

Biosafety Level	BSL-1	BSL-2	BSL-3	BSL-4
Description	<ul style="list-style-type: none"> · No Containment · Defined organisms · Unlikely to cause disease 	<ul style="list-style-type: none"> · Containment · Moderate Risk · Disease of varying severity 	<ul style="list-style-type: none"> · High Containment · Aerosol Transmission · Serious/Potentially lethal disease 	<ul style="list-style-type: none"> · Max Containment · "Exotic," High-Risk Agents · Life-threatening disease
Sample Organisms	E.Coli	Influenza, HIV, Lyme Disease	Tuberculosis	Ebola Virus
Pathogen Type	Agents that present minimal potential hazard to personnel & the environment.	Agents associated with human disease & pose moderate hazards to personnel & the environment.	Indigenous or exotic agents, agents that present a potential for aerosol transmission, & agents causing serious or potentially lethal disease.	Dangerous & exotic agents that pose a high risk of aerosol-transmitted laboratory infections & life-threatening disease.
Autoclave Requirements	None	None	Pass-thru autoclave with Bioseal required in laboratory room.	Pass-thru autoclave with Bioseal required in laboratory room.

Table 3. Summary of biosafety level requirements

	BIOSAFETY LEVEL			
	1	2	3	4
Isolation ^a of laboratory	No	No	Yes	Yes
Room sealable for decontamination	No	No	Yes	Yes
Ventilation:				
— inward airflow	No	Desirable	Yes	Yes
— controlled ventilating system	No	Desirable	Yes	Yes
— HEPA-filtered air exhaust	No	No	Yes/No ^b	Yes
Double-door entry	No	No	Yes	Yes
Airlock	No	No	No	Yes
Airlock with shower	No	No	No	Yes
Anteroom	No	No	Yes	—
Anteroom with shower	No	No	Yes/No ^c	No
Effluent treatment	No	No	Yes/No ^c	Yes
Autoclave:				
— on site	No	Desirable	Yes	Yes
— in laboratory room	No	No	Desirable	Yes
— double-ended	No	No	Desirable	Yes
Biological safety cabinets	No	Desirable	Yes	Yes
Personnel safety monitoring capability ^d	No	No	Desirable	Yes

^a Environmental and functional isolation from general traffic.

^b Dependent on location of exhaust (see Chapter 4).

^c Dependent on agent(s) used in the laboratory.

^d For example, window, closed-circuit television, two-way communication.

Biosafety Level 1 – BSL1

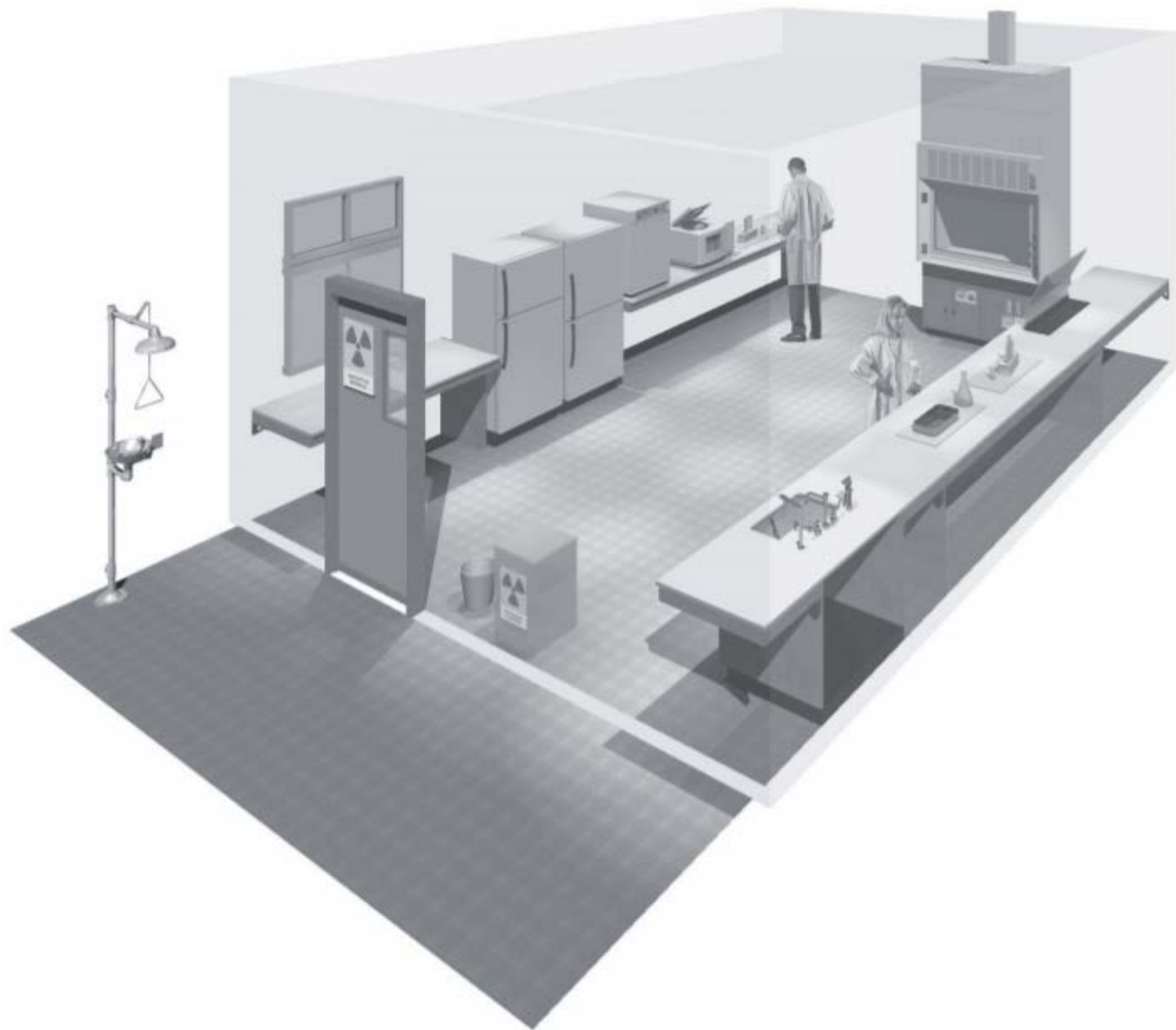


Figure 2. A typical Biosafety Level 1 laboratory
(graphics kindly provided by CUH2A, Princeton, NJ, USA)

