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# Scientific research groups

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- **Preventable diseases** ( prof. MUDr. Lenka Borská, Ph.D. ): The research focuses on the study of preventable immuno-pathophysiological mechanisms of the origin and development of selected civilization diseases - obesity, metabolic syndrome, diabetes mellitus, cancer, and psoriasis vulgaris.
- **Aging research** ( MUDr. Pavel Borský, Ph.D. ): Research on the biological process of aging with the aim of identifying and analyzing factors that influence aging with respect to different health conditions and patient groups, using modern methods and techniques from the fields of genetics, epigenetics, and metabolomics.
- **Toxicology** ( prof. Ing. Zdeněk Fiala, CSc. ): Research is focused on the study of the response of the organism to exposure to selected chemical substances with a focus on nanoparticles and nanomaterials.
- **General Practice and Public Health** ( doc. Býma ), **Epidemiology and Vaccinology** ( prof. MUDr. Roman Prymula, CSc., Ph.D. ): Research in the fields of public health and general practice focuses on optimization of the network of general practice providers in the Czech Republic and on legislative modifications of their competences. Research in the field of epidemiology is oriented to the areas of clinical epidemiology, epidemiology of non-communicable diseases, pharmacoepidemiology, medical statistics, and the strategy of planning clinical trials of new vaccines.
- **Psychosocial Issues and Ethics** ( doc. PhDr. Jana Marie Havigerová, Ph.D. ): The research focuses on the assessment of patients' quality of life (Well-being), medical ethics, psychosomatic diseases, and doctor-patient communication.