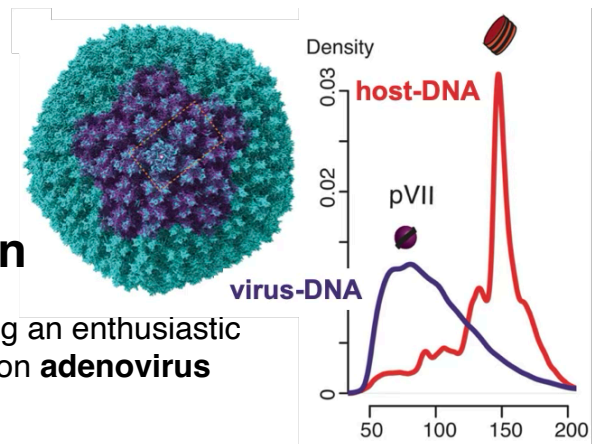


PhD Position

Epigenetic Structure-Function Relationship of Adenovirus Infection

The **Längst Lab** at the **University of Regensburg** is seeking an enthusiastic PhD student to join our team and contribute to our research on **adenovirus infection and chromatin dynamics**.



About the Project

Adenoviruses are widely used as gene therapy vectors, but a deeper understanding of their early infection process is crucial for developing improved therapeutics. This DFG-funded PhD project will focus on the intricate interplay between **adenovirus infection and chromatin structure** in both the virus and the host cell during early infection. The project involves:

- Investigating changes in both **viral and host chromatin structure** and their impact on **gene expression** during early adenovirus infection.
- Performing **Chromatin structure analysis, isolation of Protein-DNA complexes and RNA** of infected human cells, for the preparation of sequencing libraries.
- **Bioinformatics analysis of high-throughput sequencing data** (MNase-seq, ChIP-seq and RNA-seq) generated from adenovirus-infected human cells.

This project involves close collaborations with leading laboratories at the **LMU Munich** and the **University of Bordeaux**, studying early infection by proteomics and imaging technologies. The knowledge gained from correlating structural and functional changes during adenovirus infection has the potential to significantly advance the design of more effective therapeutic adenoviruses.

Our research (www.laengstlab.com), centers on understanding chromatin dynamics and its role in gene regulation. We are a collaborative and supportive team, committed to fostering the scientific growth of our members.

We're looking for a highly motivated candidate with:

- A **Master's degree** in biology/biochemistry, molecular biology, virology, or a related field with a strong interest to learn bioinformatic data analysis.
- A strong interest in **virology, epigenetics, and gene regulation**.
- Proficiency in scripting languages (e.g., Python, R) is highly advantageous.
- Excellent **communication skills** and the ability to work both independently and as part of a collaborative team.

How to Apply

If you are passionate about combining computational and experimental approaches to unravel virus-host interactions and contribute to the development of better gene therapies, we encourage you to apply. Please send your application, including a cover letter outlining your motivation and research interests, your detailed CV, and contact details of two academic references, to gernot.laengst@ur.de.

We look forward to hearing from you

Prof. Gernot Längst
Applied Epigenetics
University of Regensburg

