

## ItPS Seminars

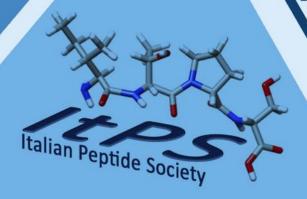
Jutta Eichler Professor Friedrich-Alexander-Universität

Structure-based design of antiviral peptides

The structure-based design of peptides capable of functionally mimicking the binding sites of proteins represents a promising strategy for the exploration and understanding of protein structure and function. In addition to their basic significance, such protein mimetic peptides are also useful tools for a range of biomedical applications, in particular the inhibition of disease-associated protein-protein interactions. Our research focus is on exploring virus -host protein interactions with the aim to design inhibitory peptides.

These peptides, which include antibody and receptor mimetic

molecules, are generated through chemical synthesis, enabling chemical modification to improve their inhibitory activity, as well as metabolic stability. Examples of our research include peptides targeting HIV-1, human cytomegalovirus (HCMV), as well as SARS-CoV-2. These studies provides pecific insight into the molecular details of the respective protein interactions, as well as to probe pathways towards novel antiviral strategies.







## ItPS Seminars



Jutta Eichler Prof. Dr.

Friedrich-Alexander-Universität Erlangen-Nürnberg, Erlangen/D

Structure-based design of antiviral peptides





