

**THE SMALL-ANGLE X-RAY SCATTERING CORE FACILITY OF CENTER FOR
CANCER RESEARCH OF NATIONAL CANCER INSTITUTE**

Lixin Fan^a and Yun-Xing Wang^b

^a *Basic Science Program, Frederick National Laboratory for Cancer Research, Leidos
Biomedical Research, Inc., Frederick, MD 21702, USA*

^b *Structural Biophysics Laboratory, Center for Cancer Research, National Cancer Institute,
Frederick, MD 21702, USA*

Small-angle X-ray scattering (SAXS) is a powerful tool for structural biology research. It allows studying the structure of macromolecules and their complexes in near physiological environments and studying structural changes with external conditions. The SAXS Core Facility of Center for Cancer Research (CCR) is officially established in 2013. The SAXS core includes in-house state-of-art SAXS instrument and routine access to beamtime from the Advanced Photon Source at Argonne National Lab through the partnership user program agreement. The SAXS Core opens to all NIH intramural and extramural research communities. The mission of the SAXS Core Facility is to provide support to research projects of CCR PIs, NIH intramural and extramural research groups/laboratories. The support includes providing expertise in experimental design, data collection, processing, analysis and interpretation. The research field includes but not limited to structural studies of nucleic acids, proteins, protein assemblies, virus particles, lipid membranes and membrane-protein/DNA complexes. This poster gives introduction to the SAXS Core Facility of CCR and presents highlights of recent scientific achievements produced by the SAXS Core users.

SAXS Core website: <https://ccr-staging.ncifcrf.gov/resources/sbl/Saxs/default.aspx>

Lixin Fan: lixin.fan@nih.gov