



## Curriculum Vitae

### Personal information **Matthias Niedrig**

#### Work experience

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Since Nov 2019 Senior scientific consultant

German Accreditation Society (DAkkS), Berlin, Germany

- Consultant for accreditation of virus diagnostic from diagnostic laboratories.  
Non profit society

Since Oct 2019 Senior scientific consultant

WHO, Geneva, Switzerland

- Consultant for improving diagnostic for Yellow Fever of the African laboratory network.  
International Public Health

Nov 2014 - May 2019 Staff position

Robert Koch Institut, Berlin, Germany

- Implementation of a One Health strategy for the RKI  
Public Health

Aug 2002 - Oct 2014 Laboratory chief

Centre of Biological Safety, Robert Koch Institut, Berlin, Germany

- Management of laboratory for exotic viral infections
- Research on flavi viruses, diagnostic and immune response
- Project management (e.g. of the European Network for Diagnostics of "Imported" Viral Diseases (ENIVD) )
- (Co) organisation of several international symposia and congresses
- Head of the German consultant laboratory on tick-borne encephalitis
- Reviewer for international journals
- Analysis of immune responses
- Diagnostic of virus infections
- Training of students (BA, MA, Diploma, Doctoral)

Research, Public Health

Jun 2001 - Aug 2002 Laboratory chief

Department Hygiene, Robert Koch Institut, Berlin, Germany

- Virus inactivation
- External Quality Assurance studies for microbiological diagnostic tests
- Training of students (Diploma, Doctoral)
- Project management of the European Network for Diagnostics of "Imported" Viral Diseases (ENIVD) .

Research, Public Health

Jan 1994 - May 2001 Research scientist

Department Yellow Fever vaccine production, Robert Koch Institut, Berlin, Germany

- YF Vaccine production
- Responsible for product control
- Laboratory management
- Training of students (Diploma, Doctoral)
- Project management of the European Network for Diagnostics of "Imported" Viral Diseases (ENIVD) .

Research, Public Health

Sep 1989 - Dec 1993 Research scientist

Behringwerke AG, Marburg, Germany

- YF Vaccine production
- Vaccine production
- In-process control
- Vaccine research
- Bio safety of blood-products

Pharmaceutical Industry

## Education and training

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Since Mar 1997 Associated Professor

Teaching virology at the Charité Hospital of the Humbolt University, Berlin

May 1994 - Oct 1996 Venia legendi - Habilitation in Virology

Humbolt University, Charité, Berlin, Germany

Sep 1985 – Aug 1988 Doctor's Degree, PhD in Microbiology

Free University , Berlin, Germany

Nov 1984 – Sep 1985 Diploma in Biology

Georg August University, Göttingen, Germany

### PERSONAL SKILLS

Mother tongue(s) German

Other language(s) English

#### UNDERSTANDING

Listening

C2

Reading

C2

#### SPEAKING

Spoken interaction

C2

Spoken production

C2

#### WRITING

C2

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user

Common European Framework of Reference for Languages

Computer skills Microsoft office: Word, Excel, Outlook, Powerpoint

Organisational / managerial skills

Establishing and coordinating for nearly 20 years the European Network for Diagnostics of „imported“ Viral Diseases (ENIVD), [www.enivd.de](http://www.enivd.de)

Communication / social skills

Establishing and running a network with ca. 100 members in ca. 35 institutions 29 countries for nearly 20 years is not possible with a certain level of communication skills.

Job-related skills Reviewer

Of research projects for international 16 universities and organisations e.g.

For 32 international scientific journals e.g.

