

# Centre for Emerging Viral Diseases

## Newsletter n°2, 2025

Dear collaborators and friends of the Centre,

More than a year has passed since our last newsletter, and during that time, many exciting developments have taken place at the [Centre for Emerging Viral Diseases](#), including a change in leadership last year. We are pleased to share some recent highlights and achievements with you. With new faces, new projects and new collaborations, our Centre continues to grow, advancing our vision of being *a Centre dedicated to expertise in emerging viruses through translational research, clinical excellence, state-of-the-art diagnostics and public health service!*

We thank you sincerely for your continued collaboration and support.

We hope you enjoy reading!

### Centre Highlights

#### New Leadership at the Centre for Emerging Viral Diseases

On May 1<sup>st</sup>, 2024, Prof. Isabella Eckerle assumed the role of Director of the Centre for Emerging Viral Diseases, succeeding Prof. Laurent Kaiser. Dr Pauline Vetter now serves as Deputy Director.

The Centre was established in 2016 under Prof. Laurent Kaiser's leadership at the Geneva University Hospitals (HUG) and the Faculty of Medicine of the University of Geneva and has since become a recognized leader in emerging viral disease management.

Prof. Eckerle, who joined the Centre in 2018, brings extensive expertise in virology, microbiology and infectious disease epidemiology. Her specialisation in coronaviruses has further strengthened the Centre's academic foundation and has led to the establishment of a translational research group.

Dr. Vetter, an infectious disease specialist, leads the clinical arm of the Centre. She coordinates with diagnostic and surveillance structures and conducts several clinical research projects focused on emerging pathogens.



Read more [here](#)

## Nomination as WHO CoViNet Member

The Centre, in collaboration with the Swiss Federal Institute of Virology and Immunology (IVI) and the Vetsuisse Faculty of the University of Bern (UNIBE), became a member of the global CoViNet network in March 2024. This international research network, launched by the World Health Organization (WHO) is operational in 20 countries and aims to improve early detection, analysis and surveillance of coronaviruses globally.



WHO convened the 1st Coronavirus Network (CoViNet) meeting on 26-27 March 2024 in Geneva, to discuss how to achieve the overall goal and specific objectives of the network.

Read more:

[Press release about our CoViNet nomination](#)

[More info on CoViNet from WHO](#)

[1<sup>st</sup> CoViNet newsletter](#)

SNSF's special Investigator Initiated Clinical Trial (IICT) is funding a clinical trial on influenza treatment at the Centre



The SNSF's special Investigator Initiated Clinical Trial (IICT) program has chosen to support a multi-Center Swiss study on the treatment of influenza in hospitalized patients led by Dr. Pauline Vetter.

This randomized trial will evaluate the clinical efficacy of antiviral treatment vs placebo in hospitalized influenza patients ([NCT06653569](#), [SNCTP000006168](#)). As no such data have been ever obtained in this population, the trial will allow to close an important knowledge gap and eventually help establish sound clinical recommendations. The study started enrolling in

December 2024 at HUG and in January 2025 in Zurich, Locarno and Lugano (Ticino), and Lausanne (CHUV). It will run for 3 influenza seasons.

Read more [here](#) on the rationale behind this project.

More information regarding the INFLUENT trial (INpatients inFLUENza Treatment trial) on the [website of the Center](#) & the [SNSF website](#).

## Receipt of the “Vita” label by the Swiss Biobanking Platform

Our HUG Center for Emerging viral disease biobank has been awarded the VITA Label for its biobank, recognizing its compliance with Swiss Biobanking Platform standards! Both the EVIDIX (CCER:2023-01667) and the INFLUENT (CCER:2024-01535) biobanks, associated with corresponding ongoing studies achieve compliance with legal and ethical standards. We are proud to be part of the Swiss Biobanking Platform network!

More details available [here](#).

## New study investigating mpox transmission in DR Congo

In 2024 a new clade of mpox was first detected in South Kivu DR Congo and the number of reported cases and deaths began to climb both within DR Congo and across several countries in Africa, leading to the declaration of the Public Health Emergency of International Concern. In collaboration with Johns Hopkins University, Catholic University of Bukavu, the National Institute of Biomedical Research in DR Congo, London School of Hygiene and Tropical Medicine and the DR Congo Ministry of Health, the Centre is helping to support a new research study in South Kivu to better understand the clinical and epidemiological characteristics of this new mpox clade.

A few early learnings from this study are already posted as preprints ([here](#) and [here](#)).

## Field mission, Marburg virus outbreak in Rwanda: October-November 2024

Rwanda declared his first ever outbreak of Marburg virus disease (MVD) on 27 September 2024. The outbreak was identified simultaneously in two tertiary hospitals in the capital city of Kigali. In total, there were 66 cases of which 51 were healthcare workers (77%) with 15 deaths (22.7%). The low case fatality rate was the result of advanced supportive care by the government medical team and access to investigational countermeasures (e.g., vaccine and therapeutics). In early October 2024, Dr Jacquieroz deployed as clinical expert to Kigali to coordinate the WHO case management pillar.



