



THE UNIVERSITY of TEXAS

HEALTH SCIENCE CENTER AT HOUSTON

SCHOOL of HEALTH INFORMATION SCIENCES

JOHN P. MCGOVERN TOWN MEETINGS IN MOLECULAR IMAGING SEMINAR

Structural Plasticity of Replicative Helicases: Results from Electron Microscopy (and Challenges Ahead)



Jose-Maria Carazo, Ph.D.
Centro Nacional de Biotecnologia
Madrid, Spain

Dr. Carazo will demonstrate recent 3D reconstructions of bacterial homologues of the replicative helicase DnaB that present the macromolecule in different conformational states. The DNA-protein complex formed by the double hexamer of the Large T Antigen of SV40 sheds light on the molecular origins of replication in eucaryotic systems. Instigated by these experimental results, some of the challenges that exist in the EM field in the areas of data processing, analysis and integration will be addressed. These represent key areas where methodological progress promises to enhance our detailed understanding of complex macromolecular machines.

Dr. Carazo is Deputy General Director for Research Planning in the Spanish Ministry of Science and Technology and works as professor and consultant at three institutions and at a startup company in the Madrid area. His research interests include EM and large biological databases of complex objects in structural biology and new query tools in these fields, as well as mathematical aspects of image processing.

DATE: Wednesday, August 6, 2003

TIME: 4:00PM – 5:30PM

PLACE: Trevisio Restaurant, 6th floor,

**John P. McGovern Medical Center Commons,
6550 Bertner Ave., Houston, TX 77030**

**Drinks
and snacks
complimentary**

Parking in the Commons will be validated by Trevisio Restaurant
For information contact Dr. Yao Cong at 713.500.3967