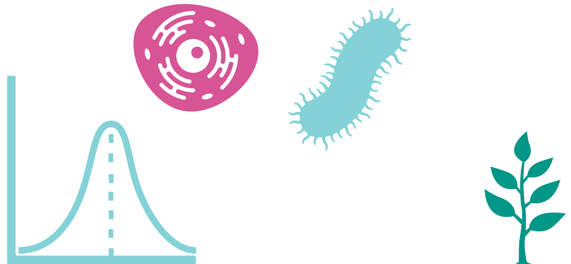
THE ESSENTIALS

Overview over the first weeks



Dagmar Hann, Danny Meilinger

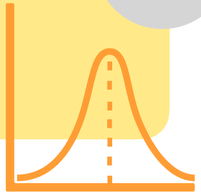
GENERAL MASTER COURSES

The semester starts with **two compulsory courses**

"LAB" METHODS

COMPUTATIONAL BIOLOGY

online



Both courses are tightly linked!

Together, you will learn **essential methods** required for molecular biology.

Different model organisms, different molecules & different techniques

14.10 - 17.10

Computational Course Part 1

A & B

October 21.10 - November 07.11.

Lab Course

A-1

Lab Course

A-2

Lab Course

A-3

Lab Course

A-4

“free”
Data Camp R

Group B - Computational Part 2

14.10 - 17.10

November 11.11. - November 28.11.

Computational Course Part 1

A & B

“free”
Data Camp R

Group A - Computational Part 2

Lab Course

B-1

Lab Course

B-2

Lab Course

B-3

14.10 - 17.10

Computational Course Part 1

A & B

Group A - 21.10 - 07.11

Danny Meilinger

HUMANBIOLOGY MASTER
&
MOLECULAR & CELLULAR BIOLOGY MASTER

A-1

Tamara Mikeladze-Dvali

MOLECULAR & CELLULAR BIOLOGY MASTER

A-2

Sonja Grath

MOLECULAR & CELLULAR BIOLOGY MASTER

A-3

Serena Schwenkert

MOLECULAR & CELLULAR BIOLOGY MASTER
&
PLANT SCIENCE MASTER

A-4

Group B - 11.11 - 28.11

Dagmar Hann

MOLECULAR & CELLULAR BIOLOGY
&
PLANT SCIENCE MASTER

B-1

Danny Meilinger

HUMANBIOLOGY MASTER
&
MOLECULAR & CELLULAR BIOLOGY MASTER

B-2

Joachim Surm

MOLECULAR & CELLULAR BIOLOGY MASTER

B-3

COMPUTATIONAL COURSE - CONTENT & TOPICS

All information can be found on
Moodle:
moodle -LMU

You need to enrol yourself to the respective group:

Sign in
as soon as you get sorted in your group with the correct enrolment key that you received via Email

!!! IMPORTANT !!!

group specific task will be assigned within MOODLE

sign in as soon as you get sorted in your group with the correct enrolment key!

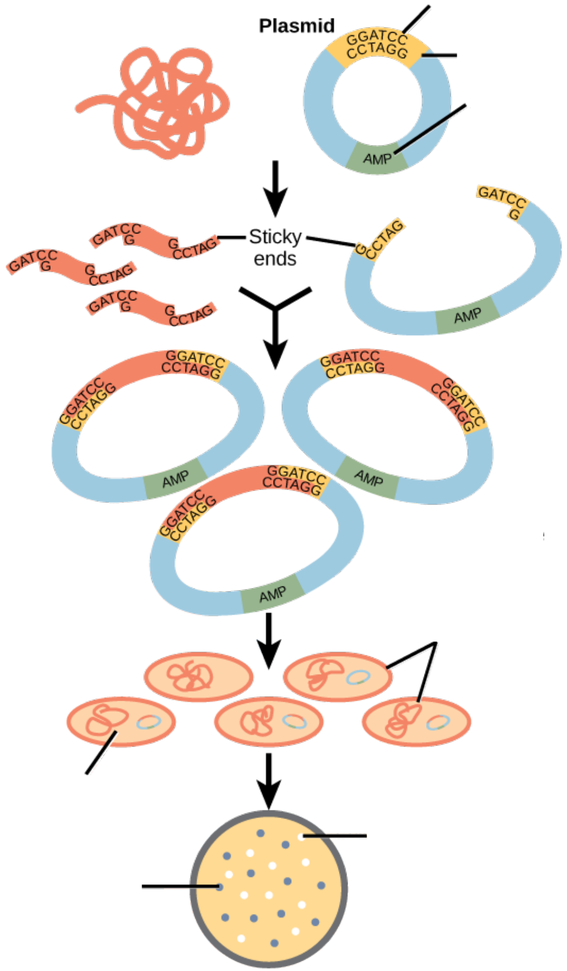
Data Camp HAS to be completed before R-Module !!!

information about Data Camp on moodle!

