

You are cordially invited to a talk in the Edmond J. Safra Center for Bioinformatics Distinguished Speaker Series.

The speaker is Prof. Roland L. Dunbrack, Jr., Institute for Cancer Research, Fox Chase Cancer Center, Philadelphia, USA.

**Title:** "Structural Bioinformatics for Protein Structure Prediction and Design"

**Time:** Wednesday, 21 May 2014, at 14:15 sharp (refreshments from 14:00)

**Place:** Sherman Bldg, room 105, Life Sciences Faculty

**Abstract:** The Protein Data Bank (PDB) provides a rich source of information when viewed as a whole. Statistical analysis of structural features from atom-atom contacts and dihedral angles to biological and crystallographic interfaces have become a branch of modern bioinformatics and computational biology. I will present results of several studies that seek to improve our understanding of protein structure and function and our ability to predict structure from sequence, when an experimental structure is not yet available. Specific results on kinase autophosphorylation structures and antibody computational design will also be presented.

**Host:** Prof. Nir Ben-Tal, [NirB@tauex.tau.ac.il](mailto:NirB@tauex.tau.ac.il), The Department of Biochemistry and Molecular Biology, Life Sciences Faculty