high throughput screening

	NCT Number	Title	Authors	Description	Identifier	Dates
1	pubmed:36077237	Breaking the Concentration Limit in Fluorescence Fluctuation Spectroscopy with Camera-Based Detection	Yu-Kai Huang Per Niklas Hedde	Fluorescence correlation spectroscopy (FCS) is an extremely versatile tool that has been widely used to measure chemical reaction rates, protein binding, nanoparticle-protein interactions, and biomolecular dynamics in vitro and in vivo. As an inherently microsized approach, FCS is compatible with high-throughput screening applications, as demanded for drug design, but typically limited to nanomolar concentrations, which restricts possible applications. Here, we show how massively parallel	pmid:36077237 doi:10.3390/ijms23179840	Fri, 09 Sep 2022 06:00:00 -0400
2	pubmed:36077750	DNA Karyometry for Automated Detection of Cancer Cells	Alfred Böcking David Friedrich Martin Schramm Branko Palcic Gregor Erbeznik	CONCLUSIONS: An automated microscope- based screener was developed which is able to identify malignant cells in different types of human specimens with a diagnostic accuracy comparable with subjective cytological assessment. Early prostate cancers which do not progress despite applying any therapy could be identified using this automated approach.	pmid:36077750 doi:10.3390/cancers14174210	Fri, 09 Sep 2022 06:00:00 -0400
3	pubmed:36079706	Development of a Novel Tissue Blot Hybridization Chain Reaction for the Identification of Plant Viruses	Fiona Filardo Peter Vukovic Murray Sharman Cherie Gambley Paul Campbell	Assays for the high throughput screening of crops for virus monitoring need to be quick, easy, and low cost. One method involves using tissue blot immunoassays (TBIA), where plant stems are blotted onto nitrocellulose membrane and screened with available antibodies against a range of viruses. TBIAs are inexpensive but limited by antibody availability and specificity. To circumvent the antibody limitations, we developed the tissue blot hybridization chain reaction (TB-HCR). As with TBIA, plant	pmid:36079706 doi:10.3390/plants11172325	Fri, 09 Sep 2022 06:00:00 -0400
4	pubmed:36081349	Three-dimensional visualization of planta clathrin-coated vesicles at ultrastructural resolution	Alexander Johnson Walter A Kaufmann Christoph Sommer Tommaso Costanzo Dana A Dahhan Sebastian Y Bednarek Jií Friml	Biological systems are the sum of their dynamic 3-dimensional (3D) parts. Therefore, it is critical to study biological structures in 3D and at high resolutions to gain insights into their physiological functions. Electron microscopy of metal replicas of unroofed cells and isolated organelles has been a key technique to visualize intracellular structures at nanometer resolution. However, many of these methods require specialized equipment and personnel to complete them. Here we present novel	pmid:36081349 doi:10.1016/j.molp.2022.09.003	Fri, 09 Sep 2022 06:00:00 -0400

	NCT Number	Title	Authors	Description	Identifier	Dates
5	pubmed:36082311	High-throughput, real-time monitoring of engineered skeletal muscle function using magnetic sensing	Alec St Smith Shawn M Luttrell Jean-Baptiste Dupont Kevin Gray Daniel Lih Jacob W Fleming Nathan J Cunningham Sofia Jepson Jennifer Hesson Julie Mathieu Lisa Maves Bonnie J Berry Elliot C Fisher Nathan J Sniadecki Nicholas A Geisse David L Mack	Engineered muscle tissues represent powerful tools for examining tissue level contractile properties of skeletal muscle. However, limitations in the throughput associated with standard analysis methods limit their utility for longitudinal study, high throughput drug screens, and disease modeling. Here we present a method for integrating 3D engineered skeletal muscles with a magnetic sensing system to facilitate non-invasive, longitudinal analysis of developing contraction kinetics. Using this	pmid:36082311 pmc:PMC9445471 doi:10.1177/20417314221122127	Fri, 09 Sep 2022 06:00:00 -0400
6	pubmed:36083482	Zebrafish facilitates drug screening: potential of 3-deoxy-andrographoside from Chuanxinlian) as an anti-inflammatory agent	H E Xuemei Xiao Junjie Fan Chunlin L U Zibin Cao Huihui Y U Linzhong Zheng Yuanru Liu Junshan	CONCLUSION: Our research sheds light on the inestimable roles of zebrafish in high- throughput drug screening, elucidates the potent inhibitory effects of diterpene lactones against inflammation and indicates that AP-5 may serve as a potential alternative agent for the treatment of inflammatory diseases.	pmid:36083482 doi:10.19852/j.cnki.jtcm.2022.05.008	Fri, 09 Sep 2022 06:00:00 -0400
7	pubmed:36083560	High-Throughput Binder Confirmation Using Affinity Selection Mass Spectrometry	Eric X Shi	Affinity selection mass spectrometry (AS-MS) was recently applied to a new high-throughput binder confirmation (HTBC) platform. The HTBC-AS-MS platform can assess target engagement for hundreds of chemical series per target and is used at GSK to prioritize synthesis decisions for follow-up organic synthesis of DNA-encoded library technology (ELT) hits.	pmid:36083560 doi:10.1007/978-1-0716-2545-3_25	Fri, 09 Sep 2022 06:00:00 -0400
8	pubmed:36084168	Elastic-inertial separation of microparticle in a gradually contracted microchannel	Zhuang-Zhuang Tian Chong-Shan Gan Liang-Liang Fan Ji-Chang Wang Liang Zhao	Separation of microparticle in viscoelastic fluid is highly required in the field of biology and clinical medicine. For instance, the separation of the target cell from blood is an important prerequisite step for the drug screening and design. The microfluidic device is an efficient way to achieve the separation of the microparticle in the viscoelastic fluid. However, the existing microfluidic methods often have some limitations, including the requirement of the long channel length, the labeling	pmid:36084168 doi:10.1002/elps.202200083	Fri, 09 Sep 2022 06:00:00 -0400