

Lab Guide for Employees and Interns

(Please give to all new employees to read, please notify DR of any changes)

Sharing rooms, workstations, equipment, utensils, and supplies requires a considerable amount of cooperation and consideration. However, most problems and the associated annoyance are mainly due to carelessness or unawareness. Therefore, the following are some tips to help ensure low-friction laboratory operations. Suggestions for changes and additions to this list are always very welcome.

Basically: leave everything tidy, clean and in working order!!!

Employees (without Bachelor and Master; abbreviation)

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Bisen Rituja	(RB)	Mühlbauer Barbara	(BM)
Colizzi, Sara	(SC)	Öchsner Konrad	(KÖ)
Dahlhoff, Stefan	(SD)	Pütz Stephanie	(SP)
Deppisch, Peter	(PD)	Raabe, Thomas	(TR)
Held, Martina	(MH)	Rieger Dirk	(DR)
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Iqbal, Fathima	(FI)	Wegener Christian	(CW)
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I. General information

! IMPORTANT!

- Never throw sharp objects (hypodermic needles, razor blades, broken glass, etc.) into the residual waste. Special containers are provided for this purpose in each laboratory. (Risk of injury and infection for cleaning personnel!)
- Label all used bottles, beakers, flasks, syringes, containers for Eppendorf cups, etc. with contents, date and name (abbreviation). Unlabeled containers will be disposed of!
- Immediately forward shipments containing perishable substances or files to the recipient or, if the recipient is unavailable, store them properly and leave a message on the workstation.
- Sign and date delivery bills upon receipt of goods, then place directly to IW (secretary's office) or in the secretary's mailbox.
- Alle gelieferten Chemikalien müssen in die Chemikalienliste eingetragen werden Datenblatt **SP** in das Postfach legen! Lieferdatum auf dem Etikett eintragen.
- Only use solutions prepared by other employees after consultation!
- When consumables (chemicals, glass, plastic, etc.) run low, notify the person in charge in time. Please pay special attention to this point. It is better to give notice a little too early than too late!

Handling microorganisms and recombinant nucleic acids

- The rooms marked as "Gene Laboratory" are registered as S1 safety level laboratories. Work that may generate aerosols must be performed in the S2 microbiology laboratory.
- Laboratory waste containing microorganisms or newly combined nucleic acids must be rendered harmless chemically (hypochlorite) or thermally (autoclave).
- Do not drink, eat, smoke or apply cosmetics in the rooms marked S1. Food and cosmetics may not be stored in the laboratories. Bags and street clothes must be stored outside these rooms (locker).
- Wear a lab coat
- Mouth pipetting is prohibited

II. Rooms and Workplaces

The laboratories must be locked in the evening after the end of work. This task falls to the person who works last in the laboratory. Ensure beforehand that no one is locked in (e.g. darkroom or side rooms). Switch off all equipment not in use and the lights overnight and over the weekend!

Many workplaces must be shared. Here it is particularly important that everyone cleans up immediately, cleans up appropriately and leaves nothing behind!

What is needed by everyone (e.g. pens, tape, wipes, rubbing alcohol, etc.) must be available or replenished at the general workstations.

Refrigerators and freezers

Experience shows that there is a lack of space here. Therefore, do not "forget" any utensils in the refrigerator! Samples and vessels without names and dates are regularly removed. When leaving the department (e.g. after completion of the bachelor, master or doctoral thesis), sort out accordingly!

Basically use space-saving containers and store large storage containers in the 4°C room.

4°C-Rooms (DO 19C): general **BM, MG**; (DK 27A): **GG**

Keep clean and do not store food!

Temperature-constant rooms:

(DO 28 Chamber 1-5): **KÖ, DR**

(DK 27C, DK 27D): **CW**

Climate chambers for activity registration (CK 70, DK 01): **KÖ, DR**

Fly climate chambers

DO 19a (**25°**) DO 19b (**18°**): general: **MG**; Malfunctions of temperature or light: **KÖ**

All boxes must be labeled with name abbreviation. Check flies regularly! Rotten jars endanger the whole breeding (mites, fungi microsporidia etc.), therefore move in time and remove old jars. Report malfunctions or damages immediately.

IV. Equipment

In case of any defects, contamination and malfunctions, inform the responsible person immediately! Leave devices and workplaces clean! Contact persons are also helpful with the instruction!

-80°C-freezers (DK 31): **PM, SK**

Sterile bench / cell culture (DK 38/1): **GG**

Use only after instruction. Users must book time in cell culture calendar.

Incubator S2-Cells (DK 38/1): **BM**

LuminoView Olympus (DO 28): **DR**

Use only after instruction

LI-COR Odyssey (DO 12): **PD**

Use only after instruction. Enter usage in list!

Leica Confocal microscope (DO 22, CK 01): DR

SPE and SP8: **Use only after instruction**

SPE: Users book time in the confocal calendar. Enter max. 4 hours per session. Create an "Error Report" in case of error messages. Entry of the error in the report list. Info mail to **DR**

SP8: Bookings via the Biozentrum homepage. In case of malfunction please report to **DR**

q-PCR machine (DO 12): PS

Use only after instruction.

Vibratom (DO 26a): PS

Use only after instruction

Paraffin wax mikrotome / Paraffin wax embedding (DO 26a): MG

Benutzung nur nach Einweisung.

