Vendor	Magnification	Batch	Plate_Name	Binning	Number_of_ch	z_plane	Modality	Plate_Map_Name	Images_per_well	BF_Zplanes
MolDev	10	Scope1_MolDev_10X	Plate2_PCO_6ch_4site_10XPA	1	6	1	Confocal	JUMP-MOA_compound	4	
			Plate3_PCO_6ch_4site_10XPA_Crest	1	6	1	Confocal	JUMP-MOA_compound	4	
		Scope1_MolDev_10X_4siteZ	Plate3_PCO_6ch_4site_10XPA_Crestz	1	6	3	Confocal	JUMP-MOA_compound	4	
	20	Scope1_MolDev_20X_4site	Plate3_PCO_6ch_4site_20XPA_Crestz	1	6	3	Confocal	JUMP-MOA_compound	4	
		Scope1_MolDev_20X_9site	Plate2_PCO_6ch_9site_20XPA	1	6	1	Confocal	JUMP-MOA_compound	9	
			Plate3_PCO_6ch_9site_20XPA_Crest	1	6	1	Confocal	JUMP-MOA_compound	9	
		Scope1_MolDev_20X_Adaptive	Plate3_PCO_6ch_Adaptive_20XPA	1	6	1	Confocal	JUMP-MOA_compound	3	
Nikon	10 (0.45 NA)	Scope1_Nikon_10X	BR00117060a10x	1	4	1	Widefield	JUMP-MOA_compound	1	
			BR00117061a10x	1	4	1	Widefield	JUMP-MOA_compound	1	
			BR00117062a10x	1	4	1	Widefield	JUMP-MOA_compound	1	
			BR00117063b10x	1	4	1	Widefield	JUMP-MOA_compound	1	
	20 (0.75 NA)	Scope1_Nikon_20X	BR00117061a	1	4	1	Widefield	JUMP-MOA_compound	9	
			BR00117062a	1	4	1	Widefield	JUMP-MOA_compound	9	
			BR00117063b	1	4	1	Widefield	JUMP-MOA_compound	9	
PE	20 (1 NA)	Scope1_PE_Bin1_Confocal_1Plane	CP_Broad_Phenix_C_BIN1_1Plane_P1	1	5	1	Confocal	JUMP-MOA_compound	3	
			CP_Broad_Phenix_C_BIN1_1Plane_P2	1	5	1	Confocal	JUMP-MOA_compound	3	
			CP_Broad_Phenix_C_BIN1_1Plane_P3	1	5	1	Confocal	JUMP-MOA_compound	3	
			CP_Broad_Phenix_C_BIN1_1Plane_P4	1	5	1	Confocal	JUMP-MOA_compound	3	
		Scope1_PE_Bin1_Confocal_3Plane	CP_Broad_Phenix_C_BIN1_P1	1	5	3	Confocal	JUMP-MOA_compound	3	
			CP_Broad_Phenix_C_BIN1_P2	1	5	3	Confocal	JUMP-MOA_compound	3	
			CP_Broad_Phenix_C_BIN1_P3	1	5	3	Confocal	JUMP-MOA_compound	3	
			CP_Broad_Phenix_C_BIN1_P4	1	5	3	Confocal	JUMP-MOA_compound	3	
		Scope1_PE_Bin1_Widefield_1Plane	CP_Broad_Phenix_NC_BIN1_1Plane_P1	1	5	1	Widefield	JUMP-MOA_compound	3	
			CP_Broad_Phenix_NC_BIN1_1Plane_P2	1	5	1	Widefield	JUMP-MOA_compound	3	
			CP_Broad_Phenix_NC_BIN1_1Plane_P3	1	5	1	Widefield	JUMP-MOA_compound	3	
			CP_Broad_Phenix_NC_BIN1_1Plane_P4	1	5	1	Widefield	JUMP-MOA_compound	3	
		Scope1_PE_Bin1_Widefield_3Plane	CP_Broad_Phenix_NC_BIN1_P1	1	5	3	Widefield	JUMP-MOA_compound	3	
			CP_Broad_Phenix_NC_BIN1_P2	1	5	3	Widefield	JUMP-MOA_compound	3	
			CP_Broad_Phenix_NC_BIN1_P3	1	5	3	Widefield	JUMP-MOA_compound	3	
			CP_Broad_Phenix_NC_BIN1_P4	1	5	3	Widefield	JUMP-MOA_compound	3	
		Scope1_PE_Bin2_Confocal_1Plane	CPBroadPhenixC1PlaneP1	2	5	1	Confocal	JUMP-MOA_compound	3	
