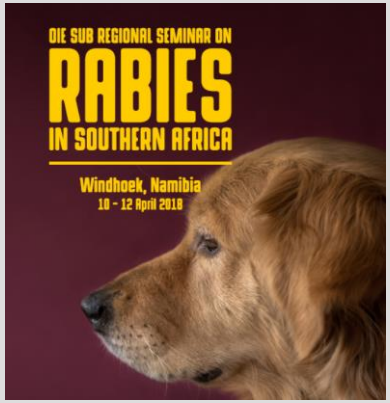
FRIEDRICH-LOEFFLER-INSTITUT
FLI
Bundesforschungsinstitut für Tiergesundheit
Federal Research Institute for Animal Health

OIE Laboratory Twinning Project

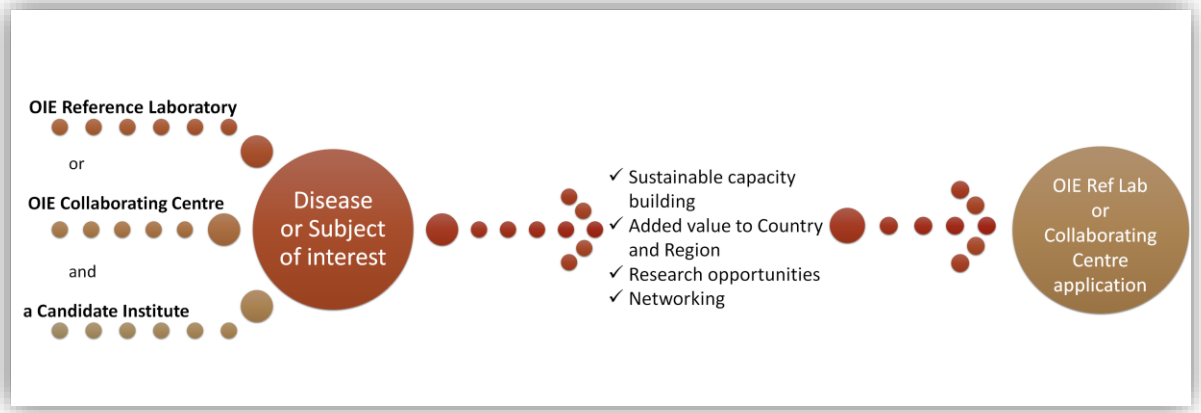
Between FLI and CVL

Thomas Müller
Conrad Freuling
Jolandie v.d. Westerhuizen



OIE Laboratory Twinning Project

Concept



- Benefits:
  - Improved laboratory performance, international connections (candidate lab)
  - To improve global capacity for disease detection, prevention, and control (OIE)
  - Joint research projects, access to strains, samples, laboratory networks (parent lab)

OIE Laboratory Twinning Project

Rabies

- Finished projects (62)

55	Peste des Petits Ruminants	UK	Tanzania	2015
56	Rabies	South Africa	Nigeria	2012
57	Rabies	Germany	Turkey	2017
58	Salmonellosis	Italy	Vietnam	2015

- Ongoing projects (28)

18	Peste des Petits Ruminants and CBPP	France	Jordan	2017
19	Rabies	France	Chinese Taipei *	2018
20	Rabies	Germany	Namibia	2019
21	Rabies	UK and USA	India ◊	2016
22	Rabies and TSEs	Canada	Peru	2016
23	Rift Valley fever	France	Mali	2019

OIE Laboratory Twinning Project

Partners

"Strengthening the Namibian Central Veterinary Laboratory in rabies diagnostics, control and research"

