high throughput screening

	NCT Number	Title	Authors	Description	Identifier	Dates
1	pubmed:36084523	MINI: A high-throughput point-of-care device for performing hundreds of nucleic acid tests per day	Duncan McCloskey Juan Boza Christopher E Mason David Erickson	There are a variety of infectious diseases with a high incidence and mortality in limited resource settings that could benefit from rapid point of care molecular diagnosis. Global health efforts have sought to implement mass-screening programs to provide earlier detection and subsequent treatment in an effort to control transmission and improve health outcomes. However, many of the current diagnostic technologies under development are limited to fewer than 10 samples per run, which inherently...	pmid:36084523 doi:10.1016/j.bios.2022.114654	Fri, 09 Sep 2022 06:00:00 -0400
2	pubmed:36084553	Accelerating PROTAC drug discovery: Establishing a relationship between ubiquitination and target protein degradation	Patrick H Gross Katie J Sheets Noël A Warren Saptarshi Ghosh Rebekah E Varghese Katherine E Wass KWass Karteek Kadimisetty	PROTACs have emerged as a new class of drugs that can target the "undruggable" proteome by hijacking the ubiquitin proteasome system. Despite PROTACs' success, most current PROTACs interface with a limited number of E3 ligases, hindering their expansion to many challenging therapeutic uses. Currently, PROTAC drug discovery relies heavily on traditional Western blotting and reporter gene assays which are insensitive and prone to artifacts, respectively. New reliable methods to monitor true PROTAC...	pmid:36084553 doi:10.1016/j.bbrc.2022.08.048	Fri, 09 Sep 2022 06:00:00 -0400
3	pubmed:36084576	Small, smaller, smallest: Miniaturization of chromatographic process development	Tiago Castanheira Silva Michel Eppink Marcel Ottens	Biopharmaceuticals are becoming increasingly important in modern healthcare. Monoclonal antibodies (mAb) are one of the most widely used therapeutic proteins and are important for the treatment of cancer and autoimmune diseases, among others. After cell culture there are still large amounts of other impurities (e.g. host cell proteins) in solution. Chromatography is usually the first purification step, allowing to increase purity and reduce volume. This comes associated with high costs and...	pmid:36084576 doi:10.1016/j.chroma.2022.463451	Fri, 09 Sep 2022 06:00:00 -0400
4	pubmed:36085003	Focus on your locus with a massively parallel reporter assay	Jessica C McAfee Jessica L Bell Oleh Krupa Nana Matoba Jason L Stein Hyejung Won	A growing number of variants associated with risk for neurodevelopmental disorders have been identified by genome-wide association and whole genome sequencing studies. As common risk variants often fall within large haplotype blocks covering long stretches of the noncoding genome, the causal variants within an associated locus are often unknown. Similarly, the effect of rare noncoding risk variants identified by whole genome sequencing on molecular traits is seldom known without functional...	pmid:36085003 doi:10.1186/s11689-022-09461-x	Fri, 09 Sep 2022 06:00:00 -0400

	NCT Number	Title	Authors	Description	Identifier	Dates
5	pubmed:36086505	Automated Characterization of Catalytically Active Inclusion Body Production in Biotechnological Screening Systems	Karina Ruzaeva Kira Kusters Wolfgang Wiechert Benjamin Berkels Marco Oldiges Katharina Noh	We here propose an automated pipeline for the microscopy image-based characterization of catalytically active inclusion bodies (CatIBs), which includes a fully automatic experimental high-throughput workflow combined with a hybrid approach for multi-object microbial cell segmentation. For automated microscopy, a CatIB producer strain was cultivated in a microbioreactor from which samples were injected into a flow chamber. The flow chamber was fixed under a microscope and an integrated camera...	pmid:36086505 doi:10.1109/EMBC48229.2022.9871325	Sat, 10 Sep 2022 06:00:00 -0400
6	pubmed:36086889	Construction of Degradable and Amphiphilic Triblock Polymer Carriers for Effective Delivery of siRNA	Yunfeng Yan Fangtao Zhu Huahui Su Xiaomin Liu Qidi Ren Fangqian Huang Wenbo Ye Mengdan Zhao Yunchun Zhao Junpeng Zhao Qi Shuai	The development of effective and safe delivery carriers is one of the prerequisites for the clinical translation of siRNA-based therapeutics. In this study, we constructed a library of 144 functional triblock polymers using ring-opening polymerization (ROP) and thiol-ene click reaction. These triblock polymers are composed of hydrophilic poly (ethylene oxide) (PEO), hydrophobic poly (-caprolactone) (PCL), and cationic amine blocks. Three effective carriers were discovered by high-throughput...	pmid:36086889 doi:10.1002/mabi.202200232	Sat, 10 Sep 2022 06:00:00 -0400
7	pubmed:36087205	Rapid Identification of MHCII-Binding Peptides Through Microsphere-Assisted Peptide Screening (MAPS)	Luke F Bugada Mason R Smith Fei Wen	CD4^(+) T cells play a vital role in the immune response, and their function requires T cell receptor (TCR) recognition of peptide epitopes presented in complex with MHC class II (MHCII) molecules. Consequently, rapidly identifying peptides that bind MHCII is critical to understanding and treating infectious disease, cancer, autoimmunity, allergy, and transplant rejection. Computational methods provide a fast, ultrahigh-throughput approach to predict MHCII-binding peptides but lack the accuracy...	pmid:36087205 doi:10.1007/978-1-0716-2712-9_11	Sat, 10 Sep 2022 06:00:00 -0400
8	pubmed:36087262	High-Throughput, Parallel Flow Cytometry Screening of Hundreds of Cell Surface Antigens Using Fluorescent Barcoding	Stanislav Drápela Radek Fedr Ondej Vacek Ján Remšík Karel Souek	Multicolor flow cytometry allows for analysis of tens of cellular parameters in millions of cells at a single-cell resolution within minutes. The lack of technologies that would facilitate feasible and relatively cheap profiling of such a number of cells with an antibody-based approach led us to the development of a high-throughput cytometry-based platform for surface profiling. We coupled the fluorescent cell barcoding with preexisting, commercially available screening tools to analyze cell...	pmid:36087262 doi:10.1007/978-1-0716-2553-8_9	Sat, 10 Sep 2022 06:00:00 -0400