## What do structural studies tell us about protein function?

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## Abstract

High resolution structural studies of proteins, both by X-ray crystallography and NMR, provide a wealth of information about three-dimensional architecture of the macromolecules. Since 3D structural organization mediates protein function, the detailed structural information holds a promise of revealing the function of a particular studied biomolecule. Determination of the function by the structure is not, however, a straightforward and easy process. In this presentation we will discuss our experience with use of X-ray crystallography protein structures to comprehend protein function and activity.