



Professor Celia Abolnik

MSc, PhD

NRF-DST South African Research Chair in Poultry  
Health and Production

Orchid ID: 0000-003-3044-465X

## Summary CV

---

Prof Abolnik joined the Faculty of Veterinary Science in August 2012 as the South African Poultry Association's Research Chair in Poultry Health and Production at the level of associate professor. In January 2018 she was appointed to the NRF-DST South African Research Chair (SARChI) in Poultry Health and Production, the Faculty's first and only SARChI, and was promoted to a tenured full professor. One postdoctoral fellow, four PhD and eight MSc students obtained their degrees under her supervision and her current research group comprises two postdoctoral fellows, two PhD students, two MSc students and a junior technical assistant. Past and present key collaborations include APHA (UK), SEPRL (USA), IZSve (Italy), James Cook University (Australia), CIRAD (France), CVL (Nigeria) and locally the CSIR, University of Stellenbosch, national veterinary laboratories and poultry industry and government stakeholders. She is currently a C2-rated NRF scientist with 68 peer-reviewed scientific papers.

## Research Expertise/Interest

---

Prof Abonik's research program encompasses molecular and epidemiological aspects of infectious avian/ poultry diseases, whereas the Animal Production research group at the Faculty of Natural and Agricultural Sciences focuses on the non-disease related production aspects such as poultry physiology and nutrition. Prof Abolnik's personal research interests lie in the avian respiratory viruses with the most severe impact on poultry production such as avian influenza, Newcastle disease and infectious bronchitis. Projects on these and other poultry pathogens (e.g. mycoplasmas and DNA viruses) entail epidemiology, evolutionary biology, genomics, metagenomics and plant biotechnology approaches to identify, characterize and trace field outbreaks, assess risk, develop molecular diagnostic and serological tests as well as vaccines. This is essentially an applied research program that underpins national food security, disease control and international trade policies.

## Postgraduate Students

---

- Post-doctoral
  - Dr Hester Catharina (Therese) Lotter-Stark completed her PhD at the University of Cape Town in 2013. Therese is based at the CSIR where she is working on producing an infectious bursal disease immune complex using plant-made monoclonal antibodies.
  - Dr Amanda Beyliefeld completed her PhD at the University of Pretoria in 2019. Amanda is currently working on genomic and proteomic studies of important bacterial pathogens of poultry.
- PhD
  - Dr Vincent Simbizi (BVSc) is jointly registered at UP and James Cook University and is working on epidemiological ensemble modeling to create a surveillance system for pigs and poultry in rural sector of Eastern Cape Province.
  - Dr Laura Roberts (BVSc) completed her Masters at UP in 2018 and is working on the epidemiology and management of highly pathogenic avian influenza outbreaks in coastal birds.
- MSc
  - Ms Belinda Peyrot completed her MTech degree at the University of the Western Cape in 2014. Belinda is working on the molecular characterization of highly pathogenic avian influenza clade 2.3.4.4 H5N8 viruses causing outbreaks in terns and other coastal birds in South Africa in 2018.
- MSc
  - Ms Thandeka Phiri completed her MTech degree at the Vaal University of Technology in 2018 and is working on molecular assays for improving the identification of avian influenza viruses in South Africa.