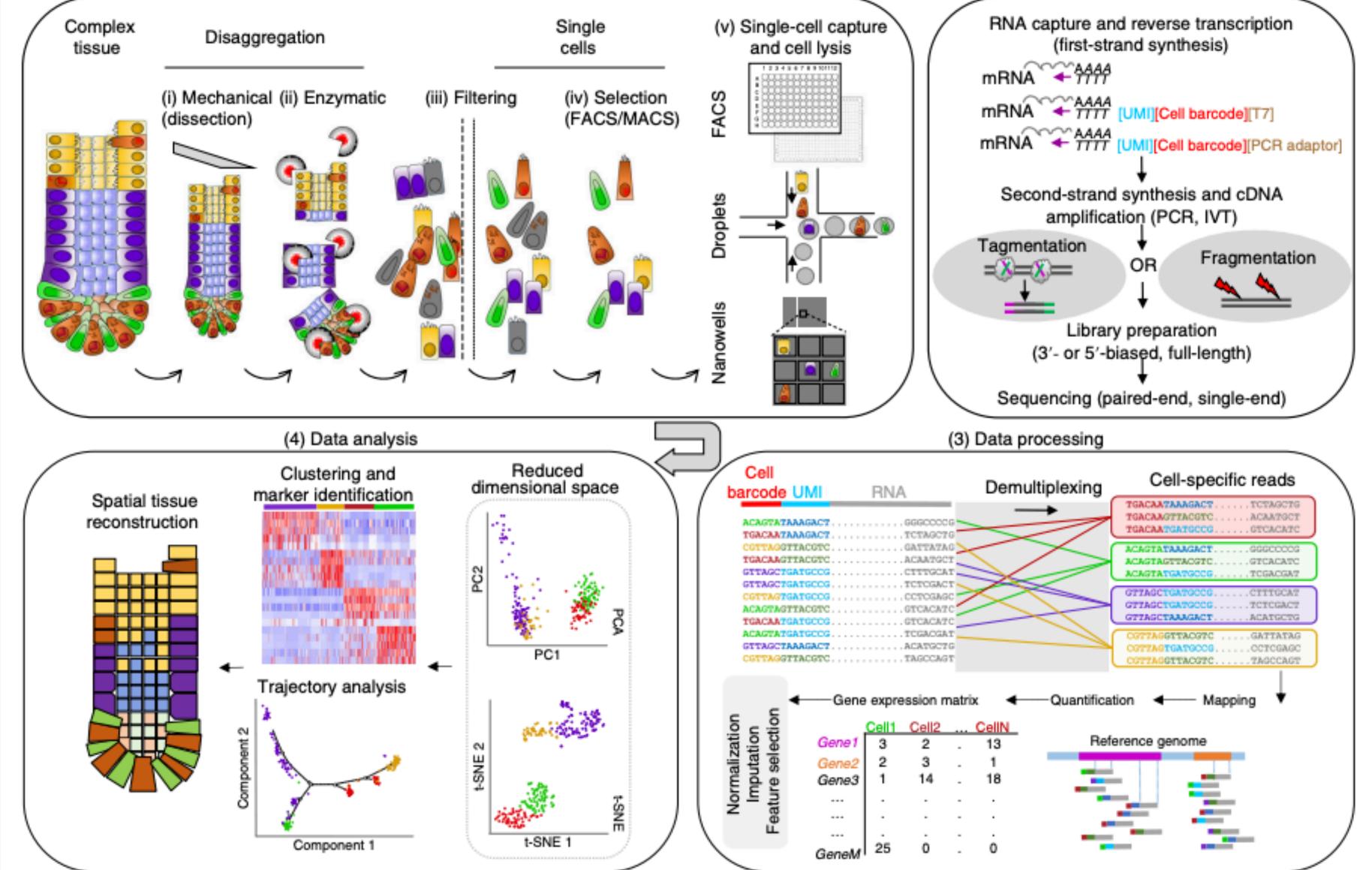
Processo





(1) Sample prepraration

protocols

(2) Single-cell RNA sequencing

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Tutorial: guidelines for the experimental design of single-cell RNA sequencing studies

