

# May 11: Helen Berman, Creating an Open and Sustainable Resource for Structural Biology



## SYNOPSIS:

As the crystal structures of biological macromolecules were being determined, a new field of structural biology was born. Inspired by these new structures, the scientific community worked to establish a home to archive and share the data emerging from these experiments. The Protein Data Bank (PDB) was established in 1971 with seven structures. The PDB provides a repository for scientists who generate the data, and an access point for researchers and students to find the information needed to drive additional studies. Today, the PDB contains and supports online access to ~117,000 biomacromolecules that help researchers understand aspects of biology, including medicine, agriculture, and biological energy. The ways in which the interrelationships among science, technology, and community have driven the evolution of the PDB resource for more than 40 years will be discussed. The PDB archive is managed by the Worldwide Protein Data Bank ([wwpdb.org](http://wwpdb.org)), whose members are the RCSB PDB, PDBe, PDBj and BMRB.

## Session details...BIO:

Helen M. Berman is a Board of Governors Professor of Chemistry and Chemical Biology at Rutgers, The State University of New Jersey. From 1998-2014, she was the Director of the Research Collaboratory for Structural Bioinformatics Protein Data Bank (RCSB PDB). RCSB PDB is a member of the Worldwide Protein Data Bank (wwPDB) that manages the PDB archive of information about the structures of proteins, nucleic acids, and complex assemblies. She serves in leadership roles for the EMDataBank, the Structural Biology Knowledgebase, and the Nucleic Acid Database. She received her Ph.D. in Chemistry in 1967 from the University of Pittsburgh under the direction of George Alan Jeffrey. Prior to joining the Rutgers faculty in 1989, she was a faculty member at the Fox

Chase Cancer Center. In addition to her work on structural databases and ontologies, she has had an active research career in structural biology with a particular focus on nucleic acid-containing systems and collagen. She is the recipient of several awards, including the Benjamin Franklin Award for Open Access in the Life Sciences, the DeLano Award for Computational Biosciences, and the Carl Brändén Award.

## SUMMARY:

**Topic:** Creating an Open and Sustainable Resource for Structural Biology

**Speaker:** Helen Berman, Ph.D.

**Date:** Wednesday, May 11, 2016

**Time:** 11 AM – 12 PM ET

You are invited to listen to Dr. Berman's presentation in Room 2E908 in the NCI Shady Grove Building on Medical Center Drive or via WebEx.

**Presentation:** A screen cast of the presentation will be available for viewing after the event on the [NCI CBIIT Speaker Series YouTube Playlist](#) 

## About the NCI CBIIT Speaker Series:

The National Cancer Institute (NCI) Center for Biomedical Informatics and Information Technology (CBIIT) Speaker Series is a bi-weekly knowledge-sharing forum featuring both internal and external speakers on topics of interest to the biomedical informatics and research communities. For additional information, including past speaker series presentations, visit the [CBIIT Speaker Series page](#).

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