

Master thesis project I – Engineering of future protein therapeutics

Within the field of protein technology, new valuable proteins are constantly being developed with the aim to be used for detection of numerous diseases, as treatment for various diseases and to aid production of protein therapeutics. By modifying existing proteins, specific desired properties and improved functionality can be obtained. In our group, we work with protein engineering and in this project the focus lies on developing calcium-dependent proteins to be used for targeting cancer or inflammatory diseases such as rheumatoid arthritis. Recently, a combinatorial library of many different variants of calcium-dependent proteins was created with the aim to use phage display to select for proteins that can bind to a disease-causing target solely in the presence of calcium. The vision is that this could enable a more effective treatment of certain diseases in the future.

The master thesis project we have in mind will focus on characterizing the proteins found during phage display selections targeting cancer or inflammatory diseases in order to evaluate if they have the properties needed to be further developed as a protein drug. Working with this will result in experience of using many different laboratory techniques useful to know in any lab setting such as cloning and protein production, purification and analysis.

If this sounds of interest to you, don't hesitate to contact:

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