			CPBroadPhenixC1PlaneP2	2	5	1	Confocal	JUMP-MOA_compound	3	
			CPBroadPhenixC1PlaneP3	2	5	1	Confocal	JUMP-MOA_compound	3	
			CPBroadPhenixC1PlaneP4	2	5	1	Confocal	JUMP-MOA_compound	3	
		Scope1_PE_Bin2_Confocal_3Plane	CPBroadPhenixCP1	2	5	3	Confocal	JUMP-MOA_compound	3	
			CPBroadPhenixCP2	2	5	3	Confocal	JUMP-MOA_compound	3	
			CPBroadPhenixCP3	2	5	3	Confocal	JUMP-MOA_compound	3	
			CPBroadPhenixCP4	2	5	3	Confocal	JUMP-MOA_compound	3	
		Scope1_PE_Bin2_Widefield_1Plane	CPBroadPhenixNC1PlaneP1	2	5	1	Widefield	JUMP-MOA_compound	3	
			CPBroadPhenixNC1PlaneP2	2	5	1	Widefield	JUMP-MOA_compound	3	
			CPBroadPhenixNC1PlaneP3	2	5	1	Widefield	JUMP-MOA_compound	3	
			CPBroadPhenixNC1PlaneP4	2	5	1	Widefield	JUMP-MOA_compound	3	
		Scope1_PE_Bin2_Widefield_3Plane	CPBroadPhenixNCP1	2	5	3	Widefield	JUMP-MOA_compound	3	
			CPBroadPhenixNCP2	2	5	3	Widefield	JUMP-MOA_compound	3	
			CPBroadPhenixNCP3	2	5	3	Widefield	JUMP-MOA_compound	3	
			CPBroadPhenixNCP4	2	5	3	Widefield	JUMP-MOA_compound	3	
Yokogawa_Japan	20 (0.75)	Scope1_Yokogawa_Japan_20X	20201021T062317	1	5	10	Confocal	JUMP-MOA_compound	9	
	40 (0.95)	Scope1_Yokogawa_Japan_40X	20201020T134356	1	5	12	Confocal	JUMP-MOA_compound	2	none
Yokogawa_US	10 (0.40)	Scope1_Yokogawa_US_10X	BR00117014_10x	1	6	12	Confocal	JUMP-MOA_compound	4	10
	20 (1.00)	Scope1_Yokogawa_US_20X_5Ch	BR00117033_20xb	1	5	1	Confocal	JUMP-MOA_compound	9	none
			BR00117056_20x	1	5	1	Confocal	JUMP-MOA_compound	9	none
		Scope1_Yokogawa_US_20X_5Ch_12Z	BR00117056_20xb	1	5	12	Confocal	JUMP-MOA_compound	9	none
		Scope1_Yokogawa_US_20X_6Ch_BR00117	BR00117033_20x	1	6	12	Confocal	JUMP-MOA_compound	9	11
		Scope1_Yokogawa_US_20X_6Ch_BR00117	BR00117059_20X	1	6	12	Confocal	JUMP-MOA_compound	9	15
		Scope1_Yokogawa_US_20X_6Ch_BR00117	BR00117034_20x	1	6	12	Confocal	JUMP-MOA_compound	9	13
	40 (1.00)	Scope1_Yokogawa_US_40X_BR00117059	BR00117059_40x	1	6	12	Confocal	JUMP-MOA_compound	9	15

# of profiling analysis (there have percent replicating and matching figures, but they are not included in any of the batch analysis)
jb.com/jump-cellpainting/jump-scope-analysis/issues/1#issuecomment-1034267798

Instrument/Vendor	Modality	ObjectiveMagnification	Binning	# of plates ima	Images per well	Zplane	# of channels	Pixel size	LightSource	Dye	Excitation Laser Line	Emission Filter	Comment
Nikon Eclipse Ti2 inverted microscope	WF?	20x (0.75 NA)	1x1	3	9	single			LED	Hoechst	395/25	460/25	Well name as prefix
										FITC -Alexa488	470/24	535/20	Objective type as suffix
