

Cloning Club



Meeting 1 (Aug 30, 2016)



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Course requirements

- <http://www.helisci.fi/hbgs/cloning-club2016>

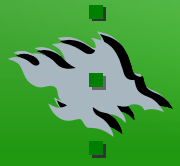
- **Meetings**

8 meetings: Tuesdays 15:00 - 16:30 pm (meeting room 7, note exceptions!), 75% participation

- One project: a freely chosen cloning simulation per group (in groups of 1-4 students), which students present and explain. Difficulty of cloning according to prior experience (expect difficult questions about the different types and exact mechanisms of Gateway reactions if I realize that an expert cloner is doing a Gateway cloning!)
- Software: **SnapGene**, **SerialCloner**, whatever (make sure it is accessible to me!)

Practical part

- Max. 16 students in groups of 1-4 students. Notify me of the groupings and your project by end of September (ungrouped participants will be put into groups at random by the organizer)!
- Realization of the cloning simulation at your own schedule and venue.
- Thorough discussion of the cloning plans (and possible prior previous attempts) before starting (make an appointment with me during October). No own project? Ask the organizer!
- Total beginners (without any prior cloning experience and no possibilities to clone at their own venue) should preferably team up with more experienced participants.
- Continuous possibility to ask for assistance, reagents and devices for every step!
Possibility to to the work in our laboratory under supervision upon agreement.



Survey

<https://jeltsch.org/cc>

Results



Possible topics based on participants' comments

(this list will be updated as the course progresses)

| # | Date | Topic | Seminar room |
|---|-----------------|---|---|
| 1 | Tue, 30.08.2016 | General discussion & cloning plans | KOK7 = Seminar room 7 (5 th floor) |
| 2 | Tue, 6.09.2016 | Recap lecture (the basics: plasmids, enzymes, ligation, cells, transformation) | KOK7 |
| 3 | Tue, 13.09.2016 | Cloning problem/task (group 2): How to make a deletion (or any type of mutation): IVA and QuikChange | KOK7 |
| 4 | Tue, 20.09.2016 | Shuttle vectors (and virus production) | KOK7 |
| 5 | Tue, 27.09.2016 | Cloning problem/task (group 1): Exchanging PuroR against GFP/ZeoR and expressing multiple proteins from one expression vector | BM B136A (1 st floor) |
| 6 | Tue, 4.10.2016 | Gateway and Golden Gate | KOK7 |
| 7 | Tue, 11.10.2016 | Cloning problem/task (group 3) | KOK7 |
| | Tue, 18.10.2016 | No seminar | |
| 8 | Tue, 25.10.2016 | Cloning problem/task (group 4) | BM B136A (1 st floor) |

★ presentations by individual student groups (problem, task, paper, method, kit, ...)



Software

- Highly recommended: SnapGene

<http://www.snapgene.com>

- Group Name: Helsinki Cloning Club

Registration Code: XXXX-XXXX-XXXX-XXXX-XXXX*

- Other software is fine as long as I don't need to buy a license to look at your cloning plan (**SnapGene Viewer** is free).
- Suggestion for a web-based tool (if you are not allowed to install anything on your computer):
Genome Compiler: <http://www.genomecompiler.com/>
- If you prefer open source software, I suggest **SerialCloner**.

*the serial number and download link is blanked out in the online version, course participants will receive an e-mail with the link/serial number