

A large, illuminated snake sculpture, possibly a cobra, is the central focus of the image. It is positioned in a museum or gallery setting, with its head raised and tongue flicking. The scene is lit with dramatic, low-key lighting, featuring a mix of red and blue tones. In the foreground, there are several large, dark, rectangular objects that appear to be art installations or containers, some with glowing elements. The background shows architectural details like railings and structural beams, all bathed in the same atmospheric lighting.

# Introduction to Containers and Snakemake

# Organizers/teachers

- **Valeria DiCola:** Coordination
- **Antonin Thiébaud:** PostDoc at UNIL  
Evolutionary-Functional genetics
- **Damir Zhakparov:** PhD candidate at  
SIAF/UZH in Davos
- **Geert van Geest:** trainer at  
SIB/bioinformatician at IBU Bern

# Learning outcomes

- Understand the basic **concepts** and **terminology** associated with virtualization with **containers**
- **Customize, store, manage** and **share** containerized environments with **Docker**
- Use **Singularity** to run containers on a shared computer environment (e.g. a HPC cluster)
- Understand the basic **concepts** and **terminology** associated with **workflow management systems**
- Create a computational **workflow** that uses **containers** with **Snakemake**

# Learning experiences

- Lectures
- Poll questions
- Exercises

# Question 1-4

# Communication

- Course website:

<https://sib-swiss.github.io/containers-introduction-training/>

- Slack
- Google docs

# Introduction round

- Current job/study
- Why you are joining this course