	WF?	10x (0.45 NA)		4	1	single				TRITC - Cy3 - F	555/25	620/30	No suffix – 20x/0.75 NA objective (9 images per well)
										Cy5	640/30	670/25	"10X" suffix – 10x/0.45 NA objective (1 image per well)
Opera Phenix Plus/Perkin Elmer	WF	20x (1 NA)	2x2	4	3	1 and 3							
	Confocal		1x1	4	3	1 and 3							
Yokogawa Japan, scope model?	Confocal	20x (0.75), Dry	1x1	1	9	10		0.325	Laser				
	Confocal	40x (0.95), Dry	1x1	1	2	12		0.1625	Laser				
Yokogawa US (CV8000)	Confocal	10x (0.40), Dry	1x1	1	4	only BF channel was imaged in different number of z planes (11,13,15) and we chose a middle of for analysis	6		Laser				
	Confocal	20x (1.00), Water	1x1	6 (3 with 5 ch a	9 (one plate has imag	only BF channel was imaged in different number of z planes (11,13,15) and we chose a middle of for analysis	5 and 6		Laser				
	Confocal	40x (1.00), Water	1x1	1	9	only BF channel was imaged in different number of z planes (11,13,15) and we chose a middle of for analysis	6		Laser				
MolDev/ImageXpress Micro Confocal (IXM-Co	Confocal	10x	1x1	3	4	1 and 3	6						They were interested to see the difference between 4site/well vs 1 site/well
	Confocal	20x	1x1	4	4 and 9 (one plate, ad	1 and 3	6						https://broadinstitute.slack.com/archives/G01KMKR9MQX/p1611784359015000

Instrument	Modality	ObjectiveMagn	ObjectiveNA	LightSource	Dye	Excitation Laser Line (nm)	Emission Filter (center/band nm)	Binning	Comment
Nikon Eclipse Ti2 inverted microsco	WF?	20x	0.75 NA	LED	Hoechst	395/25	460/25	1	Well name as prefix
					FITC -Alexa488 - GFP	470/24	535/20	1	Objective type as suffix
	WF?	10x	0.45 NA		TRITC - Cy3 - RFP	555/25	620/30	1	No suffix – 20x/0.75 NA objective (9 images per well)
					Cy5	640/30	670/25	1	“10X” suffix – 10x/0.45 NA objective (1 image per well)
									Single z plane

Instrument	ObjectiveMagr	ObjectiveNA	LightSource	Dye	Organelle or Cellular component	Laser Excitation	Dichroic Filter	Emission Filter	Exposure time	Additional indo	Gain	Binning	Camera
ImageXpress Micro Confocal (IXM-Confocal)	Nikon 20x	0.75 NA Plan Apo Lambda (Part No. 1-6300-0295)	Laser	MitoTracker Deep Red 633	Mitochondria	640 nm	Penta Band: 405/470/555/640/730 nm	669 - 693 nm	40 ms	Single plane, **with confocal launcher**, with 9 sites/well took 3.2 hrs to image the entire plate--Confocal launcher: using dual micro-lens spinning disk confocal launcher to even fluorescence background	1 (1.1 e/cnt)	1 x 1	26 MP PCO. SDK
				Phalloidin Alexa Fluor 569	Actin	577 nm	593 nm	604 - 644 nm	50 ms				
				Wheat-germ agglutinin Alexa Fluor 555	Golgi	555 nm	Penta Band: 405/470/555/640/730 nm	579.5 – 610.5 nm	15 ms				