Biosafety Level 2 – BSL2

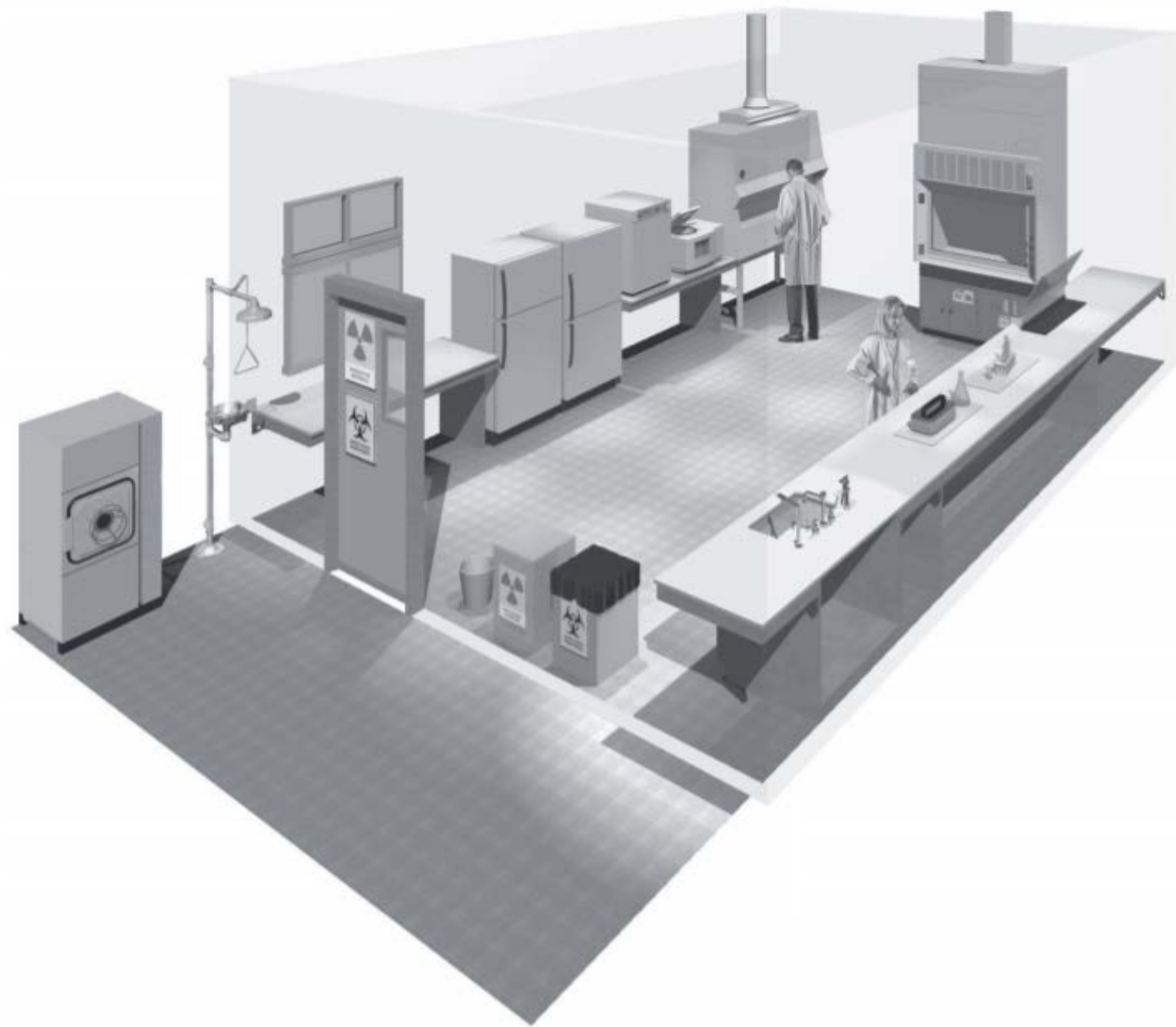


Figure 3. A typical Biosafety Level 2 laboratory

Biosafety Level 3 – BSL3

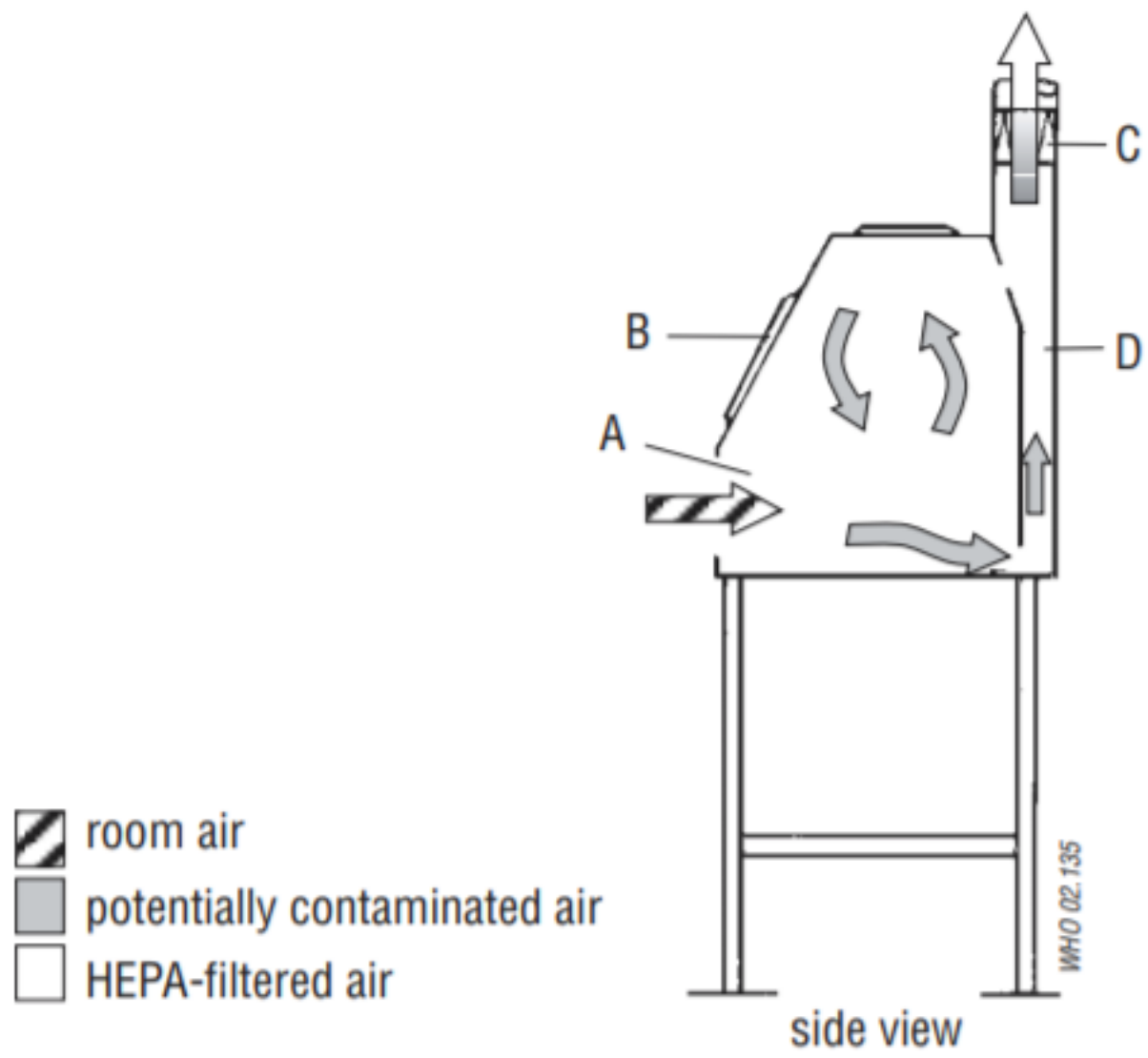


Figure 6. Schematic diagram of a Class I biological safety cabinet.
A, front opening; B, sash; C, exhaust HEPA filter; D, exhaust plenum.

