THE SCRIPPS INSTITUTE’S DR. JOHN A. TAINER TO SPEAK AT HAUPTMAN-WOODWARD STRUCTURAL BIOLOGY SERIES SEMINAR

John A. Tainer, Ph.D., of The Scripps Research Institute (TSRI) and Lawrence Berkeley National Laboratory (LBNL) is scheduled to speak at the Hauptman-Woodward Medical Research Institute (HWI) on Thursday, April 16, 2009. He will present his lecture, “Small Angle X-ray Scattering (SAXS) combined with crystallography and computation: defining accurate macromolecular structures in solution.” The lecture will begin at 4 p.m. at 700 Ellicott Street immediately followed by a reception.

Tainer is currently a professor in the Molecular Biology Department at TSRI with joint appointments at the Skaggs Institute for Chemical Biology and LBNL. He is the author of over 200 scientific publications on four classes of proteins that interface structural biology with cellular chemistry: those that regulate reactive oxygen, those that control DNA damage responses, those that control responses to environmental stress, and those critical to bacterial pathogenesis. As part of his research, he has also determined and deposited over 200 macromolecular structures in the Protein Data Bank for researchers to access world-wide. In parallel to specific research programs, Tainer works to develop robust methods to determine accurate structures of dynamic macromolecular complexes by combined methods. Major efforts include methods development for small angle x-ray scattering (SAXS) for solution shape and assembly combined with x-ray crystallography for detail at high-resolution. As part of these technology efforts, Tainer designed and operates the high-brilliance synchrotron radiation beamline at the Advanced Light Source (ALS) at LBNL, named SIBYLS (Structural Integrated BiologY for Life Sciences). SIBYLS is optimized to structurally characterize macromolecular complexes and conformations in solution and at high resolution (http://www.bl1231.als.lbl.gov/). Tainer’s funded research aims to bridge the gaps from structural cell biology to therapeutics and biotechnology.

He received his Ph.D. at Duke University in 1982.

ABOUT HWI
With more than 50 years of exceptional scientific research, the Hauptman-Woodward Institute is an internationally-renowned independent, non-profit facility specializing in life-altering research. Our team of more than 75 members is committed to improving human health through the study of the causes of diseases, as well as potential therapies, at their fundamental molecular level. HWI is located in the heart of the Buffalo Niagara Medical Campus in Downtown Buffalo, New York, in a state-of-the-art structural biology research center at 700 Ellicott Street. For more information, visit HWI’s website at www.hwi.buffalo.edu or call 716-898-8600.

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