

***FiberNet/BioCAT* Fiber Diffraction Workshop**
October 15-17, 2009
Advanced Photon Source, Argonne, IL

Scientific Program – Version of 9/30/09

Thursday October 15th

Bldg. 401, Room E1100-E1200

- 9:00 am Gerald Stubbs (Vanderbilt) – Welcome and Overview of FiberNet
9:15 am Tom Irving (BioCAT, IIT) – Introduction to BioCAT
9:30 am Raul Barrea/Joseph Orgel (BioCAT, IIT) – The Fiber Crystallography Program at BioCAT
10:00 am Coffee Break
10:30 am Robert Henning (BioCARS, U.Chicago) – Fiber Crystallography at BioCARS
11:00 am Nick Terrill (DIAMOND)– Non-Crystalline Diffraction at DIAMOND
11:30 am Poster talks - to be selected from contributed abstracts
12:30 pm Lunch (provided)
1:45 pm Gerald Stubbs (Vanderbilt) – Amyloid Structure by Fiber Diffraction
2:10 pm Holger Wille (UCSF) – X-ray Fiber Diffraction Reveals Major Structural Differences between Brain-derived Prions and Recombinant Prion Protein Amyloid
2:30 pm Tom Irving (BioCAT, IIT) -Time resolved X-ray fiber Diffraction of Insect Flight Muscle
3:00 pm Stephen Meredith (U.Chicago) – The Variety of Protein Fibrils as Shown by X-ray Diffraction and NMR
3:30 pm Poster Session
6:00 pm Dinner (provided)

Friday October 16th

Bldg. 401, Room E1100-E1200

- 9:00 am Olga Antipova (IIT) Molecular Structure of Type II Collagen
9:30 am Joseph Orgel (IIT) - Molecular Architecture of the Collagen Based Extracellular Matrix
10:00 am Coffee
11:00 am Jennifer Lewis (Ohio State) - Investigation of Fibril Ultrastructure in Optic Nerve by X-Ray Scattering
11:30 am Paul Langan (LANL) Microdiffraction Studies of Cellulose and Biomass
12:00 noon Lunch (provided)
1:00 pm Software for Analyzing Fiber Diffraction Patterns

Bldg. 435 and 434

- 2:30 pm Practical workshops on the BioCAT beamline 18ID and BioCARS beamline 14 BM-C

Saturday October 17th

Bldg. 435 and 434

- 9:00 am - ? Practical workshops on the BioCAT beamline 18ID and BioCARS beamline 14 BM-C