Biohazard warning sign for laboratory doors



BIOHAZARD

MM10 04 64

ADMITTANCE TO AUTHORIZED PERSONNEL ONLY

Biosafety Level: _____

Responsible Investigator: _____

In case of emergency call: _____

Daytime phone: _____ Home phone: _____

**Authorization for entrance must be obtained from
the Responsible Investigator named above.**

Biosafety Level 4 – BSL4

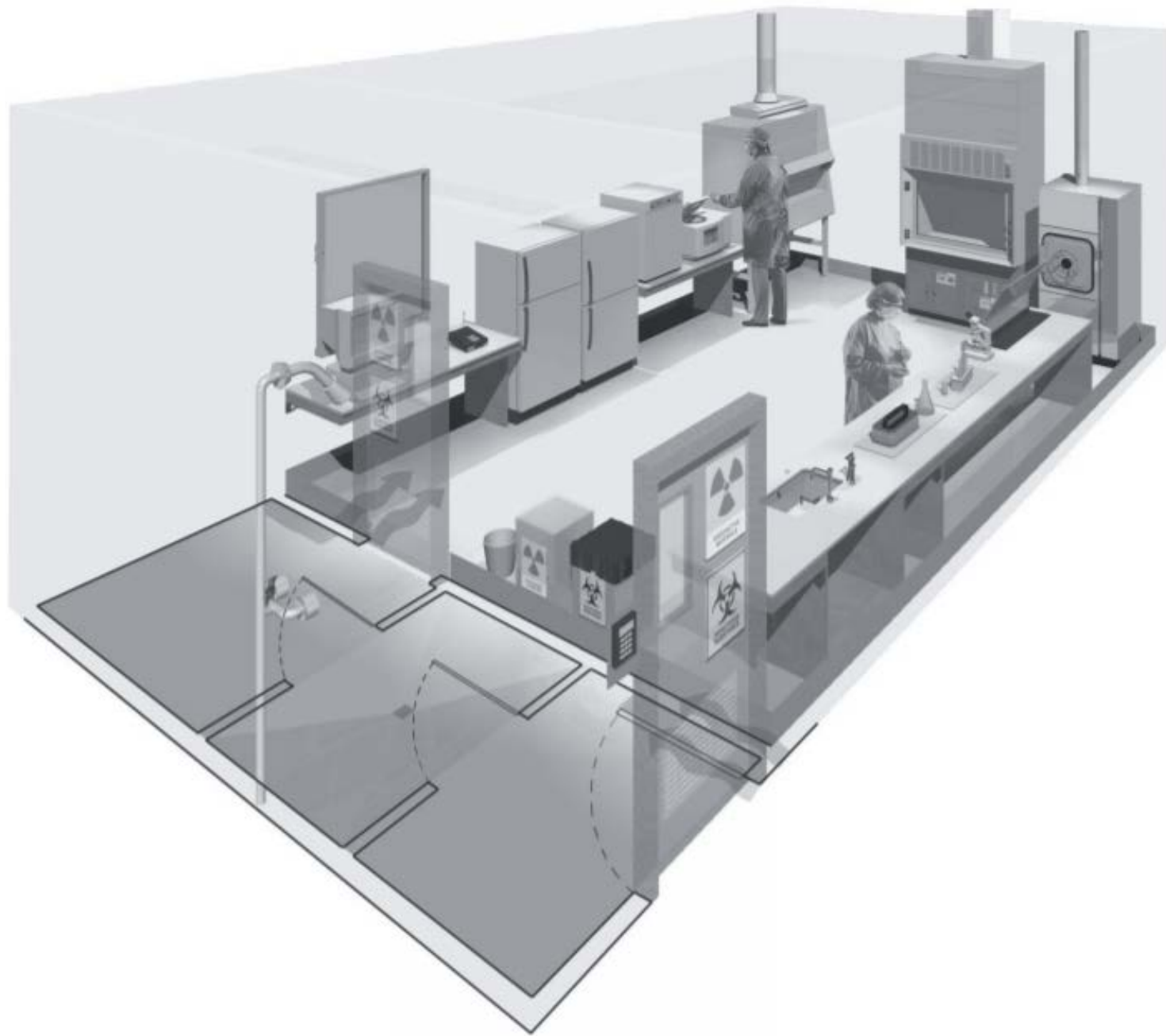
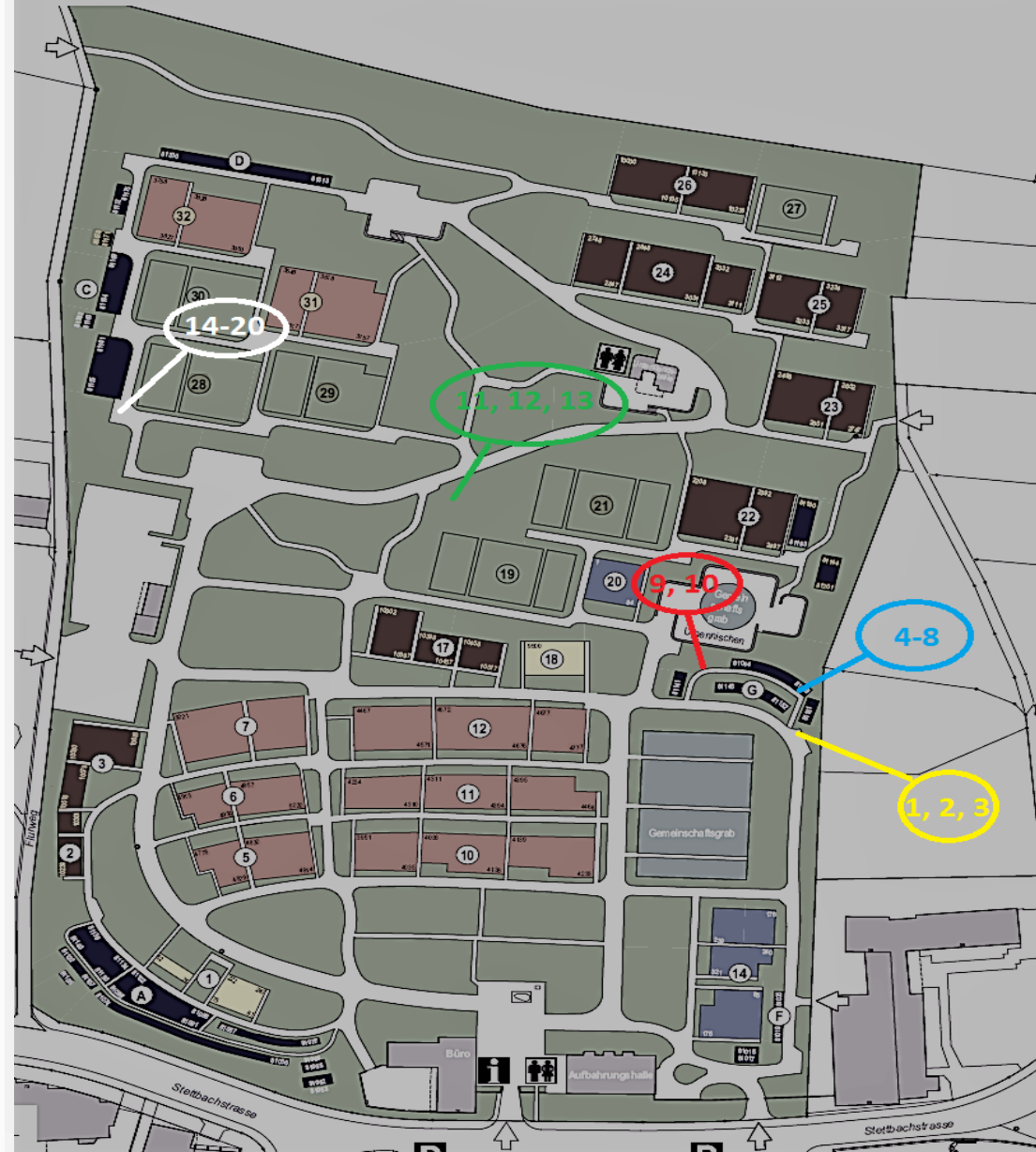


