high throughput screening

	NCT Number	Title	Authors	Description	Identifier	Dates
1	pubmed:36126550	A high-throughput microplate toxicity screening platform based on Caenorhabditis elegans	Jiaying Wu Yue Gao Jing Xi Xinyue You Xiaohong Zhang Xinyu Zhang Yiyi Cao Peichuan Liu Xiang Chen Yang Luan	Caenorhabditis elegans (C. elegans), an established model organism, has been widely used in environmental toxicology research. However, most of the current toxicity testing methods based on worms are time-consuming. In this study we aimed to develop an automated and highly-integrated platform for high-throughput and in situ toxicity testing. Considering the superiority of C. elegans as a neurotoxicological model, this platform mainly evaluates general toxicology and neurotoxicology endpoints,...	pmid:36126550 doi:10.1016/j.ecoenv.2022.114089	Tue, 20 Sep 2022 06:00:00 -0400
2	pubmed:36127074	Invertebrate neurones, genomes, phenotypic and target-based screening; their contributions to the search for new chemical leads and new molecular targets for the control of pests, parasites and disease vectors	David B Sattelle	Insect-borne diseases of humans, animals and plants can be devastating. The direct damage to crops by insect and nematode pests can also severely reduce crop yields and threaten harvests. Parasitic nematodes can impair human health and the health of farm livestock. Effective control for all such pests, vectors and pathogens is required as the economic and health burden can be substantial. Insecticides, nematicides and anthelmintics have been at the forefront of control and will remain important...	pmid:36127074 doi:10.1016/j.pestbp.2022.105175	Tue, 20 Sep 2022 06:00:00 -0400
3	pubmed:36127350	Screening microbially produced Δ^9-tetrahydrocannabinol using a yeast biosensor workflow	William M Shaw Yunfeng Zhang Xinyu Lu Ahmad S Khalil Graham Ladds Xiaozhou Luo Tom Ellis	Microbial production of cannabinoids promises to provide a consistent, cheaper, and more sustainable supply of these important therapeutic molecules. However, scaling production to compete with traditional plant-based sources is challenging. Our ability to make strain variants greatly exceeds our capacity to screen and identify high producers, creating a bottleneck in metabolic engineering efforts. Here, we present a yeast-based biosensor for detecting microbially produced...	pmid:36127350 doi:10.1038/s41467-022-33207-x	Tue, 20 Sep 2022 06:00:00 -0400
4	pubmed:36127580	Quantitation of Butyrylcarnitine, Isobutyrylcarnitine, and Glutarylcarnitine in Urine Using Ultra-Performance Liquid Chromatography-Tandem Mass Spectrometry (UPLC-MS/MS)	Judith A Hobert Stephen A Brose Marzia Pasquali	Acylcarnitines are formed when an acyl group is transferred from coenzyme A to a molecule of L-carnitine. In organic acidemias, and in fatty acid oxidation disorders, specific acylcarnitine species accumulate in a pattern that is characteristic for each disease. For this reason, acylcarnitine analysis is widely used for screening and diagnosis of inherited disorders of metabolism. The most common method for acylcarnitine analysis uses flow injection tandem mass spectrometry. Flow injection...	pmid:36127580 doi:10.1007/978-1-0716-2565-1_8	Tue, 20 Sep 2022 06:00:00 -0400

	NCT Number	Title	Authors	Description	Identifier	Dates
5	pubmed:36128986	[Non-adhesive contrast substrate for single-cell trapping and Raman spectroscopic analysis](#)	Alina Peethan Aravind M Santhosh Chidangil Sajan D George	Droplet splitting by exploiting tailored surface wettability is emerging as an important pathway to creating ultralow volumes of samples that can have applications in bioassays, tissue engineering, protein chips, and material synthesis. Reduction of droplet volumes enables the encapsulation of single biological cells which allows high throughput screening. In this work, we demonstrate a facile fabrication approach to create a non-adhesive contrast quartz substrate that allows droplet splitting...	pmid:36128986 doi:10.1039/d2lc00665k	Wed, 21 Sep 2022 06:00:00 -0400
6	pubmed:36129984	[PKM2 promotes pulmonary fibrosis by stabilizing TGF-1 receptor I and enhancing TGF-1 signaling](#)	Shaoyan Gao Xiaohe Li Qiuyan Jiang Qing Liang Fangxia Zhang Shuangling Li Ruiqin Zhang Jiaoyan Luan Jingyan Zhu Xiaoting Gu Ting Xiao Hui Huang Shanshan Chen Wen Ning Guang Yang Cheng Yang Honggang Zhou	Idiopathic pulmonary fibrosis (IPF) is a progressive interstitial lung disease, and the molecular mechanisms remain poorly understood. Our findings demonstrated that pyruvate kinase M2 (PKM2) promoted fibrosis progression by directly interacting with Smad7 and reinforcing transforming growth factor-1 (TGF-1) signaling. Total PKM2 expression and the portion of the tetrameric form elevated in lungs and fibroblasts were derived from mice with bleomycin (BLM)-induced pulmonary fibrosis. Pkm2...	pmid:36129984 doi:10.1126/sciadv.abo0987	Wed, 21 Sep 2022 06:00:00 -0400