**LEGENDS:** A) Training certificate on MVD given by the MOH and WHO case management leads. B) Morning round with MOH medical team to discuss MVD cases. C) Perfusion of monoclonal antibody MPB091 (open label trial). D) ICU MOH and WHO team. E) WHO clinical experts. F) Experimental MVD vaccine (Chad3) to at-risk healthcare workers.

Read also her interview in [Le Temps](#)

### Field mission, Marburg virus outbreak in Tanzania: February-March 2025

On 20 January 2025, Tanzania declared its second outbreak of Marburg virus disease in the last 3 years. The outbreaks lasted until March 13 with a total of 2 confirmed and eight probable cases, all deceased (case fatality ratio 100%). The high case fatality case was due a delay in identifying and declaring the outbreak by the MoH. Dr Jacquerioz deployed as clinical expert with MSF-Switzerland. Main activities covered clinical and IPC training on filovirus diseases at the treatment center and in the health facilities.



LEGENDS: A-B) Suspect patient and medical team inside red zone. C) IPC training on filovirus disease

### Participation to the [WHO Infectious Disease Treatment Module \(IDTM\)](#) training and stimulation exercises in Brindisi, Italy from 15-17 April 2025.

The IDTM is an innovative prototype to enable a rapid response to outbreaks of infectious diseases such as Ebola or Marburg virus diseases. The main purpose is to provide optimized supportive care to patients in a secure and caring manner. For three days, forty participants (including Dr Frederique Jacquerioz, as expert for the Center) from around the world WHO partner organizations and from different professional backgrounds (medical, pharmacy, WASH, and logistics) engaged actively in stimulation activities and hands-on exercises using the IDTM in near real conditions.



**LEGENDS: A-B). Medical simulation exercises (i.e. reanimation). C). Hand-on exercise to expand the treatment unit in the event of a surge in cases. D-E). Building of the IDTM (basic module – 3 rooms, ready to use in less than 24h).**

## Tabletop exercise on the management of viral haemorrhagic fever at Geneva University Hospitals

In collaboration with the FOPH and the Office Cantonal de la Santé (OCS) of the Canton of Geneva, our Center, represented by the two expert clinicians Dr Pauline Vetter and Dr Frederique Jacquieroz co-organized at HUG a TableTop exercise on the management of viral haemorrhagic fevers. On January 28, 2025, around 40 key actors, including representatives of the WHO, MSF; the FOPH, OCS, Geneva airport, Geneva Service Fire and RescueBrigade sanitaire Cantonal and different HUG divisions were reunited to discuss processes & processus involved in case of a medical evacuation from the field (MedEvac).

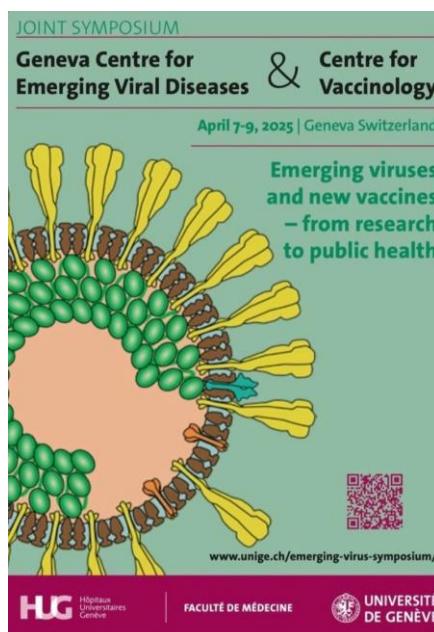
This session will be followed at the end of the year by a full-scale simulation exercise at the end of 2025.



## Symposium of the Center for Emerging Viral Diseases and the Vaccine Research Center: "Emerging Viruses and New Vaccines- From Research to Public Health"

We had the pleasure of hosting the 1st joint symposium of the Center for Emerging Viral Diseases and the Vaccine Research Center this past April in Geneva. The meeting brought together approximately 300 participants with global experts from various disciplines including virologists, epidemiologists,

vaccinologists, and public health experts. Feedback from this event has been overwhelmingly positive and we are already looking towards setting the date for the next symposium (late 2026).



Read more [here](#)

### The research group «Emerging Viruses» is hosting a new Ambizione research group!

The research group of the Centre «Emerging viruses» is the hosting laboratory of the research group of Dr. Lena Royston, who was awarded a SNF Ambizione scholarship «Unravelling the relevance of cytomegalovirus detection after hematopoietic cell transplantation». Welcome Lena!

Read more [here](#)

### Other events & activities of the Center

Our Centre participated in the R&D Blueprint meeting hosted by World Health Organization in March 2025: "What research is important to prepare and respond to H5N1 influenza outbreaks?" in the panel "Surveillance research – What kind of surveillance is required? »

More info on the meeting [here](#)

Prof. Isabella Eckerle was selected for the «Forum des 100s» in 2024, naming the 100 most impactful individuals of the Swiss Romandie in 2024

Read more [here](#)

Our Centre was invited to give a lecture in the Duke Geneva Global Health Program, teaching Duke Global Health Fellows in the 2024 years program “Revitalizing the "Survive and Thrive" Agenda for Women's and Children's Health” in Geneva in June 2024, with a lecture of Prof. Isabella Eckerle on emerging viruses and their impact on women and children's health.