Figure 4. A typical Biosafety Level 3 laboratory

Orientierungsplan Friedhof Schwamendingen

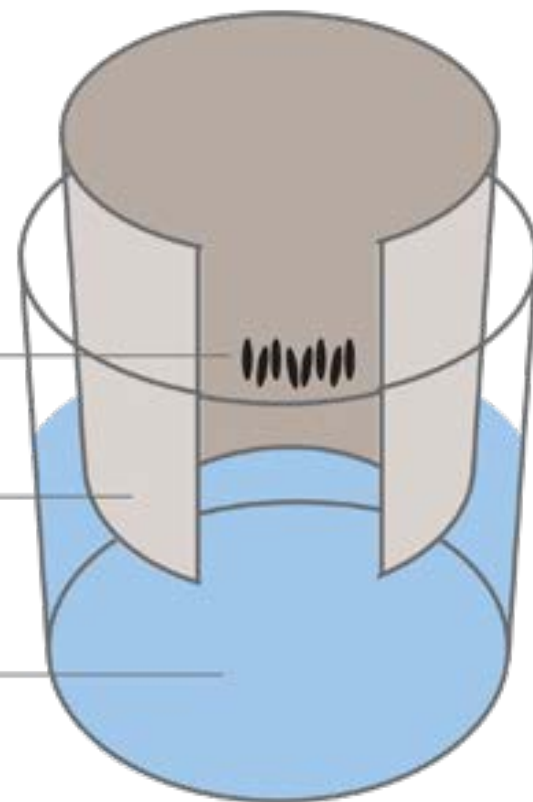


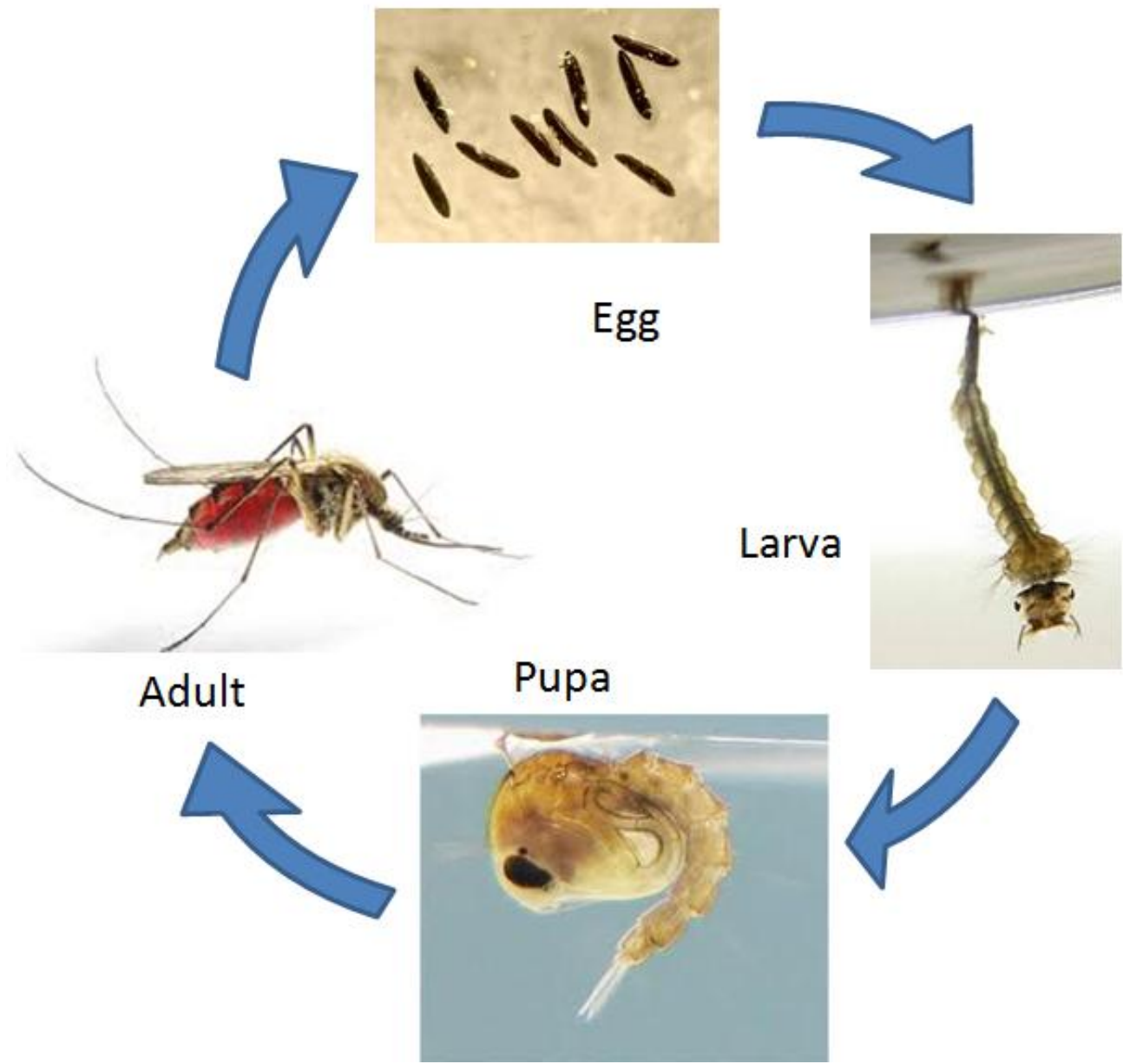


