



Red
Estructura
Función y
Evolución de
Proteínas



Minicourse in Protein Physics

Esfuerzo conjunto entre REFEP y la Red Temática de Proteínas, Priones y Enfermedades Neurodegenerativas (PRyEND)

Hotel Holiday Inn

Cuernavaca, Morelos

30 de noviembre, 1 y 2 de diciembre de 2017

Goal:

This minicourse offers insights on protein structure and function using physical concepts. As a case study, we will focus proteins involved in neuronal processes. A (at least basic) knowledge on quantum mechanics, thermodynamics and electrostatics is useful to appreciate the topics here.

Program:

Molecular basis of neurotransmission. Neuronal cascades. Thermodynamics basis of proteins' and nucleic acid structures. Intermolecular forces in Proteins. Ligand/protein interactions. Molecular simulation and electrostatic modeling: basic principles. Applications to receptors and enzymes. Investigation of key molecular events for protein function and dysfunction.

Prof. Paolo Carloni

Institutes for Neurobiology and Medicine (INM-9) and Advanced Simulation

Juelich Research Center

Department of Physics, RWTH University of Aachen, Germany

Coordinadores: Dra. Liliana Quintanar (REFEP) y Dr. José Antonio De la Peña (PRyEND)

PROGRAMA

Hora	Jueves 30 de noviembre	Viernes 1 de diciembre	Sábado 2 de diciembre
8:00 - 9:00 hrs		Desayuno	Desayuno
9:00 - 10:00 hrs		Minicourse in Protein Physics - Module 3	Minicourse in Protein Physics - Module 3
10:00 - 10:30 hrs		Coffee Break	Coffee Break
10:30 - 11:30 hrs		Minicourse in Protein Physics - Module 4	Minicourse in Protein Physics - Student Short Talks
11:30 - 12:00 hrs		Coffee Break	Coffee Break
12:00 - 13:00 hrs		Minicourse in Protein Physics - Module 5	Minicourse in Protein Physics - Student Short Talks
13:00 - 16:00 hrs	Registro y Comida	Comida	Comida
16:00 - 17:00 hrs	Minicourse in Protein Physics - Module 1	Mesas de discusión de la PRyEND	Mesas de discusión de la PRyEND
17:00 - 17:30 hrs	Coffee Break		
17:30 - 18:30 hrs	Minicourse in Protein Physics - Module 2		
18:30 - 20:00 hrs	Cena	Cena	Cena