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OSNAT HERZBERG

Biography



CONTACT INFORMATION

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Professor

Education

Ph.D. Biochemistry, Weizmann Institute, 1982

Research Interests

Structural Biology, Protein Crystallography.

We are Structural Biologists interested in the relationship between the function and structure of proteins. We use X-ray crystallography to determine the structures of our molecules of interest, and various computational tools to analyze these structures. Some of our projects include:

- Mechanisms of complex human disease

- Structure and function of Myovirus phage CBA120 tailspike proteins

- Giardia Drug Targets – structure, function and inhibitor design.

- The pyruvate phosphate dikinase and Enzyme I molecular machines: Spare parts and swiveling domain mechanism.

Publications

Thakur M, Sharma K, Chao K, Smith AA, Herzberg O, Pal U. 2017. "A protein-protein interaction dictates Borrelial infectivity". *Sci Rep*, 7:2932.

Chao, K. L., L. Kulakova, and O. Herzberg. 2017. "Gene polymorphism linked to increased asthma and IBD risk alters gasdermin-B structure, a sulfatide and phosphoinositide binding protein.". *Proc Natl Acad Sci U S A* 114(7):E1128-E1137.

Pal, L. R., K. L. Chao, J. Moulton, and O. Herzberg. 2017. "Reply to HU et al.: On the interpretation of gasdermin-B expression quantitative trait loci data.". *Proc Natl Acad Sci U S A* 114(38):E7863-E7864.



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