Paper collects eggs laid
by mosquitoes

Collection paper submerged
into water

Water





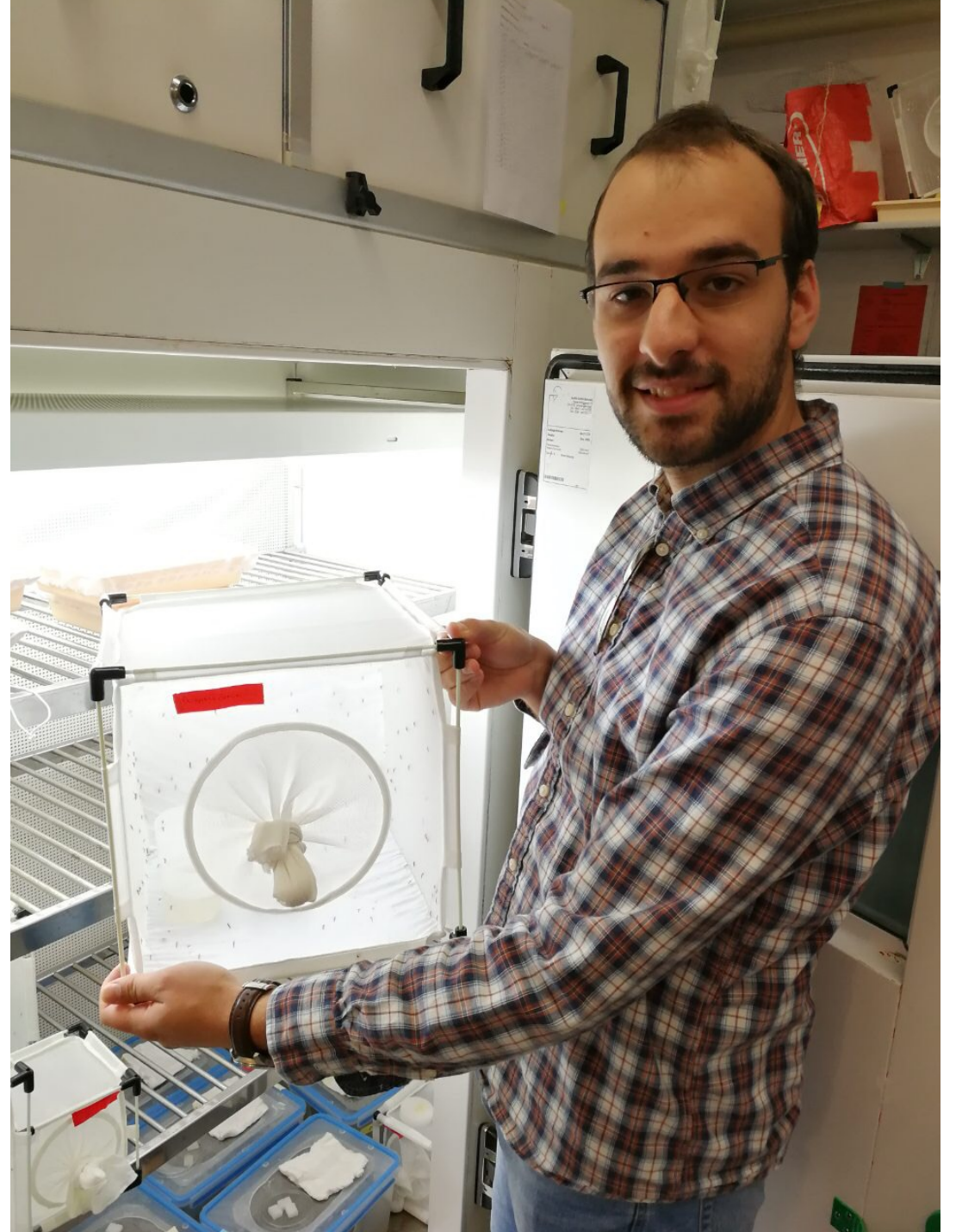
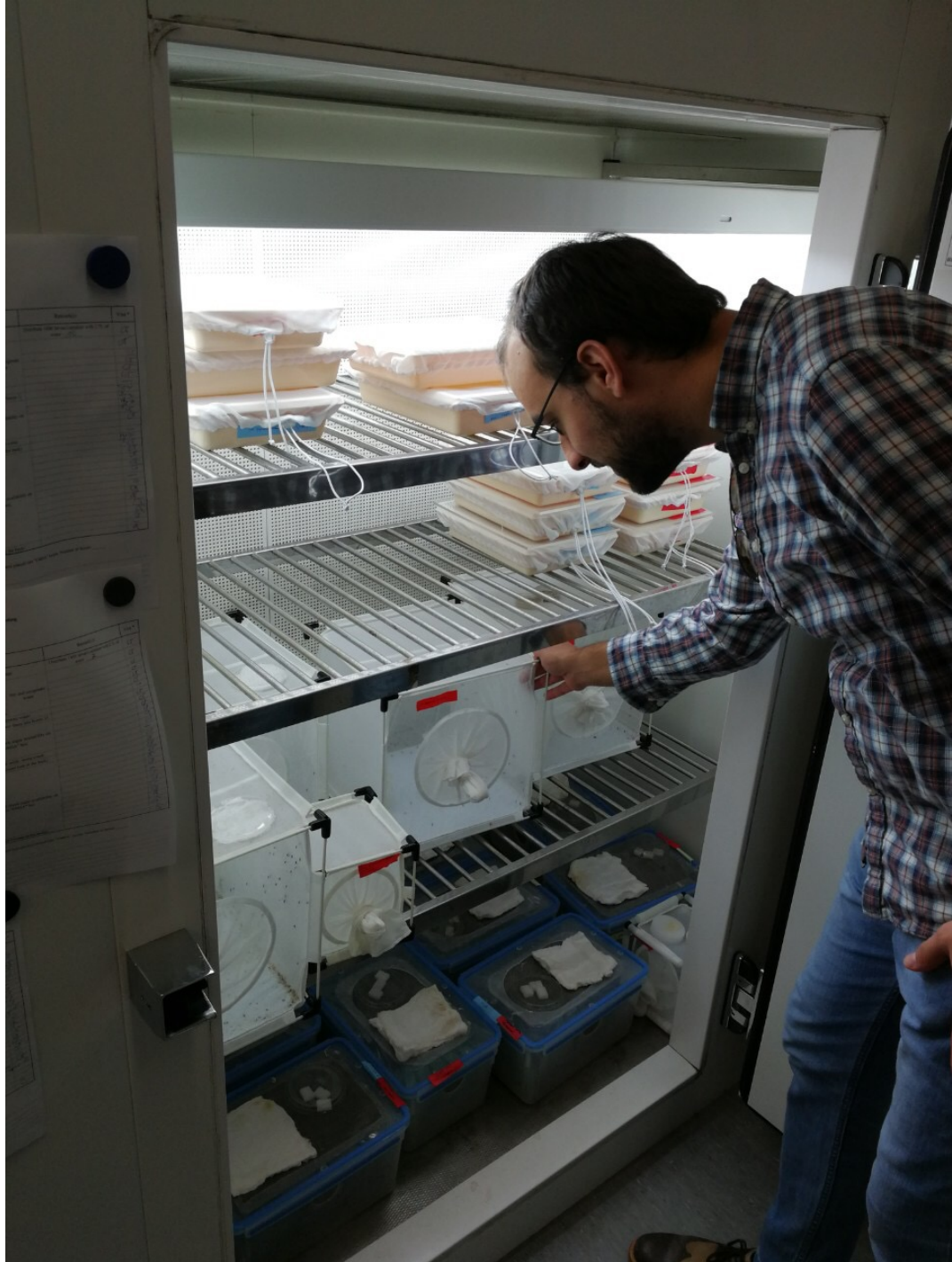
PARAFILM

