

The Johannes Kepler University in Linz (Austria) is offering a

PHD STUDENT POSITION (F*M)

at the

Institute for Mathematical Methods in Medicine and Data-Based Modeling
(part-time, 30hrs per week)

for a duration of 3 years, starting as soon as possible.

The position is partly funded by the Linz Institute of Technology SeedMedPlus 2022 call as part of the project ***Next Generation Veno-Venous ECMO Via Flow Optimization***, led by Prof. Dr. Luca Gerardo-Giorda from the Institute for Mathematical Methods in Medicine and Data-Based Modeling (M3DM) and by Prof. Dr. Jens Meier from the Department of Anaesthesiology and Intensive Care Medicine (AICM) of the Kepler University Klinikum.

The PhD student will join M3DM and collaborate with AICM and the Mathematical Methods in Medicine and Life Sciences Group at RICAM, the Johann Radon Institute for Computational and Applied Mathematics of the Austrian Academy of Sciences (ÖAW). The goal of the project is the development of ***patient specific simulations to optimize the efficacy of Extra-Corporeal Membrane Oxygenation (ECMO)***, a well-established procedure used in Intensive Care Units (ICU) to treat patients with either pulmonary or circulatory failure.

Our offer:

- Close mentorship: the student will receive mentorship from both principal investigators, who foster healthy mentor-mentee relationships.
- The opportunity to work in an international and lively research environment, collaborate with experts in the field and medical doctors.
- A working time of 30h/week and a corresponding annual gross salary of € 34.411,72 according to the salary scheme of the Johannes Kepler University (JKU).
- German language is not required for the job, and we highly welcome international applications. Linz offers a lively and diverse atmosphere and Vienna is a little over 1h by train.

Your profile:

- Master's degree in Applied Mathematics, Engineering, Computer Science or similar.
- Experience with C++ and Python programming languages.
- A keen interest in medical applications.
- Proficiency in English.
- Strong background in Finite Element Method (desirable).

Scientific inquiries about the position can be directed to Prof. Dr. Luca Gerardo-Giorda (luca.gerardo-giorda@jku.at).

Applications containing a scientific CV, a short research statement, and references for possible recommendation letters should be sent via email to cornelia.strasser@jku.at indicating in the subject "PhD position application: ECMO". The position will be open until adequately filled.

The Johannes Kepler University pursues a non-discriminatory employment policy and values equal opportunities, as well as diversity. Individuals from underrepresented groups are particularly encouraged to apply.