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2019 -2021

Bundesministerium
für Ernährung
und Landwirtschaft

Parent laboratory

Candidate laboratory

OIE Laboratory Twinning Project

Workplan

	1st year (2019)		2nd year (2020)		3rd year (2021)	
The diagnostic capacities and capabilities of CVL to meet OIE standards is enhanced	1st half	2nd half	1st half	2nd half	1st half	2nd half
a) Assessment and modifications of SOPs						
b) Training in rabies diagnostic tests at FLI						
c) Training in rabies diagnostic tests at CVL						
External OIE expert						
Shipment of samples						
Quality control measures at the rabies branch of CVL Windhoek is improved						
a) Assessment of the current documents on quality control at the CVL is conducted by FLI						
b) Audit and closing meeting at CVL						
The role and responsibilities of CVL as a NRL for rabies in Namibia and as a centre of expertise for the region is strengthened						
a) Annual meeting between CVL and regional laboratories						
b) Workshop/training for neighboring countries by CVL						
c) Improvement of the rabies surveillance and active participation/support in the dog rabies control programme						
External OIE expert						
Epidemiological tools (molecular) for rabies surveillance and control are introduced						
a) Training visit of CVL trainees at FLI						
Shipment of samples						
Initiation and conduction of joint research projects						
Closing meeting						

OIE Laboratory Twinning Project

Outputs

- (A) The diagnostic capacities and capabilities of CVL to meet OIE standards is enhanced
- (B) Quality control measures at the rabies branch of CVL Windhoek is improved
- (C) The role and responsibilities of CVL as a National Reference Laboratory for rabies in Namibia and as a centre of expertise for the region is strengthened
- (D) Epidemiological tools (molecular) for rabies surveillance and control are introduced
- (E) Joint research projects

OIE Laboratory Twinning Project

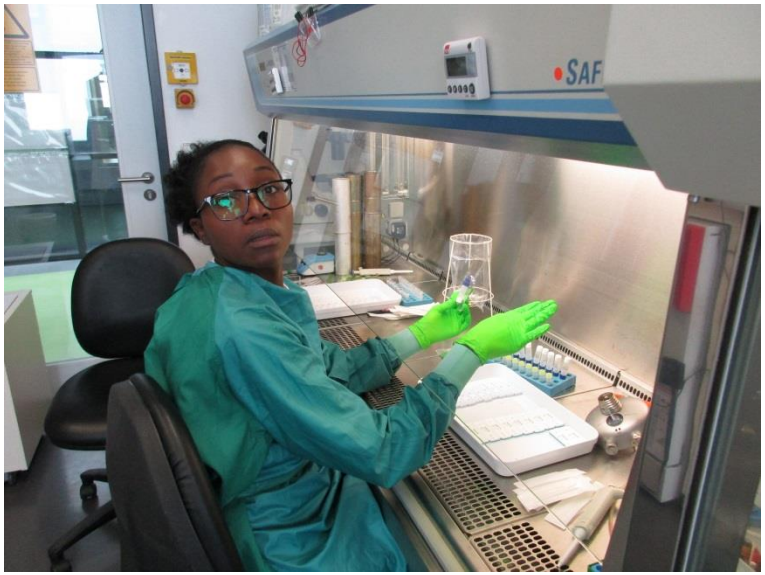
Outputs

- (A) The diagnostic capacities and capabilities of CVL to meet OIE standards is enhanced
  - SOPs were updated and shortened
  - Interlaboratory comparison of results
  - Workshops

OIE Laboratory Twinning Project

Workshops

- 2 X Training of CVL staff at FLI (2019, 2020)
- 2 X Training of CVL staff on spot (Windhoek, Ondangwa) (2019, 2020)
- 1 X International workshop under leadership of CVL for colleagues from Angola and Botswana (delayed because of COVID-19)



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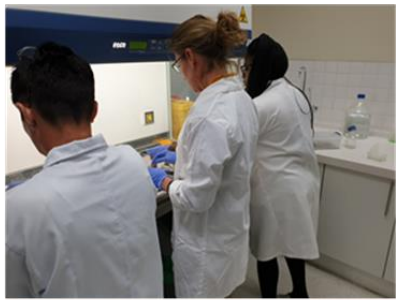