Cx. pipiens 202005

VA TDI 00.51 F532

Burkhalter + Co.
Haushaltapparate
Service 044-888 20 33

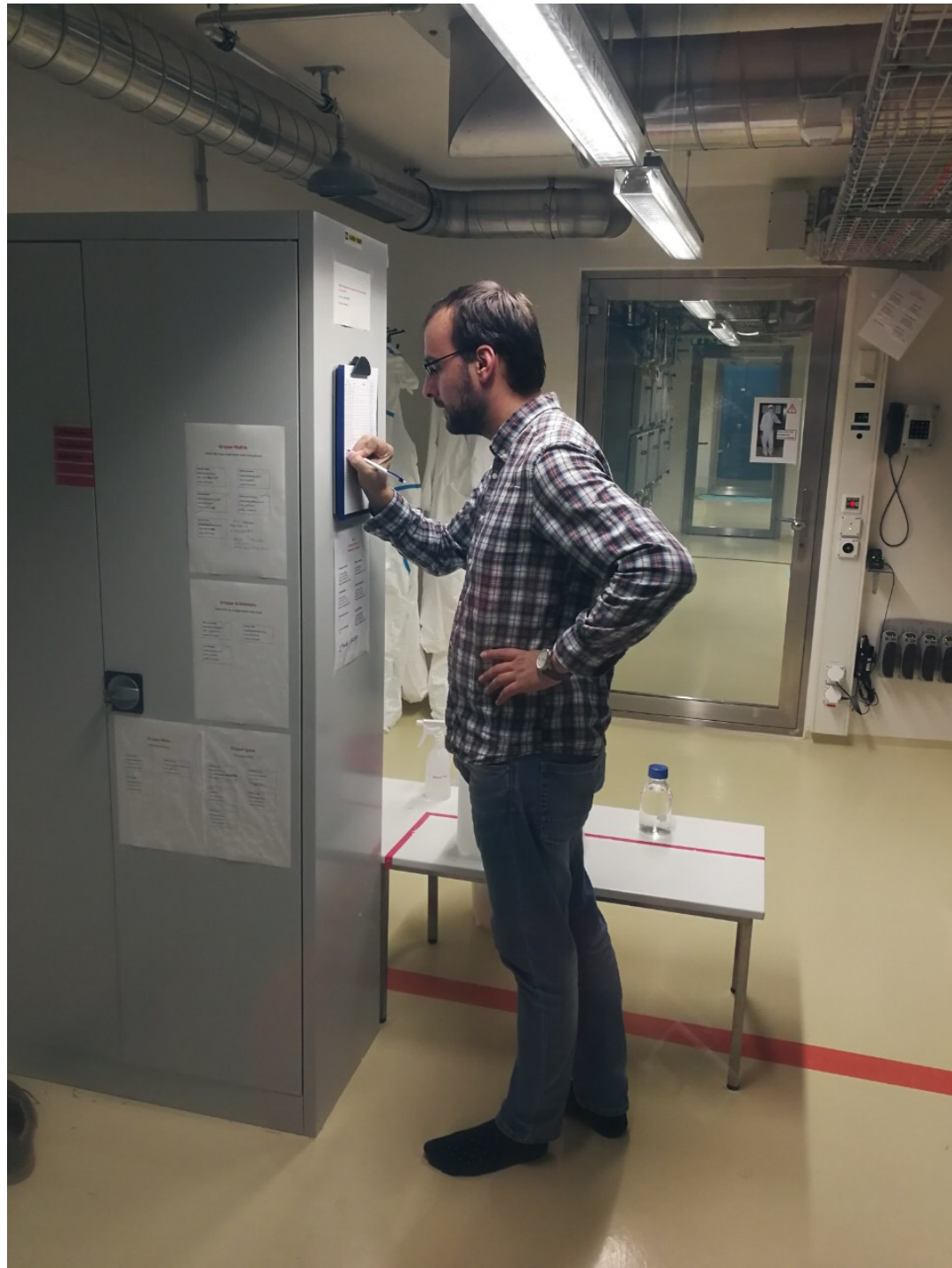
