- Journal Top. Med. & Int. Health
- Journal Clinical Virology
- Emerging Infectious Diseases,
- Eurosurveillance
- PLoS Pathogens, PLoS one, PLoS NTD
- Vaccine,
- The Lancet,
- Science,
- Virology

## Additional information

### Publications

256 publications in peer reviewed journals (52 about diagnostic methods in virology)

Ten relevant publications on diagnostic issues:

[Niedrig M.](#), P. Patel, A. Abd El Wahed, R. Schädler, S. Yactayo (2019) Find the right sample: A study on the versatility of saliva and urine samples for the diagnosis of emerging viruses. *BMC Infectious Diseases*, 2018, 18:707, <https://doi.org/10.1186/s12879-018-3611-x>

Weidmann M., O. Faye, O. Faye, A. Abd El Wahed, P. Patel, C. Batejat, J.C. Manugerra, A. Adjami, [M. Niedrig](#), F.T. Hufert, A.A. Sall (2018) Development of mobile laboratory for viral haemorrhagic fever detection in Africa. *J Infect Dis.* 2018 Jun 15. doi: 10.1093/infdis/jiy362

Baylis S.A., McCulloch E., Wallace P., Donoso Mantke O., [Niedrig M.](#), Blümel J., Yue C., Nübling C.M. (2018) External Quality Assessment (EQA) of Molecular Detection of Zika Virus: Value of the 1st World Health Organization International Standard. *J Clin Microbiol.* 2018 Feb 22;56(3). pii: e01997-17

Ellerbrok H., S. Jacobsen, P. Patel, T. Rieger, M. Eickmann, S. Becker, S. Günther, D. Naidoo, L. Schrick, K. Keeren, A. Targosz, A. Teichmann, P. Formenty, [M. Niedrig](#) (2017) External quality assessment study for ebolavirus PCR-diagnostic promotes international preparedness during the 2014 – 2016 Ebola outbreak in West Africa. *PLoS Negl Trop Dis* 11(5): e0005570. <https://doi.org/10.1371/journal.pntd.0005570>

Patel P., A. A. E. Wahed, O. Faye, P. Prüger, M. Kaiser, S. Thaloengsok, Sukathida Ubol5, Anavaj Sakuntabhai6, Isabelle Leparc-Goffart, F. T. Hufert, A. A. Sall, M. Weidmann, [M. Niedrig](#) (2016) A field-deployable reverse transcription recombinase polymerase amplification assay for rapid detection of the Chikungunya virus. *PLoS Neglected Tropical Disease.* Sep 29;10(9):e0004953. doi: 10.1371/journal.pntd.0004953.

Jacobsen S., P. Patel, J. Schmidt-Chanasit, I. Leparc-Goffart, A. Teichmann, H. Zeller, [M. Niedrig](#) (2016) Second External Quality Assessment Study for Laboratory Performance of Molecular and Serological Diagnosis of Chikungunya virus Infection. *J Clin. Virol.* 76, 55-65

Pas S. Diepenstrat., P. Patel, C. I Reusken, C. Domingo, V. Corman, C. Drosten, R. Dijkman,

V. Thiel, N. Nowotny, M.P.G. Koopmans, [M. Niedrig](#) (2015) First international external quality assessment of molecular diagnostics for MERS-CoV. *J Clin. Virol.* 69, 81–85

Proll, G., A. Hartjes, A. Sinclair, G. Markovic, F. Pröll, P. Patel, [M. Niedrig](#) (2014) Optical biosensor system for the quick and reliable detection of virus infections-VIROSENS Proceedings of SPIE - The International Society for Optical Engineering. 9253, 2014,

N° 92530S

Escadafal C., O. Faye, A. Alpha Sall, O. Faye, M. Weidmann, O. Strohmeier, F. von Stetten, J. Drexler, M. Eberhard, [M. Niedrig](#), P. Patel (2014) Rapid molecular assays for the detection of yellow fever virus in low-resource settings. *PLoS Neglected Tropical Disease*, 2014 Mar 6;8(3):e2730

Litzba N., H. Zelená, T. R. Kreil, B. Niklasson, I. Kühlmann-Rabens, [M. Niedrig](#) (2013) Evaluation of different TBE serological diagnostic methods – ELISA, immunofluorescence and plaque reduction neutralization assays. *Vector borne and zoonotic Diseases*, 14(2):149-59.