Gel photo (DO 23/1): PS

Use only after instruction

TKA water purification Anlage (DO 17): MG

Use only after instruction

Cooling centrifuge (DO 16): PS

Use only after instruction

Microbiology shaker (DK 31): TR

Use only after instruction

Spektralphotometer NanoDrop (DO 21): PD

Use only after instruction

Bacteria incubator (DO 21): PS

Use only after instruction

Fluorescence microscope (DO 22) CF, Fluorescence stereomicroscope (DK 38/2): CW

Use only after instruction

Important: All internal surfaces that are exposed must be protected from contact and dust - use protective cover! Fingerprints destroy coated optical surfaces. Objectives and eyepieces must always be cleaned only with soft cellulose and aqua dest (for glycerol). ethanol (for oil).

Do not use acetone!

Interference contrast (ICT) objectives must not be unscrewed from the turret, as they are adjusted. If internal surfaces are soiled, notify the contact person.

Alle Mikroskopes in DK 38/2: CW

Use only after instruction

HPLC und Spotter (DK 31): CW

Use only after instruction

Imaging Systeme (DK 28/2, DK 29): CW

Use only after instruction

Flüssig-Stickstoff und Tanks (DK): GG

Refilling the Deware only after instruction. Leaking nitrogen is life-threatening, as it imperceptibly displaces the respiratory oxygen!

pH-Meter (DO 26b): BM; (DK 39): SK

Leave the electrode, rinsing dish and calibration solutions at the measuring station. Never allow the electrode to dry out! Calibrate regularly.

Pipettes: Use only within the specified range, over- or under-turning will cause the calibration inaccurate! Always hang pipettes back in the stand. Defective Gilson pipettes can be serviced and repaired in the workshop. Please contact DR for service.

Scales: Always clean the equipment immediately and keep the surrounding work surface clean! **Fine balance (DK 39): EA; (DO 27): RB**

Computer, programs and access: KÖ

Use only with valid login

V. Consumables

Office supplies: The office supplies cabinet is located next to the secretary's office. Notify the secretary's office (**IW**) in good time if something is almost used up and needs to be reordered.

Chemicals order (DO): DR; (DK): SK

The general chemical room is DK 26, where the poison cabinets are also located. Refrigerator for toxic and harmful substances is located in DO 23/1. Common chemicals are also located in DO 12 or in various laboratories in the drawers under the fume hoods.

Reordering or reordering of chemicals: - molecular (like kits, enzymes): DO: **PS**, DK: **GG** the rest (also sec. antibodies, Vectashield etc.): DO: **DR**, DK: **SK**

General laboratory consumables:

- Plastic goods (tips, cups, tubes): **BM, GG**
- others (tape, wipes etc): **MG**
- Gloves, PPE: **DR**

In the event of malfunctions in electrical equipment or electronics: KÖ**Workshop:**

Orders need to be written here. For the area DO: **DR** for DK: **CW**

In case of malfunctions of the general operating facilities, electricity, water, ventilation, clean water, heating, etc. or repairs to facilities such as windows, doors or lights, notify the technical operation: tel. 84444!

VI. Waste disposal

Waste is collected separately: Paper and cardboard (bins in front of DO 05), yellow garbage can for plastic and metal (bins in DO 05), white glass, stained glass, laboratory glass (the latter is not white glass but tempered glass!) → various collection garbage cans in DO 17; autoclave waste - e.g. tip waste garbage cans (only for tips, eppis and plastic tubes!) or bacteria agar plates - is also disposed of in a large garbage can in DO 17. Place residual waste in the appropriately designated containers.

Chemicals and DAMARIS: SP

All toxic chemicals are collected in appropriate containers in or under the fume hood in DO 26a

Microorganisms, nucleic acids: DO: PS; DK: GG

Dishwashing machines, pipette rinsing machine (DO 17): SF

The glassware is collected in a white tub (hallways) for rinsing. Rinse a little beforehand and remove labeling completely!

Immediately place pipettes in the pipette rack (filled with water) (tip up, never allow to dry)

Autoclav (DO 17): SF

Label the autoclaved goods (name / room number) and place them on the table in front of the autoclave. Do not forget to collect the autoclaved goods again! Collect as much as possible. Autoclave may only be operated by trained personnel!

Sterilization cabinets (DO 17): SF

Use only after instruction

Antibodies may only be removed from the various depots after consultation with **PM** (DO) or **SK** (DK)

Enzymes for molecular biology and its management: **PS**

Flies and larvae from the general breeding for various experiments will be basically only issued by the persons responsible for this!

Förster stocks: **BM**

Wegener stocks: **SK**

The unauthorized removal of fly screens from the cultivation rooms is not permitted!

Fly ordering (Bloomington Stock Center): Collective orders via **IW** to save high customs fees. Notification of pending order via email.

VII. Organisation

List of chemicals (Damaris): SP

Seminar list: IW

Lab guide: DR

Activation **WueTeams: IW**

Activation **share folder: IW, DR, KÖ**

Management and output of locker keys: **DR**

Administration and distribution, activation of **transponders, lab keys: IW**

Project Manager: CF, CW, TR, JMA

Hazardous substances officer (Gefahrstoffbeauftragte): SP

Biological safety officer (BBS) und Safety Officer (SiBe): DR