LAB COURSE - CONTENT & TOPICS

The Essentials Methods in molecular and cellular Biology

PCNA

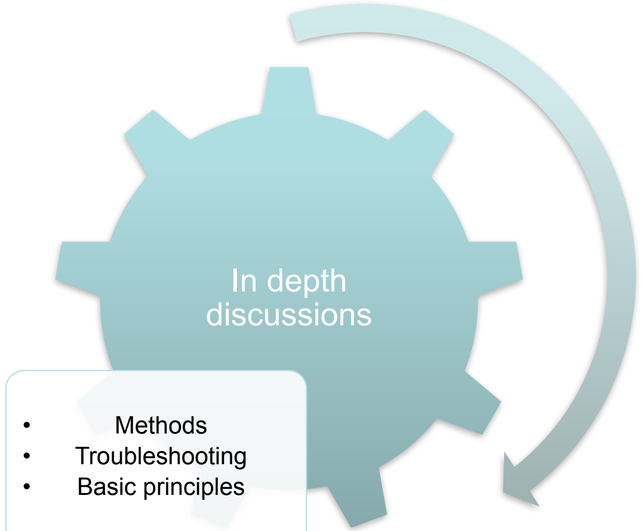


Transfection of
different cell and tissue types

Co-IP

Fluorescence Microscopy

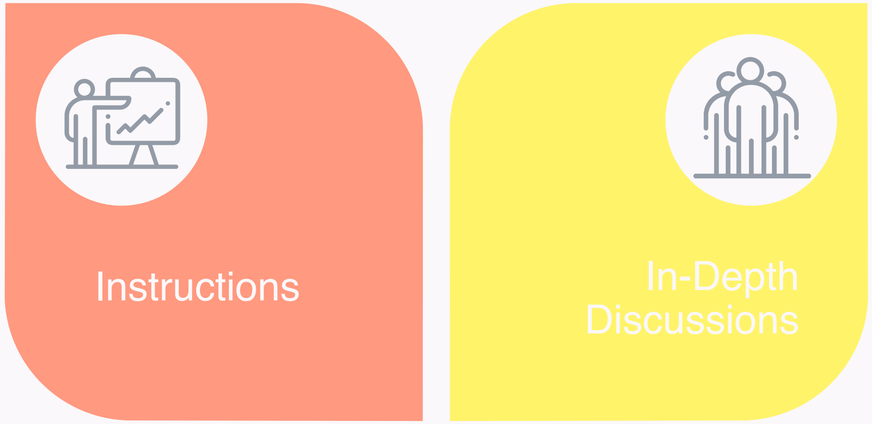
Investigate function of PCNA in plants, humans and other pro & eukaryotic cells



- Methods
- Troubleshooting
- Basic principles

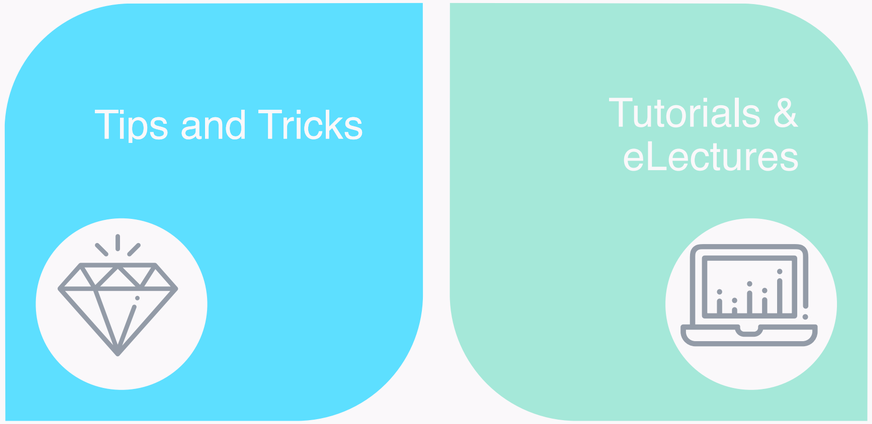
Meta-Teaching Aims

Comprehensive course design with step-by-step instructions



In depth discussions with Lecturers and Tutors

Tips and Tricks on essential lab methods



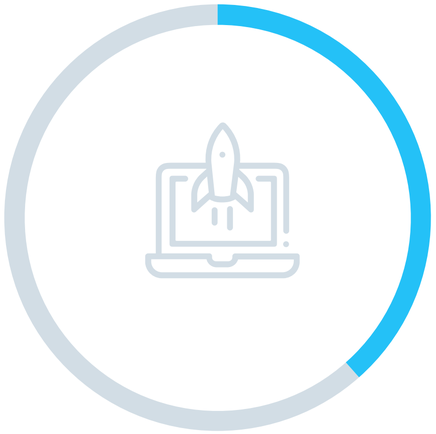
Profound accompanying online tutorials and eLectures

PROOF OF PERFORMANCE

Computational Course

Daily/weekly exercises

submission dates announced during course



Multiple Choice Exam

Date will be end of December and final date will be announced!

Lab Methods Course

Presentation / Seminar Talks

will take place during the course, topics will be assigned & distributed in the first week of the computational course

“Lab”Report

Submission 3 weeks after the course

ADD-ON RECOMMENDED LECTURE

MMB

e-Learning

- **Highly interactive lecture** with **fun online exercises** and live meetings
- **Topics:** essential methods such as Transformation, Western Blotting, IP, Sequencing, ...(these **are also essential topics for mandatory part** of the Lab methods and Computational modules)

You will receive an email with the link to the moodle page and enrolment key!!!

All additional information will be distributed via moodle!

Questions please via the Moodle Forum

Virtual Office and Consultation Hours will be provided via Moodle!

Please use first the Forum for your questions, then the virtual offices ours and then move to writing an email :)

...for general Questions regarding **Computational** Course:
Dagmar Hann
Email: d.hann@bio.lmu.de

...for general Questions regarding the **Lab** Course:
Danny Meilinger
Email: d.meilinger@lmu.de