



## Who's Who in One Health

### Centre for Viral Zoonoses (UP CVZ)

University of Pretoria, South Africa

<http://www.up.ac.za/centre-for-viral-zoonoses>



UNIVERSITEIT VAN PRETORIA  
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YUNIBESITHI YA PRETORIA

[http://www.up.ac.za/en/centre-for-viral-zoonoses/news/post\\_2305554-new-centre-for-viral-zoonoses-established-at-up](http://www.up.ac.za/en/centre-for-viral-zoonoses/news/post_2305554-new-centre-for-viral-zoonoses-established-at-up)

#### 1. Organization/ Group Name and website url:

#### 2. Description and Scope of One Health Activities

The Centre is based in the Department Medical Virology but consist of a steering committee and members that stretch across the 3 faculties, Faculty of Health, Faculty of Veterinary Sciences and Faculty of Natural Sciences.

#### About the Centre:

The University of Pretoria's Centre for Viral Zoonoses (UP CVZ) has a vision to be a research Centre of excellence in viral zoonotic diseases of public health concern in Africa but also globally. UP CVZ achieve this by investigating endemic and emerging zoonotic viral diseases of public health significance in humans, animals and the environment and encourage collaborative research that involve partners from multiple disciplines within the University of Pretoria but also including regional, national and international collaborators. The Centre join forces of established research groups in emerging arbo and respiratory viruses, bat and other small mammal viral zoonotic diseases, rabies and rabies related lyssaviruses, viral pathology, medical entomology and ecology. UP CVZ strive to generate new knowledge through surveillance, building diagnostic capacity through innovation, epidemiology, pathology, pathogenesis and ecology studies of zoonotic pathogens in humans and animals and identify intervention strategies for effective disease control.

#### 3. Key Collaborators / Participants and contact information (Email address, Telephone, if they agree to share contact information on this posting in case One Health stakeholders want to contact them)

#### STEERING COMMITTEE:

##### Faculty of Health:

- **Professor Wanda Markotter**, (Director, NRF-DST South African Research Chair in Infectious Diseases of Animals (Zoonoses), Interests: Bat and small mammal zoonotic diseases

<http://www.up.ac.za/centre-for-viral-zoonoses>

[wanda.markotter@up.ac.za](mailto:wanda.markotter@up.ac.za)

- **Professor Marietjie Venter**, Department Medical Virology, Head: Emerging Vectorborne and Respiratory virus program; International One Health Day contact for Africa, One Healthplatform Scientific Advisory board.

<http://www.up.ac.za/media/shared/239/marietjie-venter-shortend-bio-2016-aug.zp99052.pdf>  
[www.zoonosesresearchunit.up.ac.za](http://www.zoonosesresearchunit.up.ac.za);

[Marietjie.venter@up.ac.za](mailto:Marietjie.venter@up.ac.za)

#### Faculty of Natural and Agricultural Sciences

- **Prof Louis Nel**, Department Microbiology and Plant pathology, Head: Rabies virus research group  
<http://www.up.ac.za/en/microbiology-plant-pathology/article/1910968/prof-louis-nel>  
<http://www.up.ac.za/media/shared/Legacy/sitefiles/file/azdirtpiprofnel.pdf>

[Louis.Nel@up.ac.za](mailto:Louis.Nel@up.ac.za)

- **Prof Armanda Bastos**, Department Zoology and Entomology: Head: Research group on Epidemiology of infectious diseases of wildlife  
<http://www.up.ac.za/en/zoology-entomology/article/2293848/prof-armanda-bastos>  
<http://www.up.ac.za/media/shared/Legacy/sitefiles/file/azdirtpiprofbastos.pdf>

[ADBastos@zoology.up.ac.za](mailto:ADBastos@zoology.up.ac.za)

#### Faculty of Veterinary Science

- **Professor Eric Etter**, Department of Production Animal Studies, Veterinary Epidemiology  
<http://www.up.ac.za/en/production-animal-studies/article/36773/speakoutup>

[eric.etter@cirad.fr](mailto:eric.etter@cirad.fr)      [eric.etter@up.ac.za](mailto:eric.etter@up.ac.za)

#### **Main One Health programs in the Centre**

Disease Ecology of Zoonotic Pathogens of small mammals- Wanda Markotter

Emerging Vector-Borne and Respiratory virus Research Group – Marietjie Venter

Veterinary pathology of zoonotic infections- June Williams\* – [June.Williams@up.ac.za](mailto:June.Williams@up.ac.za)

Molecular epidemiology and diagnoses of infectious diseases in livestock and small mammals -

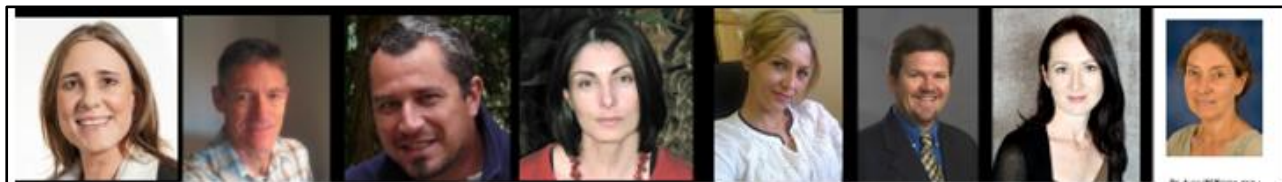
Amanda Bastos - [Amanda.bastos@up.ac.za](mailto:Amanda.bastos@up.ac.za)

Rabies Epidemiology – Louis Nel – [louis.nel@up.ac.za](mailto:louis.nel@up.ac.za)

Rift Valley Fever – Peter Thompson- [peter.Thompson@up.ac.za](mailto:peter.Thompson@up.ac.za)

Avian Influenza – Celia Abolnik – [celia.abolnik@up.ac.za](mailto:celia.abolnik@up.ac.za)

Risk and Analysis – Eric Etter – [eric.etter@up.ac.za](mailto:eric.etter@up.ac.za)



#### **4. Type of Organization**

- Academic Institution (University of Pretoria)
- Other, describe: Training, Research and Surveillance for zoonotic diseases

## 5. Address of Organization/ Group

Centre for Viral Zoonoses  
Department Medical Virology  
Room 2.72 Pathology Building  
5 Bophela Road, Prinshof Campus  
University of Pretoria, Pretoria, South Africa.