				SYTO 14 RNA 521/547	Nucleoli	520 nm	532 nm	542 – 582 nm	3 ms				
				Concanavalin A Alexa Fluor 488	Endoplasmic Reticulum	470 nm	Penta Band: 405/470/555/640/730 nm	506 – 534 nm	6 ms				
				Hoechst 33342	Nuclei	405 nm	Penta Band: 405/470/555/640/730 nm	429.5 – 474.5 nm	30 ms				
				MitoTracker Deep Red 633	Mitochondria	640 nm	Penta Band: 405/470/555/640/730 nm	669 - 693 nm	5 ms	Single plane, **without** confocal launcher, with 9 sites/well took 3.2 hrs to image the entire plate			
				Phalloidin Alexa Fluor 569	Actin	577 nm	593 nm	604 - 644 nm	30 ms				
				Wheat-germ agglutinin Alexa Fluor 555	Golgi	555 nm	Penta Band: 405/470/555/640/730 nm	579.5 – 610.5 nm	4 ms				
				SYTO 14 RNA 521/547	Nucleoli	520 nm	532 nm	542 – 582 nm	3 ms				
				Concanavalin A Alexa Fluor 488	Endoplasmic Reticulum	470 nm	Penta Band: 405/470/555/640/730 nm	506 – 534 nm	3 ms				
				Hoechst 33342	Nuclei	405 nm	Penta Band: 405/470/555/640/730 nm	429.5 – 474.5 nm	7 ms				
				Hoechst 33342	Nuclei	405 nm	Penta Band: 405/470/555/640/730 nm	429.5 – 474.5 nm	120 ms	Single plane (60 um pinhole), with 2-3 sites/well took 1hr to image the entire plate			
				MitoTracker Deep Red 633	Mitochondria	640 nm	Penta Band: 405/470/555/640/730 nm	669 - 693 nm	100 ms				
				Phalloidin Alexa Fluor 569	Actin	577 nm	593 nm	604 - 644 nm	500 ms				
				Wheat-germ agglutinin Alexa Fluor 555	Golgi	555 nm	Penta Band: 405/470/555/640/730 nm	579.5 – 610.5 nm	100 ms				
				SYTO 14 RNA 521/547	Nucleoli	520 nm	532 nm	542 – 582 nm	150 ms				
				Concanavalin A Alexa Fluor 488	Endoplasmic Reticulum	470 nm	Penta Band: 405/470/555/640/730 nm	506 – 534 nm	150 ms				

Instrument	ObjectiveMagnification	ObjectiveImmersion	ObjectiveNA	Imaging Mode	Channel	Dye	Excitation(nm)	Emission(nm)	Power [%] (BIN2)	Exp-Time [ms] (BIN2)	Power [%] (BIN1)	Exp-Time [ms] (BIN1)
Opera Phenix Plus	20x	Water	1	Confocal	DNA	Hoechst	375	435-480	50	60	100	80
					ER	Concanavalin A	488	500-530*	30	60	80	60
					RNA	SYTO 14	488	515-550*	20	60	80	60
					AGP	WGA-Phalloidin	561	570-630	60	60	100	60
					Mito	Mitotracker DR	640	650-760	20	60	80	60
				WideField	DNA	Hoechst	375	435-480	20	20	50	20
					ER	Concanavalin A	488	500-530	15	15	40	15
					RNA	SYTO 14	488	570-630	20	20	50	20
					AGP	WGA-Phalloidin	561	570-630	50	20	90	20
					Mito	Mitotracker DR	640	650-760	15	15	50	15

ObjectiveMagr	ObjectiveImme	ObjectiveNA	LightSource	Laser Power	ExposureTime	Channel	Excitation	Emissions	Binning	Pixel size
