**Call for Master Thesis**

Department:Department of Experimental Rheumatology,

Institute of Rheumatology, Na Slupi 450/4, Prague 128 00

Head of Lab: prof. MUDr. Ladislav Šenolt, PhD

Branch of study: Immunology or Molecular Biology and Genetics, Master degree programme

Number of positions: 1

Requirements:

* Complete Bc. Degree in the field relevant to biology, genetics, or biochemistry
* Good communication and interpersonal skills
* Fluency in spoken and written English is beneficial

**Screening for circulating biomarkers characterizing early axial spondyloarthritis and progression of the disease**

**Annotation:** Axial Spondyloarthritis (axSpA) is a chronic, inflammatory rheumatic disease affecting the axial skeleton and causing pain, stiffness and fatigue. The disease typically starts in early adulthood affecting sacroiliac joints, axial skeleton and entheses (tendon or ligament attachments to bone), including extraarticular manifestations (uveitis, psoriasis or inflammatory bowel disease). Current research focuses on discovering new biomarkers predicting progression of non-radiographic into radiographic form of axSpA, spinal involvement characterized by rapid formation of syndesmophytes as well as development of extraarticular manifestations.

We are looking for a highly motivated student who would participate in this research and identify potential miRNA- and protein-based biomarkers from high-throughput (miRNome and proteome) screenings predicting the development of radiographic progression of the disease. Selected candidates will be subsequently validated on a new patient cohort using qRT-PCR, ELISA or other appropriate techniques. The student will gain a wide range of knowledge of various laboratory techniques and their practical application. Additionally, he/she will participate in the preparation of the publication as a main or co-author.

To apply please contact the supervisor of this project to e-mail: **baloun@revma.cz**