PhD Candidate - CKDNapp

Arbeiten am Universitätsklinikum der Zukunft

Das Universitätsklinikum Schleswig-Holstein (UKSH) verbindet internationale Spitzenforschung mit interdisziplinärer Krankenversorgung. Wir sind einziger Maximalversorger und größter Arbeitgeber des Landes. Unsere mehr als 15.000 Mitarbeiter*innen stellen eine höchst individuelle Versorgung sicher - unverzichtbar für die Menschen in Schleswig-Holstein.

PhD Candidate in Biomedical and Metabolomics Data Analyses

At the workgroup "Clinical Metabolomics" (AG Zacharias), Department of Internal Medicine I and Institute of Clinical Molecular Biology of the University Medical Center Schleswig-Holstein and the Christian-Albrechts-University Kiel
The University Hospital Schleswig-Holstein (UKSH) combines top international research with interdisciplinary patient care. We are the state's only maximum care provider and largest employer. Our more than 15,000 employees ensure highly individualized care - indispensable for the people of Schleswig-Holstein.

About us
We are an interdisciplinary research team from the research areas metabolomics, bioinformatics, (computational) biology, and statistics. We are working with biomedical and metabolomics data from the German Chronic Kidney Disease (GCKD) study to identify novel biomarker signatures for adverse chronic kidney disease patient events. For more information please visit our homepage https://www.ikmb.uni-kiel.de/research/junior-research-groups/clinical-metabolomics.

We are part of the **e:Med junior consortium CKDNapp**, a highly interdisciplinary research consortium with a focus on **computational diagnostics in nephrology.**

Our overall goal is to model large-scale biomedical and metabolomics data from the GCKD study, one of the world-wide largest cohorts of chronic kidney disease patients including ~ 5,000 participants, by state-of-the-art and newly developed machine learning methodology, to interpret the results within a biomedical context, and to use the estimated models as a backbone for a clinical decision support software, called **CKDNapp** (CKD Nephrologists' app; https://ckdn.compbio-hohenheim.com/), which will support medical doctors in **personalizing treatment of CKD patients**. Relevant publications can be found at https://scholar.google.de/citations?user=k2vsCFQAAAAJ&hl=de.

Start in our Team

Join our team and support us at the next possible time.

We offer

- The salary will be based on the German E13 TV-L scale, if terms and conditions under collective bargaining law are fulfilled
- A part-time employment 25hours / week.
- A PhD candidate position for 36 months in a young team of scientists.
- Candidates get the opportunity to work with various types of biomedical/metabolomics data from a large and well-phenotyped cohort study and to work in an interdisciplinary research team with excellent international connections.
- Moreover, we will work in close contact with our medical/experimental partners at the University Clinic Freiburg, University Medical Center Göttingen, the Helmholtz Center Munich, and the University of Regensburg.
- We are very interested in the personal development of our employees and therefore will offer opportunities for both national and international workshop and conference visits, deep embedding into the CKDNapp junior consortium as well as into the research group. "Clinical Metabolomics" at the Institute of Clinical Molecular Biology and the Department of Internal Medicine I.

Your profile

We are looking for an enthusiastic and motivated PhD candidate with a Master degree in **data science / bioinformatics / (computational) biology / physics** or similar research fields. Ideally, the candidate should have a strong background in the work with **biomedical and metabolomics data**, **machine learning**, and **statistical programming tools like *R* or PYTHON**. Moreover, we expect the ability to work independently and as a team member. Work tasks include:

- Training and evaluation of high-dimensional machine learning models (e.g. Cox regression, LASSO regression, probabilistic graphical models) based on both biomedical and metabolomics (longitudinal) data
- Interpretation of machine learning models within biomedical context with the aid of expert nephrologists
- Presentation to the scientific community, i.e., by publishing in high-ranked journals and via presentations at international conferences
- Co-supervision of undergraduate student work in the CKDNapp project
- Close interaction with bioinformaticians, mathematicians, wet lab biologists and physicians in CKDNapp

Required Skills:

- Master degree in **data science/bioinformatics/(computational) biology/physics** or similar research fields
- First experience in high-dimensional statistical/bioinformatics/machine learning data analysis of biomedical (and metabolomics) data
- Fluency in English and German
- Programming skills in *R*
- Enthusiasm and motivation

Desired Skills:

- programming skills in PYTHON
- experience with NMR-based and/or mass spectrometry-based metabolomics data
- experience or interest in nephrology research

Apply

Applicants are requested to provide a letter of motivation, a curriculum vitae (including a list of publications, if applicable), and transcripts of records. As part of the selection procedure, we may invite potential candidates for an interview. The call will be open for application until **30.09.2021**. Where women are underrepresented they will be given preferential consideration when their level of qualification equals that of male candidates.

Send applications via email to Prof. Dr. H. Zacharias (h.zacharias@ikmb.uni-kiel.de). For additional information about the vacancy please contact Prof. Dr. H. Zacharias (h.zacharias@ikmb.uni-kiel.de).

Our strengths - your advantages at UKSH
We support you in balancing work and family life, and we also think about your future - employees can benefit from a variety of offers:
In-house childcare | Healthy at work - company health management | company social counseling | company and university sports | fitness at company rates | continuing education and training opportunities | company pension plan (VBL) | attractive employee discounts.
UKSH and its subsidiaries follow the principles of equal opportunity; we value diversity. That is why we expressly welcome applications from all members of society. We continuously work on the equality of all genders.

Haben wir Ihr Interesse geweckt?

Dann freuen wir uns auf Ihre Bewerbung unter Angabe Ihres nächstmöglichen Eintrittstermins und der Ausschreibungsnummer.

Unsere Stärken - Ihre Vorteile am UKSH

Bei der Vereinbarkeit von Beruf und Familie unterstützen wir Sie und auch an Ihre Zukunft ist gedacht - Mitarbeiterinnen und Mitarbeiter können von einer Vielzahl an Angeboten profitieren:

Innerbetriebliche Kinderbetreuung | Gesund im Beruf - betriebliches Gesundheitsmanagement | betriebliche Sozialberatung | Betriebs- und Hochschulsport | Fitness zum Firmentarif | Fort- und Weiterbildungsmöglichkeiten | betriebliche Altersvorsorge des öffentlichen Dienstes | individuelle Arbeitszeitmodelle | Starterpakete | E-Learning & Online-Wissensbibliotheken | UKSH Akademie | begleitende Karriereprogramme | attraktive Mitarbeiterrabatte und vieles mehr.

*Das UKSH und seine Töchter folgen den Grundsätzen der Chancengleichheit, wir schätzen Vielfalt. Darum begrüßen wir ausdrücklich Bewerbungen von allen Mitgliedern der Gesellschaft. Kontinuierlich arbeiten wir an der Gleichstellung von Frauen und Männern.

Campus Kiel

Veröffentlicht am: 02.09.2021
Standort:
Kiel, Schleswig-Holstein, DE, 24105
Ausschreibungsnummer: 8727

Haben Sie Fragen?

Ihr Kontakt zu uns:
Prof. Dr. Helena Zacharias
0431 - 500 22274

Recruiter*in:
Gordon Jäckel
0431 - 500 11196

Jetzt bewerben »