- 156 oral presentations between 1996 – 2020
- Intra-nasale Gelbfieber-Impfung PCT/EP 98/08387
- Selected Peptides of the group-specific antigen (GAG) of Human Immunodeficiency Virus (HIV) the preparation and use thereof PAT Nr. 5,612,453

### Projects

### Memberships

- German Society of Virology (GFV)
- European Society of Clinical Virology (ESCV)
- Deutscher Hochschulverband

### Other Relevant Information

ANNEX 1 List of selected international expert missions

Date from to	Location	Company	Position	Description
May-July 2016	Geneva, Switzerland	WHO	Senior scientific expert	Improving Yellow Fever laboratory diagnostic in African laboratorien during the YF outbreak in Angola
Jan 2013	Lyon, France	WHO	Senior scientific expert	Member of the WHO the Technical Advisory expert group on: Health laboratory Strengthening – For better preparedness, surveillance and response to epidemic-prone diseases.
Oct 2012	Abidjan, Ivory Coast	Pasteur Institut Network	Senior scientific expert	Member of the 6th research council of the Pasteur Institute Ivory Coast in Abidjan
2013	Geneva, Switzerland	WHO	Senior scientific expert	Member of the WHO Strategic Advisory Group of Experts on Immunization (SAGE) Working Group (WG) on Yellow Fever Vaccine

2013	online	Brighton Advisory committee	Senior scientific expert	Member of The Brighton Advisory expert group on: "Viscerotropic disease: case definition and guidelines for collection, analysis, and presentation of immunization safety data
Dec 2010	Cape Town, South Africa	WHO	Senior scientific expert	Consultancy WHO: Workshop to Develop the Emerging and Dangerous Pathogens Laboratory Network for outbreak response and readiness in Africa EDPLN-Africa.
Oct 2010	Brazzaville, Rep. Congo	WHO	Senior scientific expert	Consultancy WHO: Expert meeting on Yellow Fever. Surveillance and response in Africa.
Nov 2008	Geneva, Switzerland	WHO	Senior scientific expert	Consultancy WHO: Expert meeting on adverse events after Yellow Fever vaccination
Mar 2007	Stockholm, Sweden	ECDC	Senior scientific expert	Consultancy ECDC Infectious diseases and environmental changes
Feb 2007	Geneva, Switzerland	WHO	Senior scientific expert	Consultancy WHO: Influenza H5N1 diagnostic
Aug 2003	Geneva, Switzerland	WHO	Senior scientific expert	Temporary advisor for the WHO for diagnostic of SARS
Oct 2005	Budapest, Hungary	EU	Senior scientific expert	Consultant for a Twinning Project between Germany and Hungary on improving the infectious disease control and BSL-3 laboratory for the Hungarian public health system; National Center for Public Health
Apr 2004	Rio de Janeiro, Brazil	WHO	Senior scientific expert	Consultancy for WHO SARS laboratory network WHO trainings courses on diagnostic of SARS and other emerging diseases.
Oct 2003	Moscow, Russia Johannesburg, South Africa			
Sep 2003				
Nov 2000	New Delhi, India	WHO	Senior scientific expert	WHO Trainings course for laboratory diagnosis of exotic, endemic arboviral and rodent-borne viral infections at the National Institute of Communicable Diseases (NICD)

#### Graduating of students

- 18 for Diploma/Master and Bachelor
- 15 for Doctoral graduation
- 3 EUHEPEM trainees

#### Funding recruited October 1998 - June 2016

Public funding: European Commission, Ministry of Health, Fraunhofer Gesellschaft, Ministry of Education and Research (BMBF), Ministry of Health, Robert Koch Institut, Ministry of Education and Research, Investitionsbank Berlin/European Funds for regional Development, DAAD (Germany Academic Exchange Program)