## 6. Sources of funding for Organization/Group

Research funding from a variety of sources both Nationally and Internationally:

- German Department of Education & G7 (ANDEMIA)
- South African National Research Foundation
- Poliomyelitis Research Foundation
- NHLS Research Trust
- Medical Research Council
- US-CDC
- CIRAD
- Others

## 7. One Health Course/Certificate/Training Offered by Organization or Group

BSc(Hons); Honours, MSc and PhD degrees are offered in each of the 3 faculties and specific departments involved with projects focusing on zoonotic diseases and One Health

Please contact individuals listed under section 3.

## 8. Other One Health Activities / Initiatives

The Centre for Viral Zoonoses participates in the One Health Forum of South Africa and in organizing the Annual National One Health day that takes place during month of November to celebrate “International One Health day”.

- One Health Forum steering committee: Prof Wanda Markotter [wanda.markotter@up.ac.za](mailto:wanda.markotter@up.ac.za)
- International One Health day contact for Africa: Prof Marietjie Venter [marietjie.venter@up.ac.za](mailto:marietjie.venter@up.ac.za) or [onehealthafrica@up.ac.za](mailto:onehealthafrica@up.ac.za)

Prof Louis Nel is the Executive Director of the Global Alliance for Rabies Control (GARC)

[Louis.nel@up.ac.za](mailto:Louis.nel@up.ac.za)

## 9. Brief History of Your Organization’s One Health Involvement

The University of Pretoria (UP) Senate approved the establishment of a new Centre for Viral Zoonoses (UP CVZ) on 2 June 2016. The Centre is a multi-disciplinary, inter-faculty initiative that contributes towards the continued expansion of the work being done under the [Institutional Research Theme, Animal and Zoonotic Diseases](#), which was established in 2012. The Centre's vision is to be a research Centre of excellence in viral zoonotic diseases that are of concern in terms of public health, not only in Africa, but also globally.

UP is strategically extremely well positioned to host a Centre like the UP CVZ, as it has three faculties which, combined, possess the necessary expertise and infrastructure to address the multidisciplinary research aspects of this complex field, namely the [Faculty of Health Sciences](#), the [Faculty of Veterinary Science](#) and the [Faculty of Natural and Agricultural Sciences](#). The Centre encourages collaborative research involving partners from multiple disciplines within UP, but also collaborates with various other regional, national and international partners. This includes joining forces with established groups conducting research on arbovirology, viral zoonotic diseases spread by bats and other small mammals, rabies and rabies-related lyssaviruses, viral pathology, medical entomology and ecology. The Centre

strives to generate new knowledge through surveillance; to build diagnostic capacity through innovation in epidemiology, pathology, pathogenesis and ecology of zoonotic pathogens in humans and animals; and to identify intervention strategies for effective disease control.

The Centre currently has around 20 full-time academic staff members who represent the three faculties mentioned above and are affiliated with eight academic departments at the University. The Centre is structured around the laboratory infrastructure available at the Department of Medical Virology in the Faculty of Health Sciences' [School of Medicine](#), which includes a state-of-the-art, biosafety-level-3 (BSL-3) laboratory that can process both human and animal samples. UP CVZ members, including postgraduate students, who are not located at the Faculty of Health Sciences will have a virtual link to the Centre.

The newly established UP CVZ significantly enhances the University's national and international profile in zoonotic disease research by bringing together several established researchers in zoonotic diseases.

### **10. Additional Information**

The collective focus of all members is on viral diseases transmitted by insect or animal vectors that may result in severe febrile, neurological, haemorrhagic or respiratory syndromes in animals and humans. Although the Centre has a virtual link to allow individual members access to their own faculties and facilities needed, it is also centred around the need for BSL-3 facilities, animal work, virology, human and animal health, pathology, vector and ecology expertise as well as the need for shared field sites for ecological investigation.

## **Complete list of members of the Centre for Viral Zoonoses**

### **Academic and Research staff**

#### **FHS, Department of Medical Virology**

Prof. Wanda Markotter (Full professor)  
Prof. Marietjie Venter (Full professor)  
Prof. Paulo Almeida (Extraordinary professor) (  
Prof. Janusz Paweska (Extraordinary professor)  
Dr. Petrus Jansen van Vuren (Extraordinary lecturer)  
Dr. Jacqueline Weyer (Extraordinary lecturer)

#### **FNAS, Department of Microbiology and Plant Pathology**

Prof. Louis Nel (Full professor)

#### **FNAS, Department of Zoology and Entomology**

Prof. Armanda Bastos (Full professor)

#### **FVS, Department of Paraclinical Sciences**

Dr. June Williams (Senior lecturer)  
Dr. Johan Steyl (Senior lecturer)  
Dr. Sarah Cliff (Senior lecturer)

#### **FVS, Department of Production Animal Studies**

Prof. Peter Thompson (Full professor)  
Prof. Eric Etter (Associate professor)

#### **FVS, Research Chair: Poultry Health and Production**

Prof. Celia Abolnik (Associate professor)

#### **FVS, Equine Research Centre**

Prof. Alan Guthrie (Full professor)