The National High-Throughput Crystallization Center and coming handson workshops

Sarah Bowman¹, Miranda Lynch², Elizabeth Snell³, Angela Lauricella⁴, Edward Snell⁵

¹HWI ²Hauptman-Woodward Medical Research Institute, ³Hauptman Woodward Institute,

⁴Hauptman Woodward Medical Research Institute,

Institute

sbowman@hwi.buffalo.edu

Workshops designed to engage with the structural biology community are critical for providing support and training to new researchers in the field. One of the important aspects of any structure pipeline is often sample preparation; in diffraction methods, this means achieving successful crystallization. The National High-Throughput Crystallization (HTX) Center at Hauptman-Woodward Medical Research Institute has been in operation as a central crystallization facility for over 20 years. A major goal for the HTX Center is to enable broad access to instrumentation, imaging and expertise in crystal growth. In this presentation, we will describe the Center and new workshops that are being planned at the HTX Center as part of our new NIH NIGMS National Resource funding establishing us as a National Resource. We offer crystallization resources often unavailable at individual laboratories and are expanding the range of services available. We will have a series of hands-on, in-person workshops specifically addressing different crystallization methods, the use of robotics for automating the crystallization process, and how to make the best use of imaging in crystallization pipelines. We also hope to engage with users and potential new users about their needs, training associated with those needs that could be incorporated into these workshops, and best practices to effectively engage and help the structural biology community.