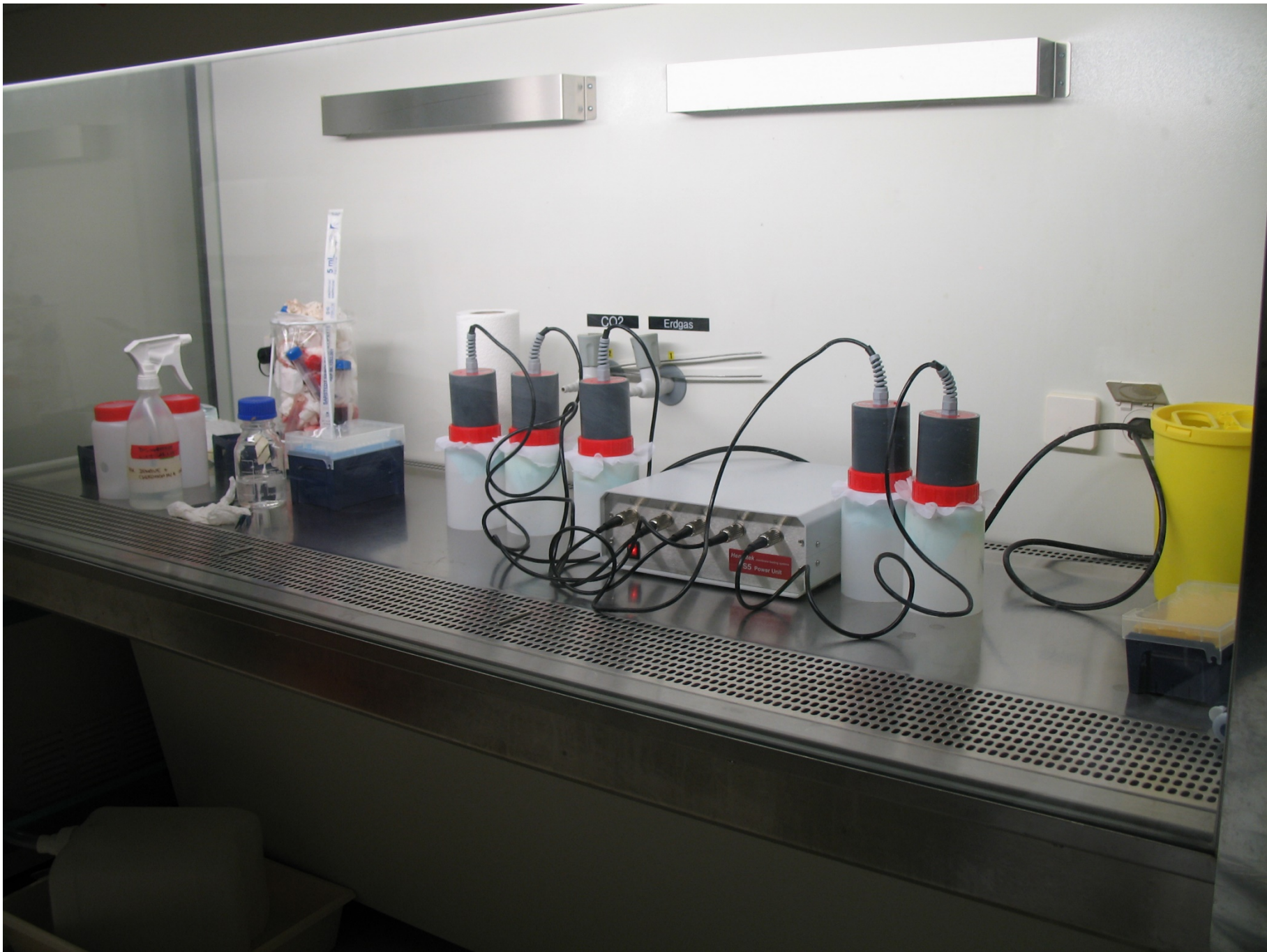


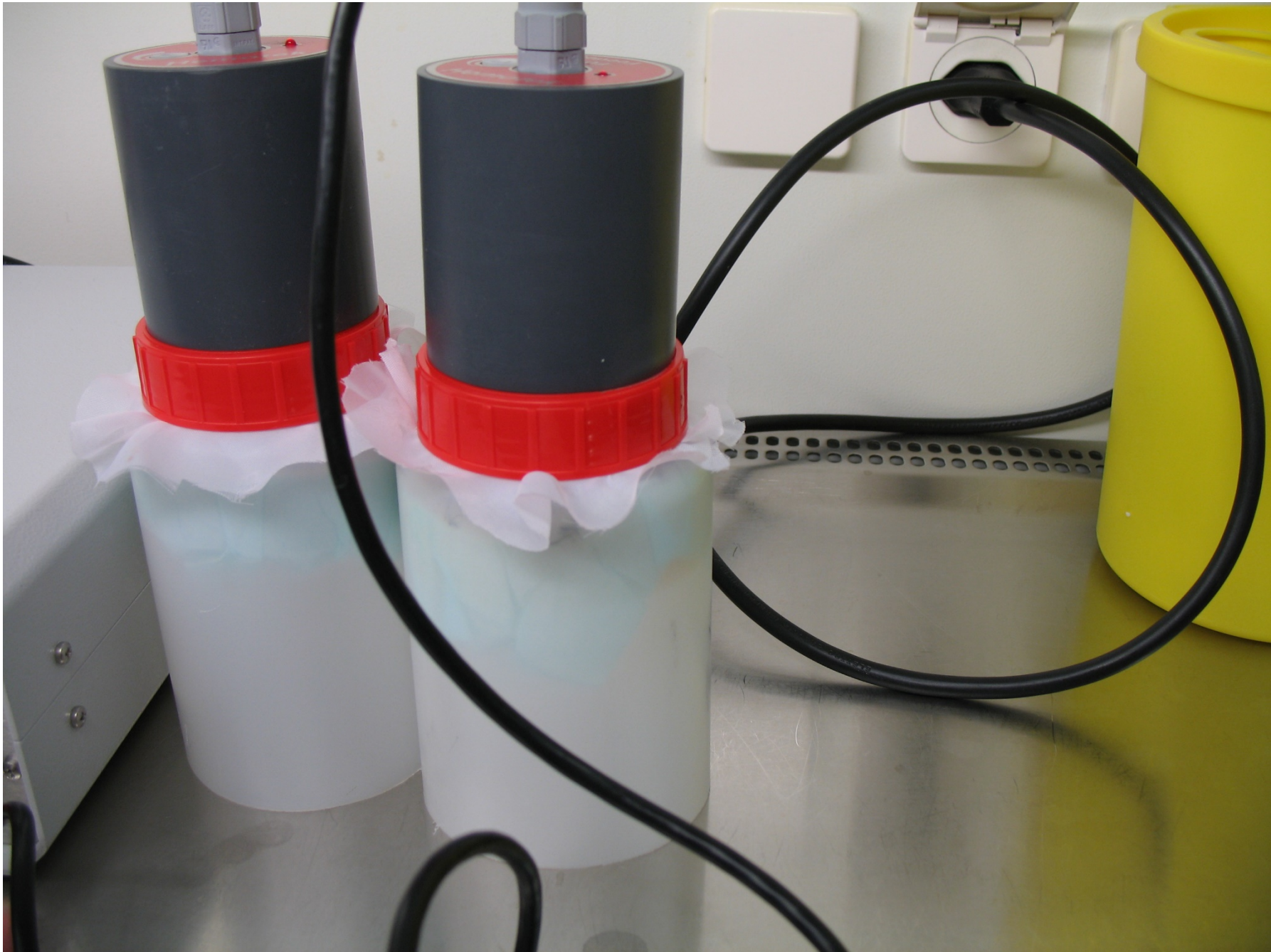


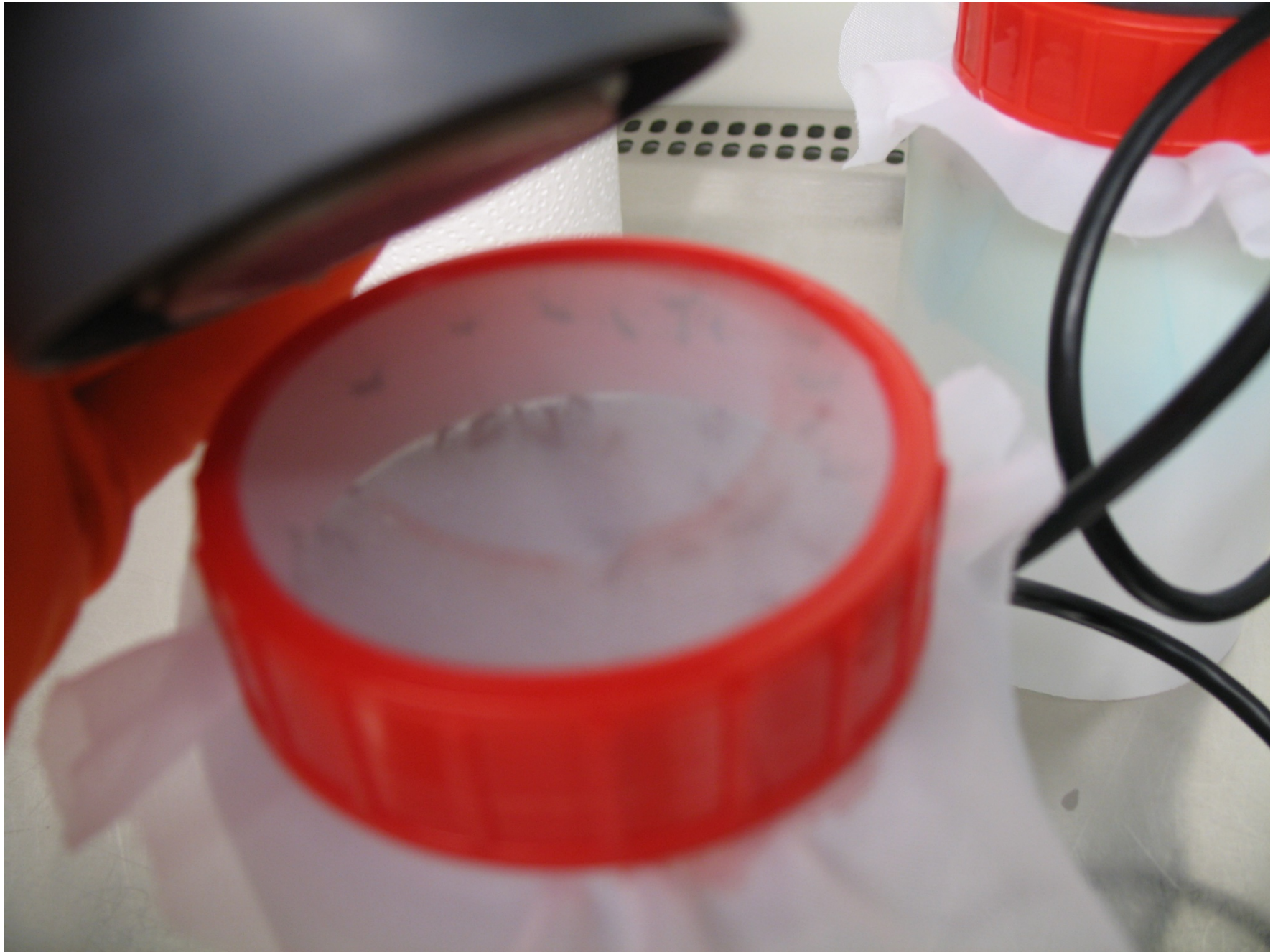












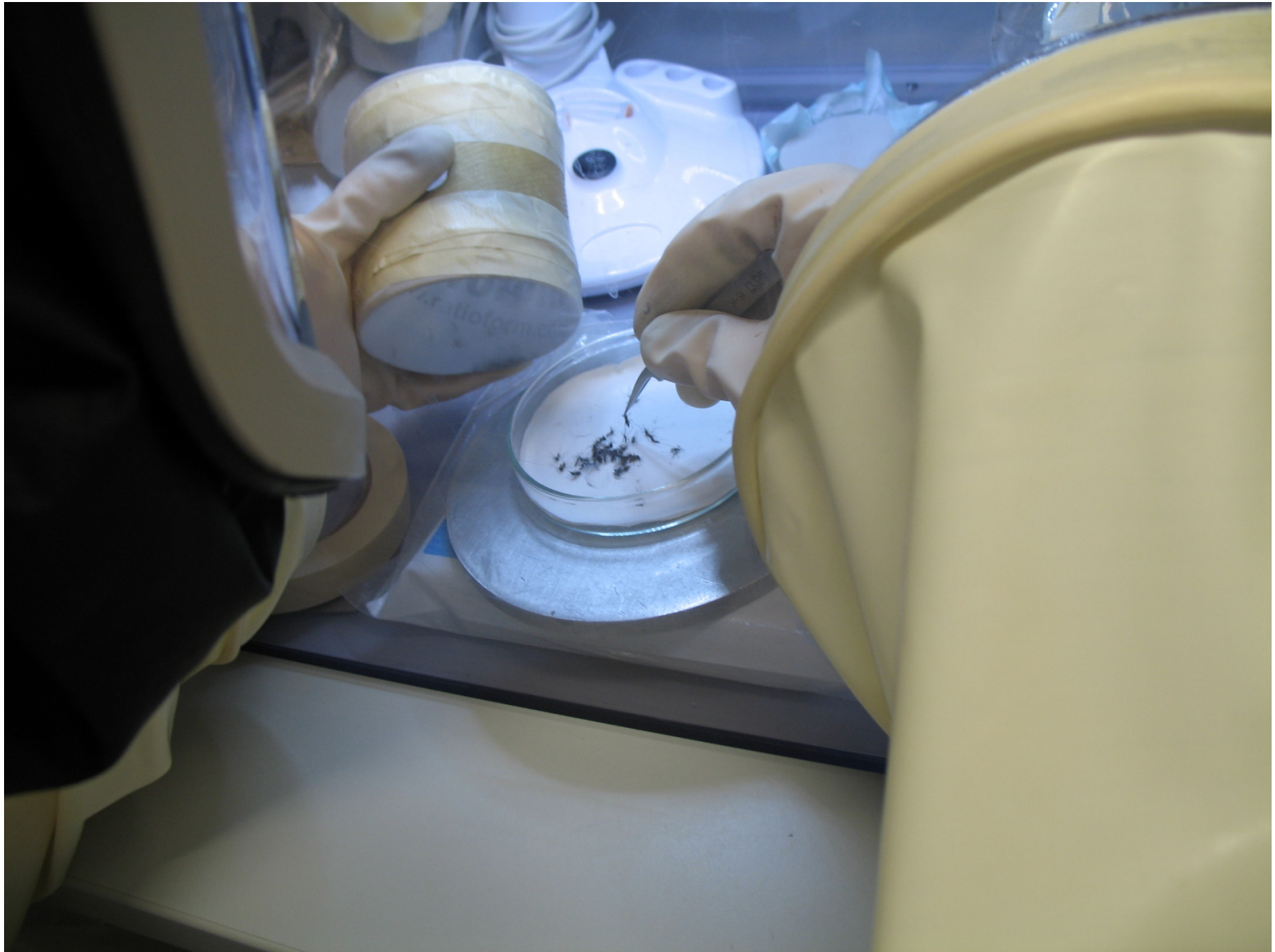




