Stellenticket

FREIE UNIVERSITÄT BERLIN

Freie Universität Berlin - Fachbereich Biologie, Chemie, Pharmazie - Institut für Pharmazie Drittmittelprojekt ONEMUC

Research assistant (praedoc) (m/f/d)

with 65%part-time job limited to 3 years salary grade (Entgeltgruppe) 13 TV-L FU
reference code: ONEMuc-FluBind2

City: Berlin; Starting date (earliest): At the earliest possible; Duration: befristet auf 3 Jahre; Remuneration: Entgeltgruppe 13 TV-L FU; Reference number: ONEMuc-FluBind2; Closing date: 06/04/26

Tasks

The collaborative project ONEMUC – Respiratory Mucus as a One Health Interface investigates how the composition and structure of mucosal barriers (mucus) influence the zoonotic transmission of influenza A viruses between animals and humans. The aim is to identify key molecular and ecological factors that determine whether viruses are blocked or transmitted at the mucus barrier. ONEMUC thereby contributes to a better understanding of zoonotic infections and to the development of new strategies for prevention and risk assessment within the One Health framework. In the subproject carried out at FU Berlin the focus lies on the role of respiratory mucus as an antiviral barrier, particularly on the interaction of influenza viruses with defined mucus components. Mucus samples from various hosts (human, pig, bird) as well as from human cohorts exposed to different air quality conditions are analyzed biochemically and biophysically.
Through this work, FU Berlin makes an important contribution to understanding mucus-mediated antiviral defense mechanisms and provides novel entry points for preventive strategies to reduce zoonotic transmission risks.

Job description:

- Pull-down studies using immobilized virus particles to identify virus-binding proteins and peptides
- Enzymatic fragmentation of mucins to generate defined fragment libraries
- Establishment of standardized protocols to analyze virus–mucin interactions, including binding and fusion-inhibition assays using membrane models
- Recombinant production of identified virus binders, such as mucin fragments

Requirements

Requirements:
Completed academic degree in biochemistry or pharmacy (M.Sc. or Diplom), or an equivalent qualification.

Desirable:

- Very good academic record
- Solid experience in protein purification using chromatographic methods
- Knowledge and initial experience with biophysical techniques to study membrane fusion
- Knowledge and initial experience in virological methods (virus titration, propagation, and binding/fusion assays with cell membranes)
- Knowledge of proteomics methods and pull-down assays
- Experience in recombinant protein production using eukaryotic expression systems (e.g., mammalian cells, Leishmania tarentolae)
- High motivation for independent scientific research and strong ability to organize work efficiently, even under time pressure
- Strong team spirit as well as excellent social and communication skills
- Excellent command of English, both written and spoken

For further information, please contact Silke Benndorf (03083864398).

Application

Applications should be sent by e-mail, together with significant documents, indicating the **reference code, no later than 6th april, 2026** in PDF format (preferably as one document) to Prof. Dr. Daniel Lauster: s.benndorf@fu-berlin.de or postal to

Freie Universität Berlin
Fachbereich Biologie, Chemie, Pharmazie
Institut für Pharmazie
Drittmittelprojekt ONEMUC
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With an electronic application, you acknowledge that FU Berlin saves and processes your data. FU Berlin cannot guarantee the security of your personal data if you send your application over an unencrypted connection.
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More information at https://stellenticket.de/201858/FUB/
Offer visible until 06/04/26