE;

Bench scale

- Innovators in the region can access specialized infrastructure, skills, systems and processes to turn their ideas and concepts into prototypes for clinical development using a variety of technologies (bacteria, yeast, plant, and mammalian expression systems, and batch-flowbiocatalytic hybrid small molecule production)
- Key differentiator and competitive advantage is the integration of a wide variety of technologies to provide digitally enabled, integrated end-to-end processing technology for active pharmaceutical ingredient production
- cGMP capabilities provide a strategic capability to develop investigational clinical-grade biopharmaceutical materials at pilot scale for clinical testing and emergency use
- Skills can be developed along the research and development value chain, with requisite techno-economics from the lab to the clinic
- Platform for local and international collaboration



