IMCA-CAT: Accelerating Drug Discovery Through Synchrotron-Based Structural Biology

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IMCA-CAT / HWI

Structure is of vital importance to pharmaceutical discovery, significantly impacting both target selection and rate of drug design. Indeed, many break-through therapies on the market are structure-based in nature. For more than 25 years, the Industrial Macromolecular Crystallography Association Collaborative Access Team (IMCA-CAT) has focused exclusively on accelerating drug discovery and development through synchrotron-based structural biology research. Pharmaceutical companies AbbVie, Bristol-Myers Squibb, Merck, Novartis, and Pfizer comprise IMCA—a unique consortium of competitors that work together in partnership with Hauptman-Woodward Medical Research Institute to support the state-of-the-art IMCA-CAT research facility. Located at the Advanced Photon Source at Argonne National Laboratory, IMCA-CAT is a significant resource optimized to meet the evolving needs of industry by delivering quality structure data at ultra-high throughput rates. Capacity is never limiting, security is unfailing, and data flow is year-round. The broad experiment envelope of capabilities for both protein crystallography and complementary techniques ensures measurement of structure data from a wide variety of samples. IMCA-CAT is tailored for fragment-based and structure-guided drug design research and strategically poised to meet the evolving needs of industry target portfolios. Opportunities abound for researchers in all pharmaceutical and biotechnology organizations to access IMCA-CAT for structure data and thus significantly advance their drug discovery and product development programs.