20X	Dry	0.75	Laser	20%	200 ms	Ch1	Excitation 405 nm	Emission 447/60	1 x 1	0.325
				20%	200 ms	Ch2	Excitation 488 nm	Emission 525/50		
				20%	200 ms	Ch3	Excitation 488 nm	Emission 617/73		
				30%	300 ms	Ch4	Excitation 561nm	Emission 617/73		
				20%	300 ms	Ch5	Excitation 640 nm	Emission 708/75		
40X	Dry	0.95	Laser	20%	300 ms	Ch1	Excitation 405 nm	Emission 447/60	1 x 1	0.1625
				20%	300 ms	Ch2	Excitation 488 nm	Emission 525/50		
				25%	300 ms	Ch3	Excitation 488 nm	Emission 617/73		
				40%	400 ms	Ch4	Excitation 561nm	Emission 617/73		
				25%	300 ms	Ch5	Excitation 640 nm	Emission 708/75		

Instrument	ObjectiveMagnif	Objectiv	ObjectiveN	LightSource	ExposureTime	Laser Power	Channel	Dye	Excitation Laser Line (nm)	Emission Filter (center/band nm)	Binning	Pinhole
Yokogawa CV8000	20X	Water	1	Laser	100 ms	80%	Ch1	Hoechst	405	445/45	1 x 1	50um
						30%	Ch2	ConA	488	525/50		
						60%	Ch3	Pha/WGA	561	600/37		
						80%	Ch4	Mitotracker	640	708/75 (or 676/29 for some plates)		
						30%	Ch5	Syto14	488	600/37		
Optical Configuration: Three step acquisition - 2-channel acquisition of (ConA, Pha-WGA), (Mitotracker & Syto14), and (Hoechst) alone.												
Single fluorescent planes in optimal focal plane												
Not Complete?												

Microscope	Channel	Excitation (nm)	Emission (nm)								
Molecular Devices - ImageXpress Micro Confocal	Nuclei	405	452/22.5			429.5	474.5	452	/	22.5	452/22.5
	ER	470	520/14			506	534	520		14	520/14
	RNA	520	562/20			542	582	562		20	562/20
	Golgi	555	595/15.5			579.5	610.5	595		15.5	595/15.5
	Actin	577	624/20			604	644	624		20	624/20
	Mitochondria	640	681/12			669	693	681		12	681/12
Opera Phenix Plus - Confocal	DNA	375	457.5/22.5							0	
	ER	488	515/15			435	480	457.5		22.5	457.5/22.5
	RNA	488	532.5/17.5			500	530	515		15	515/15
	AGP	561	600/30			515	550	532.5		17.5	532.5/17.5
	Mito	640	705/55			570	630	600		30	600/30
Opera Phenix Plus - Widefield	DNA	375	457.5/22.5			650	760	705		55	705/55
	ER	488	515/15								
	RNA	488	600/30			435	480	457.5		22.5	457.5/22.5
	AGP	561	600/30			500	530	515		15	515/15
	Mito	640	705/55			570	630	600		30	600/30
Yokogawa Japan	DNA	405	447/60			570	630	600		30	600/30
	ER	488	525/50			650	760	705		55	705/55
	RNA	488	617/73								
	AGP	561	617/73								
	Mito	640	708/75								
Yokogawa US	DNA	405	445/45								
	ER	488	525/50								
	WGA	561	600/37								
	Mito	640	708/75 (or 676/29 for some plates)								
	RNA	488	600/37								
Nikon	DNA	395/25	460/25								
	ER	470/24	535/20								
	RNA/AGP	555/25	620/30								
	Mito	640/30	670/25								