OIE Laboratory Twinning Project

Outputs

- (A) The diagnostic capacities and ca… t OIE standards is enhanced
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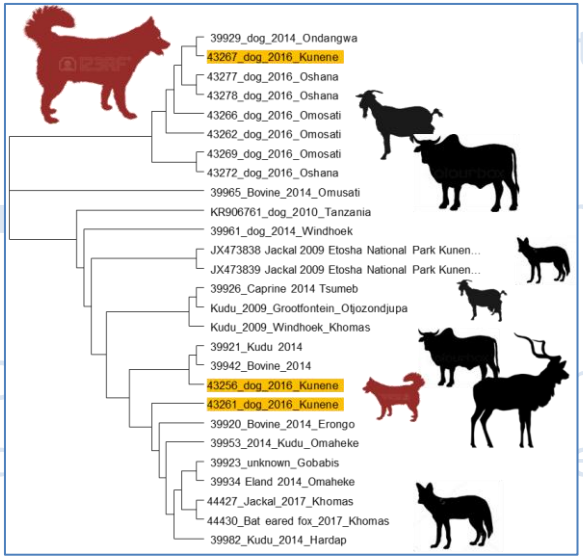
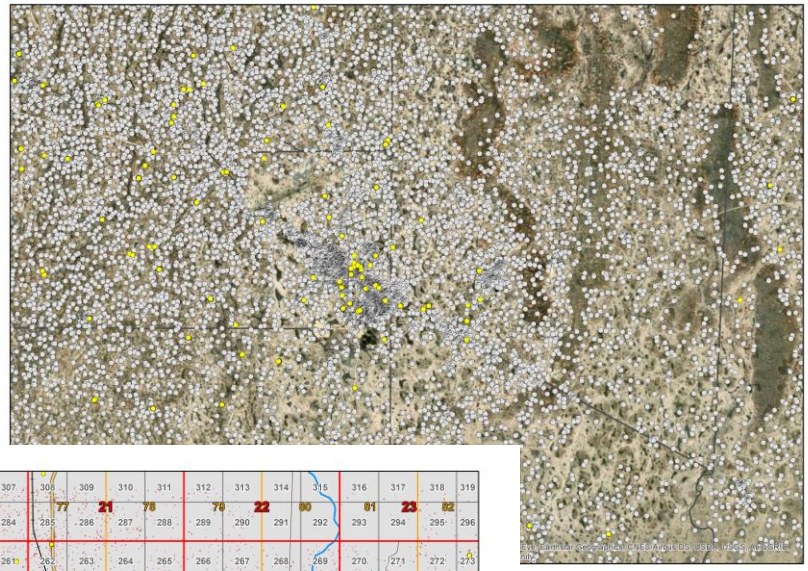


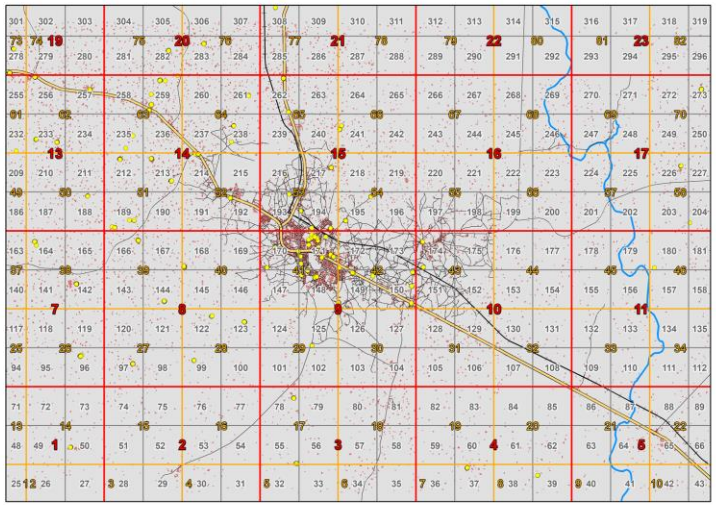
- (D) Epidemiological tools (molecular) for rabies surveillance and control are introduced
- (E) Joint research projects

