1、MetaXpress offline软件开启



Run as administrator



MetaXpress File Edit Control Measure Screening Window Help Xe **6** ${\color{black}{\overline{}}} \Box \bigcirc {\color{black}{\overline{}}} \smallsetminus {\color{black}{\overline{}}} \lor {\color{black}{\overline{}}} \subset {\color{black}{\overline{}}} \stackrel{\bullet}{\underset{\bullet}{\overline{}}} \stackrel{\bullet}{\underset{\bullet}{\overline{}}} \to {\color{black}{\overline{}}} \cup {\color{black}{\overline{}}} \subset {\color{black}{\overline{}}} \stackrel{\bullet}{\underset{\bullet}{\overline{}}} \stackrel{\bullet}{\underset{\bullet}{\overline{}}}} \stackrel{\bullet}{\underset{\bullet}{\overline{}}}} \stackrel{\bullet}{\underset{\bullet}{\overline{}}} \stackrel{\bullet}{\underset{\bullet}}} \stackrel{\bullet}{\underset{\bullet}}}} \stackrel{\bullet}{\underset{\bullet}}} \stackrel{\bullet}{\underset{\bullet}}} \stackrel{\bullet}{\underset{\bullet}}} \stackrel{\bullet}}{\underset{\bullet}}} \stackrel{\bullet}{\underset{\bullet}}}}$ 选择Screening MetaXpress File Edit Control Measure Screening Window Help Review Plate... 1 Plate Utilities... Plate Annotation... R Add Custom Module To Database [DB]... Add Analysis To Database [DB]... Start Auto Run Mode [DB]... Auto Run Plate Statuses [DB]...

选择Review Plate

2、Review Plate Deta模块中选择实验数据

、击Select Plate	; 	双击对应日	期的文件夹		选择需要	导分析的数	据 ——	→ 点击se	elect打开
🕢 Review Plate Data				🔳 Select P	late for Review				×
Select Plate. Search			Export Protocol					🔒 🖾 😭 📔	C C
Legend Not acquired Acquired Displayed well Part of montage Selected wells	Data view: Well arrangeme A E 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	nt V	Export Protocol		 04/08/24 [Date Created - Pik 04/17/24 [Date Created - Pik 04/17/24 [Date Created - Pik 04/18/24 [Date Created - Pik 04/18/24 [Date Created - Pik 04/23/24 [Date Created - Pik 05/21/24 [Date Created - Pik 05/21/24 [Date Created - Pik 05/22/24 [Date Created - Pik 05/22/24 [Date Created - Pik 06/20/24 [Date Created - Pik 07/04/24 [Date Created - Pik 07/04/24 [Date Created - Pik 07/08/24 [Date Created - Pik 07/08/24 [Date Created - Pik 07/09/24 [Date Created - Pik 07/11/24 [Date Created - Pik 07/11/24 [Date Created - Pik 07/12/24 [Date Created - Pik 08/05/24 [Date Created - Pik 08/15/24 [Date Cr	ate info] ate info]			
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	Montage: 25 🖨 x 5 🚔				 08/23/24 [Date Created - Plate Cr	ate Info] ate Info]			
Analysis:		~			09/04/24 [Date Created - Plate -	ate Info] Plate Property] e Property]			,
Settings:		\sim	Create Custom Module	Name [Pl	ate Info]	Acquisition Name [Plate Info] Barcode Creator	Date\Time Created [Plat	
Setting description:			Run on all wells	20240904 20240904 test_IXM- test001_IX	PASS D_IAM-5160367_10131 D10_IXM-5160367_10132 5160367_10133 IM-5160367_10134	20240904 PASS D3 20240904 D10 test test001	<null> MolDev <null> MolDev <null> MolDev <null> MolDev</null></null></null></null>	Wed Sep 4 10:05:24 2024 Wed Sep 4 10:12:28 2024 Wed Sep 4 13:23:52 2024 Wed Sep 4 14:16:24 2024	
			Run on selection	Diate State	stics				
		✓ Log into the database	Run on displayed site	Flate Stat					تو الله
Load Selected Images	Annotate	Navigate Selections 🤜	Clear Selection	Plate Na	me Site Count Well Count Se	eries Count Compound Count C	Controls Count Control Stat	istic Datasets Measurement Se	ts
Reset Image Displays	Save Annotations Cellu	ılar Results	Close			Select	Cancel		

3、Review Plate Deta模块中对实验数据进行查看/分析/导出

数据打开后, 左键点击选择 需要预览的通道(1) 孔板的孔位(2) PS: 点击孔板左上角空白处选择所有拍摄时所选择孔位(3) 孔内的位点(4) PS: 点击All Sites选择孔内多有位点(5)