Prof. Isabella Eckerle was nominated into the Swiss Academy of Medical Sciences (SAMW-ASSM) Senate in 2024

Read more [here](#)

[Website of the Swiss Academy of Sciences](#)

Dr. Andrew Azman was awarded the [prestigious Bailey K. Ashford Medal](#) by the American Society of Tropical Medicine and Hygiene for his work on enteric diseases in low and middle income countries.



Read more [here](#)

## Promotion & farewell

### MD/PhD graduation of Dr. Mathilde Bellon

The first MD/PhD student of the research group «Emerging viruses» has successfully defended her thesis «From the Classroom to the Laboratory: Understanding SARS-CoV-2 and Endemic Respiratory Viruses in Children through Epidemiological Studies and Ex Vivo Models» in October 2024! Congratulations to Dr. Mathilde Bellon, who successfully conducted an epidemiological-virological study on SARS-CoV-2 outbreaks in schools and established a primary cell culture model to study innate immune responses of respiratory viruses in children versus adults.

Read the pre-print of Mathilde's latest work [here](#)



#### MD/PhD thesis defense

##### Thesis committee:

Prof. Isabella Eckerle – Thesis director

Dr Manel Essaïdi-Laziosi – Thesis codirector

Prof. Doron Merkler – MD-PhD committee rep

Prof. Francesco Negro – Internal expert

Dr Ronald Dijkman – External expert

Thesis committee Prof. Doron Merkler, Prof. Francesco Negro, Dr. Manel-Essaïdi-Laziosi, Dr. Ronald Dijkman (online), Dr. Mathilde Bellon, Prof. Isabella Eckerle

### Nomination of Dr. Meriem Bekliz as assistant professor

Dr. Meriem Bekliz, who started as Postdoc at the Centre in 2020, was appointed as assistant professor at the American University of Sharjah in the United Arab Emirates, where has now started her own research group. All the best to her for her future career!

### Outreach activities & our work in the media (selection)

- We have a new video of the Centre for Emerging Viral Diseases that you can watch [here](#)
- Prof. Isabella Eckerle was invited to the TV show “MAITHINK Xperts” about the topic of pandemics (in German) that can be found [here](#)
- Interview about the Marburg outbreak and the work of Dr. Frédérique Jacquerioz in [Les Temps](#)
- Interviews of Dr Pauline Vetter on RTS on [seasonal influenza](#), [avian influenza](#), and [respiratory viruses](#)
- Portrait about our Centre in Pulsations [Link](#)

### New faces of our Centre

We have new team members!

**Camille Escadafal**

Senior biologist

**Konstantin**

MD/PhD candidate

**Frank**

PhD candidate

**Nirmegh Basu**

PhD candidate

**Megan O'Driscoll**

Postdoctoral fellow



### Publication highlights with contributions from our Centre

[Nesbitt RC et al. The effectiveness of two doses of recombinant hepatitis E vaccine in response to an outbreak in Bentiu, South Sudan: a case-control and bias indicator study. Lancet Infect Dis. 2025](#)

[Brangel P et al. A Global Collaborative Comparison of SARS-CoV-2 Antigenicity Across 15 Laboratories. Viruses. 2024](#)

[Emperador DM et al. Systematic review and meta-analysis of antigen rapid diagnostic tests to detect Zaire ebolavirus. Diagn Microbiol Infect Dis. 2025](#)

Vetter P et al. Mpox : Une réponse équitable est nécessaire à l'urgence de santé publique. Rev Med Suisse. 2024

Fontana L et al. Case Series of Patients with Marburg Virus Disease, Equatorial Guinea, 2023. N Engl J Med. 2024

Ngai S et al. Marburg Virus Disease Outbreak Response Working Group. Outbreak of Marburg Virus Disease, Equatorial Guinea, 2023. Emerg Infect Dis. 2025

Mühlemann B et al. Comparative analysis of SARS-CoV-2 neutralization titers reveals consistency between human and animal model serum and across assays. Sci Transl Med. 2024

Essaidi-Laziosi M et al. Distinct phenotype of SARS-CoV-2 Omicron BA.1 in human primary cells but no increased host range in cell lines of putative mammalian reservoir species. Virus Res. 2024

Pérez-Rodríguez FJ et al. Identification of a measles variant displaying mutations impacting molecular diagnostics, Geneva, Switzerland, 2023. Euro Surveill. 2024

More information about our Centre can be found here:

- [Centre for Emerging Viral Diseases](#)
- [UNIGE DEMED Emerging viruses](#)

We are looking forward to further collaboration and support to continue our work!

With best wishes,



Pr. Isabella Eckerle



Dr. Pauline Vetter



Dr. Frédérique Jaquieroz



Dr. Andrew Azman