

HIGH THROUGHPUT PLATE-BASED SCREENING FOR BIOMEDICAL RESEARCH AND EARLY DRUG DISCOVERY

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We present a recently established high throughput screening (HTS) laboratory for biomedical research and early drug discovery housed in 345 Parks Hall in the OSU College of Pharmacy. This laboratory is an expansion of the OSUCCC Medicinal Chemistry Shared Resource (MCSR), which offers synthetic medicinal chemistry services, to include a core that is focused on high throughput screening (HTSC). Our screening platforms are based on imaging and luminescence-based methods and integrate automation for scalability. Examples of cell-based and biochemical/biophysical assays with our current instrumentation and workflow will be described. We offer a hub for collaboration among biomedical researchers to allow unbiased systematic approaches that complement hypothesis-driven methods. The MCSR-HTSC is designed to serve investigators seeking to generate preliminary data for the external funding opportunities as well as translational studies with potential clinical applications.

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