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_FluBind

City: Berlin; Starting date (earliest): At the earliest possible; Duration: befristet auf 3 Jahre; Remuneration: Entgeltgruppe 13 TV-L FU; Reference number: ONEMuc-FluBind; 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:

- Chromatographic purification of mucins from various sources using FPLC
- Establishment of standardized protocols for mucin purification and storage
- Enzymatic fragmentation of mucins to generate fragment libraries
- Binding studies of mucins and their fragments to various influenza A viruses using microscale thermophoresis (MST) and solid-phase binding assays
- Inhibition studies assessing how mucins and their fragments block influenza virus binding to cell membranes

Requirements

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

Desirable:

- Very good to good academic degree
- Solid experience in protein purification using chromatographic methods
- Knowledge and initial experience with binding studies using biophysical techniques (e.g., SPR, MST, BLI)
- Knowledge and initial experience in working with viruses (titrations, propagation)
- High motivation for independent scientific work and strong ability to organize oneself efficiently, even under time pressure
- Ability to work well in a team, along with strong social and communication skills
- Excellent command of English, both written and spoken

For further information, please contact Silke Benndorf (030-83864398).

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
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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/201857/FUB/
Offer visible until 06/04/26