Stellenausschreibung für die Stellenbörse der DGEpi/
Job offer for the job portal of the DGEpi

Position	**PhD position on 'Association of the pituitary-thyroid axis with COVID-19 infection and vaccine-based immune response in the general German population' in Greifswald, Germany**
Arbeitgeber/ Employer	**Institute of Molecular Biology Mainz**
Arbeitsort/ Location	**Greifswald University Medicine**
Gehalt bzw. Gehaltsstufe/ Salary scale	**TVL E13 65%**
Arbeitszeit/ Hours	**Full time**
Vertragsdauer/ Contract type	**3 years**
Bewerbungsfrist/ Application deadline	**31 August 2024**
Kontaktperson/ Contact person	coage-recruiting@imb.de
Weitere Bewerbungs-informationen/ Information for applicants	Different organs like thymus, spleen or lymph nodes are important for proper functioning of the body's immune system. The involvement of thyroid hormones (T3 and T4), that are secreted in response to thyroid stimulating hormone (TSH) from pituitary glands, target the immune system to modulate specific immune responses like natural killer cell activity, antiviral action of interferon and proliferation of T and B-lymphocytes. Some studies associated thyroid dysfunction (lower fT3, fT4, TT3) with a variety of poor outcomes during COVID-19 infections including critically increased in-hospital mortality, prolonged hospital stay and increased serum biomarkers of inflammation and cardiac injury in COVID-19 patients. Despite the association, a study using Mendelian randomization models did not find any susceptibility to COVID-19 in patients with thyroid dysfunction. It remains an open question whether and to which extend COVID-19 infections influence thyroid functions and vice versa. The aim of the proposed CoAGE PhD project is to assess whether antibody titres correlate with proper thyroid functioning after COVID-19 infection or vaccination within the Study of Health in Pomerania (SHIP). In all SHIP

	cohorts, measurements of TSH, fT3, fT4 and anti-TPO-antibodies as well as sonographic measurements of thyroid volume, nodules and thyroid patterns are available. In SHIP-COVID, a large number of COVID-related parameters like anti-spike and anti-nucleocapsid proteins antibodies have been measured at different time points in around 800 individuals of the SHIP-START cohort. We will use different regression models to analyse the association of thyroid size and functional parameters with the immune response induced by SARS-CoV-2 infection and vaccination. In addition, we will also investigate the association of inflammatory parameters (hsCRP, fibrinogen and white blood cells count) with the COVID-19 infection as well as with the thyroid functional parameters. This will enable us to understand the role of a healthy thyroid in combatting viral infections. We will extend the study with the similar set of analyses to other German Cohorts like the Gutenberg Health study and the German National Cohort. Supervision: Henry Völzke (Greifswald University Medicine); The SHIP Cohorts
Datum der Anzeige/ Date posted	**01.08.2024**
Link zur Stellenaus-schreibung/ Link to job posting	**CHA Mainz**