

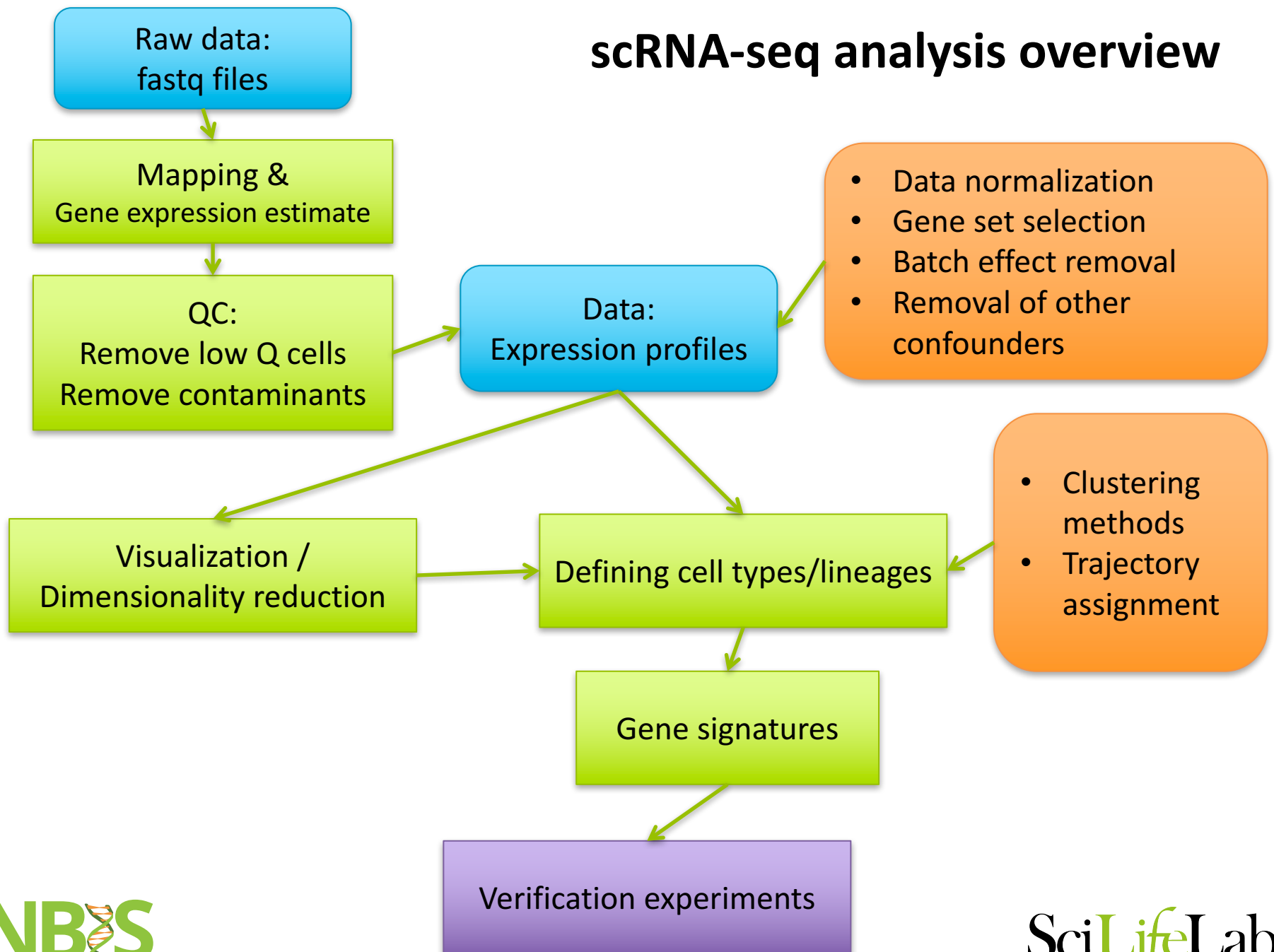


# Single cell RNA sequencing data analysis, 27-30 January 2020

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# scRNA-seq analysis overview










# Monday

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09.00	 Course introduction	Åsa Björklund
09.15	 scRNAseq methodologies and ESCG platform	Karolina Wallenberg
10.00	Coffee Break	
10.30	 scRNAseq Quality Control	Åsa Björklund
11.15	 Data normalization	Åsa Björklund
12.10	Lunch	
13.15	 Intro to exercises	Åsa Björklund
13.30	 Exercises: Quality control	Åsa, Paulo, Anna
15.00	Coffee Break	
15.30	 Dimensionality reduction	Paulo Czarnewski
16.30	Wrap up of todays lectures	Åsa Björklund

# Tuesday

Time	Description	Lecturer
09.00	 <a href="#">Exercises: Dimensionality reduction</a>	Åsa, Paulo, Nikolay, Rui
10.00	Coffee Break	
10.30	 Batch correction + Data integration	Paulo Czarnewski
11.15	 <a href="#">Exercises: Data integration</a>	Åsa, Paulo, Nikolay, Rui
12.00	Lunch	
13.00	 <a href="#">Clustering techniques and scRNAseq toolkits</a>	Åsa Björklund
13.45	 <a href="#">Exercises: Clustering</a>	Åsa, Paulo, Nikolay, Rui
14.45	Coffee Break	
15.15	 <a href="#">Exercises: Clustering (continued)</a>	Åsa, Paulo, Nikolay, Rui
16.00	 Invited seminar: Ins and outs of UMAP and tSNE	Nikoaly Oskolkov
16.30	<a href="#">Wrap up of todays lectures</a>	Åsa Björklund
18.00	** Course dinner at <a href="#">Shanti - Touch of bengal</a> **	

# Wednesday

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09.00	 Differential expression	Olga Dethlefsen
09.45	Coffee Break	
10.15	 Exercises: Differential expression	Åsa, Paulo, Olga
11.15	 [Trajectory inference]	Paulo Czarnewski
12.00	Lunch	
13.00	 Exercises: Trajectory inference	Åsa, Paulo, Olga
14.00	Coffee Break	
14.30	 Invited seminar: Single-cell multi-omics (Protein + RNA)	Johan Reimegård
15.00	 Invited seminar: Spatial transcriptomics	Lars Borm
15.30	 Cell type prediction	Oscar Franzen
16.00	Wrap up of todays lectures	Åsa Björklund
16.15	Course Summary	Åsa Björklund

# Meals

- Lunches will be at Nanna Svarz restaurant (Aula Medica)
- We have lunch coupons for all participants that you must get from us. Tables have been reserved so that we can sit together.
- Fika will be served morning and afternoon outside the lecture rooms.

# Course Dinner

- Shanti – Touch of Bengal  
<https://shanti.se/touch-of-bengal>
- Have a look at the menu beforehand and decide what you want to eat.
- Google docs where you should preorder your dish that we will send to the restaurant.
- The budget allows one drink, if you want anything more, you will have to pay for it yourself.

**PLEASE ASK QUESTIONS!**