

# Schedule for "Next Generation Sequencing Data Analysis with clinical applications, 7,5 credits (ECTS)" - 2024

**KEY:**

Accounts and Software installation

Assignments

Own learning

Q&A: optional

Mandatory sessions

*Self studies: these may be distributed as you see fit, it only represents that you are expected to invest on your own*

		AUGUST	SEPTEMBER				
		Mon	Tue	Wed	Thu	Fri	SUN
w36							
13-14	Course intro		Self studies	Self studies	Self studies	Self studies	<ul style="list-style-type: none"> <li>• Genomics quiz</li> <li>• Galaxy account</li> </ul>
14-15							
15-16							
		SEPTEMBER					
		Mon	Tue	Wed	Thu	Fri	SUN
w37							
13-14	Intro to Bioinformatics			Q&A		Q&A	<ul style="list-style-type: none"> <li>• Galaxy intro</li> <li>• Software installation</li> </ul>
14-15			Self studies	Self studies	Self studies	Self studies	
15-16							
		SEPTEMBER					
		Mon	Tue	Wed	Thu	Fri	SUN
w38							
13-14	Sequence bioinformatics	• Databases		Q&A		Q&A	<ul style="list-style-type: none"> <li>• Sequence bioinformatics</li> </ul>
14-15			Self studies	Self studies	Self studies	Self studies	
15-16							
		SEPTEMBER					
		Mon	Tue	Wed	Thu	Fri	SUN
w39							
13-14	Intro to NGS, QC, mapping and visualization			Q&A		Q&A	<ul style="list-style-type: none"> <li>• From fasta to phylogenetic tree using galaxy</li> <li>• R installation</li> </ul>
14-15			Self studies	Self studies	Self studies	Self studies	
15-16							
		SEPTEMBER			OCTOBER		
		Mon	Tue	Wed	Thu	Fri	SUN
w49							
13-14	Q&A			Q&A		Q&A	<ul style="list-style-type: none"> <li>• QC and Mapping</li> </ul>
14-15	Self studies	Self studies	Self studies	Self studies	Self studies		
15-16							

**OCTOBER**

	<b>Mon</b>	<b>Tue</b>	<b>Wed</b>	<b>Thu</b>	<b>Fri</b>	<b>SUN</b>
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13-14 14-15 15-16	Intro to R		Q&A		Q&A	
	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>	

**OCTOBER**

	<b>Mon</b>	<b>Tue</b>	<b>Wed</b>	<b>Thu</b>	<b>Fri</b>	<b>SUN</b>
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13-14 14-15 15-16	Project check		Q&A		Q&A	
	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>	

• R and Alignment visualization

**OCTOBER**

	<b>Mon</b>	<b>Tue</b>	<b>Wed</b>	<b>Thu</b>	<b>Fri</b>	<b>SUN</b>
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13-14 14-15 15-16	SNP analysis		Q&A		Q&A	
	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>	

**OCTOBER**

	<b>Mon</b>	<b>Tue</b>	<b>Wed</b>	<b>Thu</b>	<b>Fri</b>	<b>SUN</b>
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13-14 14-15 15-16	Q&A		Q&A		Q&A	
	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>	

• SNP analysis

**NOVEMBER**

	<b>Mon</b>	<b>Tue</b>	<b>Wed</b>	<b>Thu</b>	<b>Fri</b>	<b>SUN</b>
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13-14 14-15 15-16	Gene expression analysis		Q&A		Q&A	
	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>	

**NOVEMBER**

	<b>Mon</b>	<b>Tue</b>	<b>Wed</b>	<b>Thu</b>	<b>Fri</b>	<b>SUN</b>
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13-14 14-15 15-16	Q&A		Q&A		Q&A	
	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>	

• Expression analysis

**NOVEMBER**

w47

<b>Mon</b>	<b>Tue</b>	<b>Wed</b>	<b>Thu</b>	<b>Fri</b>	<b>SUN</b>
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13-14	Pathway analysis		Q&A		Q&A
14-15	Pathway analysis and reproducibility	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>
15-16					

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**NOVEMBER**

w48

<b>Mon</b>	<b>Tue</b>	<b>Wed</b>	<b>Thu</b>	<b>Fri</b>	<b>SUN</b>
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13-14				Q&A	
14-15	Project check	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>
15-16					

• Pathway analysis

**NOVEMBER**      **DECEMBER**

w49

<b>Mon</b>	<b>Tue</b>	<b>Wed</b>	<b>Thu</b>	<b>Fri</b>	<b>SUN</b>
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13-14	Q&A				Q&A
14-15	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>
15-16					

**DECEMBER**

w50

<b>Mon</b>	<b>Tue</b>	<b>Wed</b>	<b>Thu</b>	<b>Fri</b>	<b>SUN</b>
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13-14	Q&A				Q&A
14-15	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>	<i>Self studies</i>
15-16					

**DECEMBER**

w51

<b>Mon</b>	<b>Tue</b>	<b>Wed</b>	<b>Thu</b>	<b>Fri</b>	<b>SUN</b>
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13-14	Q&A				
14-15	<i>Self studies</i>	Oral presentation hand in	Examination	<i>Self studies</i>	<i>Self studies</i>
15-16	<i>Self studies</i>	<i>Self studies</i>			

• Final written report