过左侧竖条箭头调整图片对比度

4、将实验数据导出至IN Carta进行AI分析







5、INCarta 软件开启

🜔 IN Carta



∷⊟ Worklist	Acquisition Experiments	ch Q Show/Hide Colu 9 selected	mns 						Browsed Refresh ①
Interactive	ACQUISITION NAME	DATE 🗸	IMAGE MODE	PLATE ID	RESULTS	CHANNELS	OBJECTIVE	SPECIMEN HOLDER	BARCODE
=\$	20240904 PASS D3_Plate_10131	2024-09-04, 02:05:24	2-D	20240904 PASS D3			10X Plan Apo Lambda	96 well plate	
Batch									
Ţ									
Monitoring									
Export									

6、打开需要分析的图片数据

(1) 点击打开文件

🖸 IN Carta												- 0 ×
:⊟ Worklist	Acquisition Experiments	Search	٩	Show/Hide Columns 9 selected							Browse	Refresh ()
Interactive	ACQUISITION NAME		DATE 🗸		IMAGE MODE	PLATE ID	RESULTS	CHANNELS	OBJECTIVE	SPECIMEN HOLDER	BARCODE	
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Batch												
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Export												

(2) 点击Flexi Protocol 2D

(∠)	жщнехі FI0t0t	.01 2 D			~ *				PS: 这里的	列表显示	的是历史分析	ī过的
E Workfist Interactive	AMAYYZ DAX APPLICATION PRO Bine Grá 100 -<	10000 MODRY IMPORT	Curtime Mindule Esther 30		Deal Protocol 20	(3)	点击SINP		数据方法文	:件;可以:	选择移除或编	} 辑;
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© Halp ₽ Seetings	Acquisition Figurement 202405944 MISS DJJ, Rese, 2028		ter 96 welt gibte		ANALYSIS SETTINGS						VOOR VOOR Marce VOOR VOOR VOOR VOOR	
				⊘ Help ✿	Acquilition Experiment 20240904 PMSS D3_Plate_50031	•	Enstrument Norme MetaXpress		Specimen Holder 96 weil plate		Protocol Fairne 20240902 dps	

7、对图片数据进行圈选识别,添加设置训练方法

7.1 根据图片分析需求在Default中选择一个model,点击Apply,查看分析结果,在此基础上进行方法构建



SNAP Image: Snap Image: Snap Image: Snap <th>() IN Carta</th> <th></th> <th></th> <th></th> <th></th>	() IN Carta				
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	试与此次相似)	Apply Train Save Manage Advanced	b File name:		 H5 File

7.2 利用不同工具对细胞进行圈选识别



(1) 选择Target, 用笔描出细胞的边缘轮廓, 再将细胞整个涂盖住



(2) 选择Background, 用笔贴着绿色细胞边缘描出蓝色背景



(3) 选择具有代表性的细胞形态类型,可以选择不同的工具进行圈选识别



(4) 点击Segment, 查看圈选识别结果, 可反复修正再识别, 尽量达到识别率90%以上



(5) 添加ROI, 使用画笔对ROI区域内不准确的地方重新标记, 点击Correct修正, 直到目的细胞全部准确识别



8、对目的数据图片进行AI训练并保存方法

SINAP	▲ 20240904 PASS D3_Plate_10131	SINAP	▲ 20240904 PASS D3_Plate_10131
Image Selection Image Selectio	trage/Segmentation has been added to training set.	Image Selection	Image: state st
(1) 点击Train进行训练, 训练过程中不可进行任何 (2) Train结束后,点击S 保存过程中不可进行任何 (3) 方法文件保存后,可 图片,对次方法进行验证,	训练时间约15min~20min, 软件操作; ave对训练方法文件进行保存, 软件操作; 「以点击Random FOV更换其他 ,是否能准确分析,如果不能,	SIAP 202000 Image Selection Image Sele	www.ws.DJ.Aw.U
则需重复圈选标记步骤再	次Train。	Acety Itain Save Matage Advanced	

9、将保存的训练方法应用至需分析的图片,导出分析数据



(1) 回到interactive, 在APPLICSTION界面, 点击Flexi Protocol 2D

(2) 在PROTOCAL界面,选择NEW,新建一个数据文件



(3) 在新建数据文件中设置TARGET TYPE /SEGMENTATION/MASK DISPLAY等参数





(4) 选择不同视野点拍摄的图片应用分析方法, 进行查看预览











(6) 选择孔位, 运行数据文件





(7) 运行结束, 查看并下载分析结果



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