



Rosenzweig of DND-CAT & Northwestern University Receives MacArthur Grant

Amy Rosenzweig, Associate Professor of Biochemistry, Molecular Biology, and Cell Biology at Northwestern University in Evanston, Illinois, has been named a 2003 MacArthur Fellow. Rosenzweig is a member of the DuPont-Northwestern-Dow (DND) Synchrotron Research Center (sector 5 at Argonne National Laboratory's Advanced Photon Source). The Advanced Photon Source is a national synchrotron radiation research facility funded by the U.S. Department of Energy, Office of Science, Office of Basic Energy Sciences.

According to the announcement made on Sunday, October 5, by the MacArthur Foundation, "Rosenzweig uses x-ray crystallography to explore the structural basis for the activity of proteins that regulate metal trafficking." Rosenzweig, the only Illinois resident chosen, was one of 12 women and 12 men awarded one of the foundation's no-strings-attached "genius grants" of \$500,000, payable over the next five years, to be spent as the recipient sees fit. Daniel J. Socolow, director of the MacArthur Fellows program, was quoted in *The Chicago Tribune* as calling Rosenzweig "one of the great ones this year."

Argonne Associate Laboratory Director and Advanced Photon Source Director Murray Gibson said of the award, "We are delighted that Amy has received this outstanding recognition, which reflects the importance of synchrotron-based protein crystallography."

The MacArthur Fellowship goes to Rosenzweig specifically for her studies of metalloproteins, which contain metal ions such as iron, copper or zinc in addition to carbon, oxygen, nitrogen, hydrogen and sulfur atoms. These proteins are essential to many biological processes, such as respiration and defense against oxidative stress. Rosenzweig has of late been studying the manner in which cells handle copper, an essential nutrient that can be toxic at high concentrations. The studies may lead to new insights into Wilson disease or Lou Gehrig's disease.

John Quintana, Director of DND, noted, "Amy is an active user of 5-ID as a member of DND-CAT and has been instrumental in advancing the capabilities for synchrotron-based structural biology research within DND."

Among Rosenzweig's recent publications based on studies at DND is: A.L. Lamb, A.S. Torres, T.V. O'Halloran, and A.C. Rosenzweig, *Nat. Struct. Biol.* 8, 751-755 (2001).

(See: http://www.macfound.org/programs/fel/fellows/rosenzweig_amy.htm, <http://www.suntimes.com/output/news/cst-wns-genius05.html>, and <http://www.chicagotribune.com/features/health/chi-0310050066oct05,1,7766430.story> [requires free registration with Chicago Tribune])



Amy Rosenzweig