Šárka Růžičková

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Biotechnology Division

Laboratory of Diagnostics of Autoimmune Diseases





Šárka Růžičková, RNDr / Head of Laboratory Irena Veselá / Technician Alena Halouzková / Technician Martina Bajziková / Diploma Student Lucie Nováková / Diploma Student

Research topics

The research of this newly established laboratory is focused on: (1) humoral and genetic aspects of autoimmune diseases such as rheumatoid arthritis, systemic lupus erythematodes and myositis; (2) identification of target molecules for therapy of these diseases; (3) development and design of new diagnostics for autoimmune diseases. Single-cell RT-PCR is used as a unique technique in our research.

Current grant support

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Biotechnology Division Laboratory of Recombinant Ligand Engineering





Peter Šebo, PhD / Head of Laboratory Jingjing Li, PhD / Postdoc Milan Kuchař, PhD / Postdoc Hana Petroková, PhD / Postdoc Petr Jeřábek, MSc / PhD Studentt

Research topics

The research of this newly established laboratory will be focused on structural biology and protein engineering of novel scaffolds of small non-immunoglobulin type recombinant binding proteins, aiming to deepen our understanding of structure-function relationships that underlie high-affinity protein-protein interactions. The acquired knowledge and generated novel binding protein tools are expected to be useful in various research and diagnostic applications, including design of microfluidic nanoimmunosensors for detection of cytokines.

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