The Leibniz Institute for Resilience Research (LIR) gGmbH is a non-university research institute for the study of resilience, i.e. the maintenance or rapid recovery of mental health during or after acute or chronic stressful life circumstances. It investigates the mechanisms that mediate resilience, develops interventions that promote resilience and implements effective interventions in healthcare in companies, schools and universities.

The Computational Resilience Research group (Jun.-Prof. Dr. Janina Hesse) investigates resilience using theoretical and computational methods. In an interplay between mathematical modeling and modern data analysis, we unravel dynamic processes that shape individual resilience trajectories. As soon as possible, we are looking for a

Doctoral candidate or PostDoc (m/f/d)

The PhD position is initially limited to 65% (25 hours/ week) until 31.12.2027. The postdoctoral position is initially limited to 100% (38.5 hours/ week) until 31.12.2026. An optional contract extension is possible for both positions.

Temporary employment is based on the provisions of the Act on Temporary Employment Contracts in Science (WissZeitVG). The remuneration is based on EG 13 TV-UM (collective agreement of the Mainz University Medical Center).

Your tasks include:
- Interdisciplinary research at the intersection of modeling, machine learning and medicine.
- Theory, modeling and simulation of resilience as a dynamic system, e.g. network analysis via *generalized structural kinetic modeling*
- Evaluation of research data through state-of-the-art data analysis and artificial intelligence from mice (e.g. video-based behavioral analysis, event time series from learning paradigms) and longitudinal data from humans (e.g. predictive modelling)
- Close collaboration with experimental colleagues
- The 65% position is a qualification position with the aim of a doctorate

Profile:
- Completed university degree (diploma/master's degree) in life sciences, physics, computer science, mathematics or another quantitative discipline
- Sound programming skills, preferably in Python
- Ability to work independently and autonomously
- Creativity, ability to work in a team, strong communication skills, ability to quickly familiarize yourself with new topics, commitment and flexibility
- The working language is English, so you have very good written and spoken language skills

We offer:
- A challenging, highly dynamic and science-driven working environment
- Flat hierarchies, responsibility and a great deal of creative freedom
- Flexible working hours
- A wide range of training and development opportunities, e.g. via the Haufe Academy
- An employer-financed pension scheme for non-civil servants in the public sector (VBL)

- Cross-institute collaboration, membership of the Institute for Quantitative and Computational Biosciences (IQCB) at Johannes Gutenberg University Mainz

Jun.-Prof. Dr. Janina Hesse will be happy to answer any technical questions you may have by e-mail or in person (janina.hesse@lir-mainz.de).

Have we appealed to you? Then please send us your detailed application by e-mail only and in one coherent PDF file, stating your earliest possible starting date: recruiting@lir-mainz.de and janina.hesse@lir-mainz.de. Please enter the reference **number LIR_84** in the subject line.

Women are given preferential consideration for recruitment in the case of equivalent suitability, qualifications and professional performance, insofar and as long as there is an under-representation. This does not apply if there are such serious reasons in the person of an applicant that they outweigh the requirement for equal opportunities for women. Severely disabled applicants with equal qualifications will be given preference (proof required).

www.lir-mainz.de

Data protection information

Your personal data contained in the application documents or, if applicable, obtained in the interview will be processed exclusively for the purpose of the selection procedure for this advertised position.

The legal basis for data processing in the application process and as part of the personnel file is Section 26 (1) sentence 1 BDSG and Art. 6 (1) (b) GDPR and, if you have given your consent, for example by sending information that is not necessary for the application process, Art. 6 (1) (a) GDPR. The legal basis for data processing after a rejection is Art. 6 (1) (f) GDPR. The legal basis for storage under budgetary and tax law is Art. 6 para. 1 lit. c GDPR in conjunction with § SECTION 147 AO. Legitimate interest in processing based on Art. 6 para. 1 lit. (f) GDPR is the defense against legal claims.

As a rule, we do not require any special categories of personal data within the meaning of Art. 9 GDPR for the application process. We ask you not to send us any such information from the outset. If such information is exceptionally relevant to the application process, we will process it together with your other applicant data. This may, for example, concern information about a severe disability, which you can provide to us voluntarily and which we then must process in order to fulfill our special obligations with regard to severely disabled persons. In these cases, the processing serves the exercise of rights or the fulfillment of legal obligations arising from labor law, social security law and social protection. The legal basis for data processing is then Art. 9 para. 2 lit. b GDPR, §§ 26 para. 3 BDSG, 164 SGB IX. In exceptional cases, it may be necessary to obtain information about your health or a disability or information from the Federal Central Criminal Register, i.e. about previous convictions, in order to assess your suitability for the intended job. The legal basis for this is § 26 BDSG.

The person responsible for the application procedure is the addressee of the application specified below in this call for applications.

As part of the application process within the Leibniz Institute for Resilience Research (LIR), your personal data will be passed on to Members of the selection committee, the personnel administration, the equal opportunities officer, the representative for severely disabled persons and, if applicable, the works council within the scope of their organizational or legal responsibilities.

Your personal data will be deleted no later than six months after completion of the selection process. According to the GDPR, you have the following rights vis-à-vis the addressee of the application if the relevant legal requirements are met right of access (Art. 15 GDPR), right to rectification of inaccurate personal data (Art. 16 GDPR); data erasure (Art. 17 GDPR), restriction of processing (Art. 18 GDPR) and objection to processing (Art. 21 GDPR).

If you have any questions, you can contact the LIR data protection officer (datenschutzbeauftragte@lir-mainz.de). You also have the right to lodge a complaint with the Rhineland-Palatinate Data Protection Officer.

Link to the privacy policy of LIR gGmbH: https://lir-mainz.de/datenschutz