# UP FACULTY OF NATURAL AND AGRICULTURAL SCIENCES

# ATA **GLANCE**



The Faculty of Natural and Agricultural Sciences is the largest of its kind in Africa. This diverse faculty is renowned for its expertise in forestry and agriculture, food systems, biotechnology as well as life sciences and mathematical and statistical sciences, and our international rankings underline this. Our broad range of disciplines allow us to tackle interdisciplinary societal problems by finding cures for poverty-related and infectious diseases such as Tuberculosis, HIV/ AIDS and Malaria.



# INTERNATIONAL RANKING

**QS World University Rankings by subject 2020:** 

51-100 Agriculture and Forestry

401-450 Mathematics

301-350 **Biological Sciences** 

Chemistry

301-350 **Environmental Sciences**  451-500



RESEARCH CHAIRS

8 South African Research Chairs

Initiative (SARChi) chairs



### INTERFACULTY CHAIRS

- Ampath Chair in Human Genetics between NAS and Faculty of Health Sciences
- York Timbers Chair in Wood Engineering between NAS and Faculty of Engineering, Built Environment and Information Technology
- DST/NRF South African Research Chairs Initiative (SARChI) in Sustainable Malaria Control between NAS and Health Sciences



## **Centre for Science and Technology Studies (CWTS) Leiden University**

1 in mathematics and computer science in South Africa

### STAFF PROFILE



academic staff



of academic staff have PhDs - Aug 2020

# STUDENT PROFILE







International students



# **ACADEMIC OFFERINGS**

35 undergraduate degree programmes

142 postgraduate degree programmes (31 honours, 66 master's and 45 PhD)

7 research centres

6 research institutes



13 ACADEMIC DEPARTMENTS



# **UNIQUE DEGREES**

**BSc Meteorology** – the only degree of its kind offered in sub-Saharan Africa

The MSc Applied Mineralogy qualification is only offered at UP in South Africa

**BSc Culinary Science** - the only degree of its kind in Africa



# **GRADUATE SUCCESS**

#### 1 385 graduates in 2019:

- 115 PhDs comprised 29% of UP's PhDs
- **201 master's** degrees
- **327 honours** degrees
- **742 undergraduate** degrees



# **RESEARCH FOCUS AREAS**

#### **Food and Agricultural Sciences**

Precision Agriculture, Food and Water Security, Biotechnology

### Indigenous Knowledge Systems and Natural Products

Bioprospecting, Medicinal Plant Science

### **Infectious Diseases**

Tuberculosis, HIV/ AIDS, Malaria, Rabies

#### **Big Data And Datascience**

Bioinformatics and Computational Biology Mathematical Models and Methods in Bioengineering and Biosciences

#### **Environmental Sciences**

Natural Hazards Modelling



# WORLD FIRST AND FIRST IN AFRICA

NAS researchers were part of the international team that provided the **first images of a black hole in 2019** 

A lioness gave birth to two cubs conceived via nonsurgical artificial insemination, the first in the world, thanks to a team of researchers from the NAS Mammal Research Institute and the Faculty of Veterinary Science in 2018

**Current Chairperson of the Next Einstein Forum's (NEF)**Community of Scientists programme



# WORLD RENOWNED RESEARCH CENTRES

Centre for Microbial Ecology and Genomics (CMEG)

Forestry and Agricultural Biotechnology Institute (FABI)

Mammal Research Institute (MRI)