OIE Laboratory Twinning Project

Joint research projects

- Initiation of field trials on oral rabies vaccination of dogs





OIE Laboratory Twinning Project

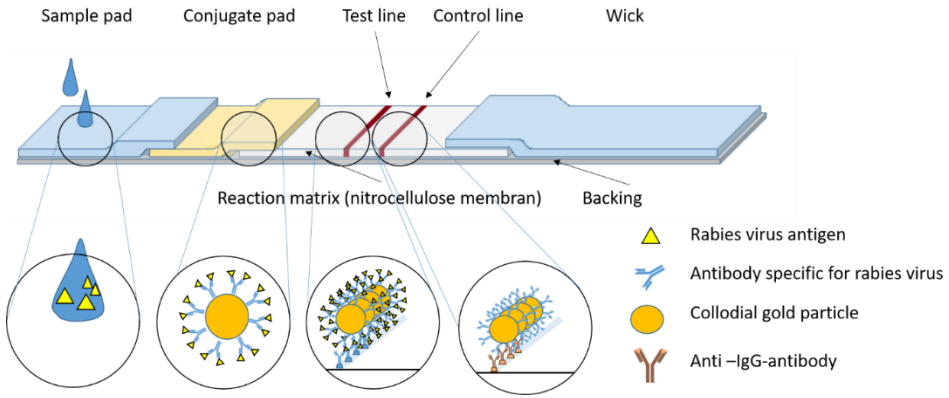
Joint research projects

- Simplified sampling method/kit for rabies surveillance

OIE Laboratory Twinning Project

Joint research projects

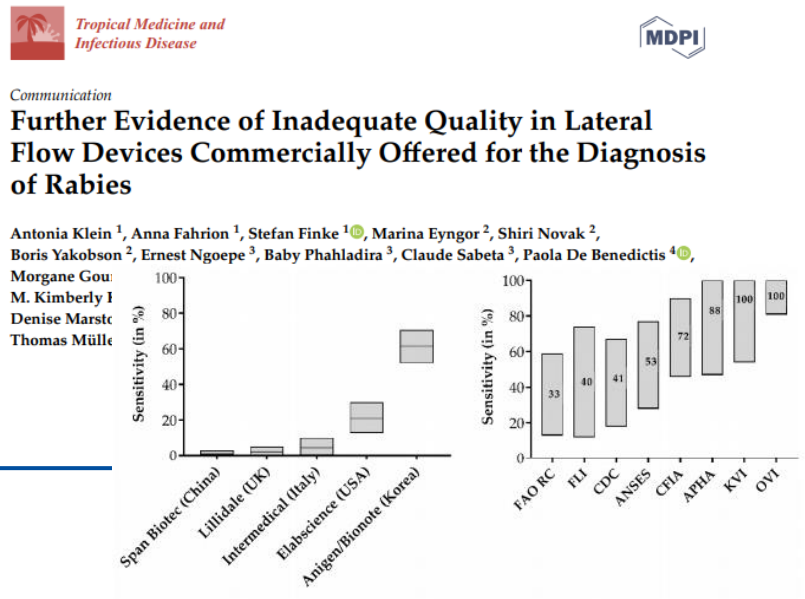
- In field use of lateral flow devices (LFDs)



- Pregnancy like test principle
- Easy, quick (10 min)
- Price: 4-15 US$/test

Lateral flow devices

Mixed results



- Numerous studies have indicated that they are fit-for-purpose
- Only Anigen/Bionote sufficiently tested with good test characteristics
- CAVE: Batch-to-batch variation
- Do not use any other kit as of now!

Lateral flow devices

Lab results CVL Namibia

Anigen/Bionote	FAT pos	FAT neg	total
LFD pos	59	0	59
LFD neg	5	78	83
Total	64	78	142

Sensitivity: **92.75%**

Specificity: **100%**

Acknowledgements

IF YOU WANT TO GO FAST GO ALONE
IF YOU WANT TO GO FAR GO TOGETHER

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