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Diferentes tecnologias



							9				
SMART-seq2	CEL-seq2	STRT-seq	Quartz-seq2	MARS-seq	Drop-seq	inDrop	Chromium	Seq-Well	sci-RNA-seq	SPLiT-seq	
FACS, microfluidics	FACS, microfluidics	FACS, microfluidics, nanowells	FACS	FACS	Droplet	Droplet	Droplet	Nanowells	Not needed	Not needed	
TSO	RNase H and DNA pol I	TSO	PolyA tailing and primer ligation	RNase H and DNA pol I	TSO	RNase H and DNA pol I	TSO	TSO	RNase H and DNA pol I	TSO	
Yes	No	Yes	Yes	No	Yes	No	Yes	Yes	No	Yes	
Library PCR with barcoded primers	d Barcoded RT primers	Barcoded TSOs	Barcoded RT primers	Barcoded RT primers	Barcoded RT primers	Barcoded RT primers				Ligation of barcoded RT primers	
No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
PCR	In vitro transcription	PCR	PCR	In vitro transcription	PCR	In vitro transcription	PCR	PCR	PCR	PCR	<u></u>
Full-length	3'	5'	3'	3'	3'	3'	3'	3'	3'	3'	
10 ⁵											D b b
	FACS, microfluidics TSO Yes Library PCR with barcode primers No PCR Full-length 10^5	FACS, microfluidics TSO RNase H and DNA pol I Yes No Library PCR with barcoded primers No Yes PCR In vitro transcription Full-length 3' 105 104 104 103 103 103 103 103 103	FACS, microfluidics microfluidics microfluidics, microfluidics, microfluidics, microfluidics, manowells TSO RNase H and DNA pol I Yes No Yes Library PCR with barcoded PT primers No Yes Yes PCR In vitro transcription Full-length 3' 5' 10 ⁵ 10 ⁴ 10 ³ 10 ³ 10 ³ 10 ³ TSO FACS, microfluidics nanowells FACS, microfluidics, microfluidics, nanowells PCR Barcoded TSOs Yes Yes Yes 10 10 10 10 10 10 10 10 10 10 10 10 10 1	FACS, microfluidics microfluidics microfluidics, nanowells TSO RNase H and DNA pol I TSO RNase H Barcoded RT primer RT primers RT primers RT primers PCR PCR PCR Full-length RT primers PCR PCR PCR PCR PCR PCR PCR POR PO	FACS, microfluidics microfluidics microfluidics, nanowells TSO RNase H and DNA pol I Yes No Yes Yes No Library PCR with barcoded primers No Yes Yes Yes Yes Yes Yes Yes Ye	FACS, microfluidics microfluidics microfluidics, nanowells TSO RNase H and DNA pol I Yes No Yes Yes No Yes PolyA tailing and primer ligation DNA pol I TSO Barcoded RT primers No Yes Yes Yes Porplet TSO PolyA tailing and primer ligation DNA pol I TSO No Yes Porplet TSO PolyA tailing and primer and DNA pol I TSO No Yes No Yes Porplet TSO PolyA tailing and primer and primer ligation DNA pol I TSO No Yes Porplet TSO Porplet TSO PolyA tailing and primer and primer and primer and primer and primers RT primers RT primers Porplet TSO Porplet TSO Porplet TSO PolyA tailing and primer and primer and primer and primer and primers RT primers RT primers Porplet TSO TSO TSO TSO TSO TSO TSO TS	FACS, microfluidics microfluidics microfluidics, microfluidics, manowells TSO RNase H and DNA pol I Yes No Yes Yes No Yes No Yes No Library PCR with barcoded primers No Yes	FACS, microfluidics microfluidics, microfluidics, nanowells TSO RNase H and DNA pol I Yes No Yes Yes No Yes No Yes No Yes No Yes RNase H and DNA pol I TSO Barcoded RT primers No Yes Yes Yes Yes Yes Yes Yes Ye	FACS, microfluidics microfluidics, m	FACS, microfluidics microfluidics, microfluidics, nanowells TSO RNase H and DNA pol I TSO PolyA tailing and primer ligation DNA pol I TSO DNA	FACS, microfluidics microfluidics microfluidics manowells TSO RNase H and DNA pol I Yes No Yes Yes No Yes Yes Yes Yes Yes Yes Yes Ye

Microfluidic Droplets