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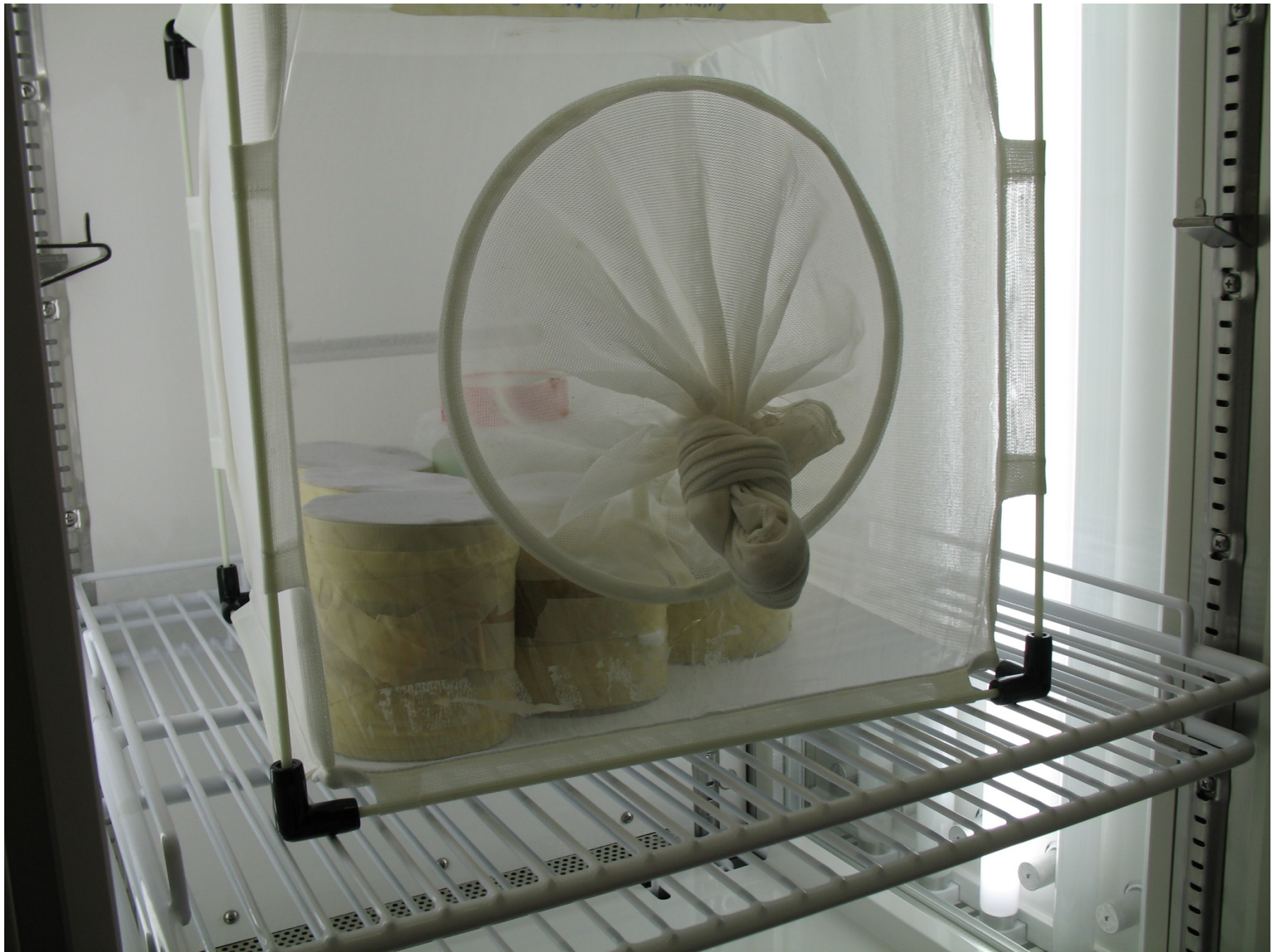
Pan

IN USE
Circu/ae
PERS
CARE
FOR PROBLETS
EVA HELMERS
LUCY STAFFORD

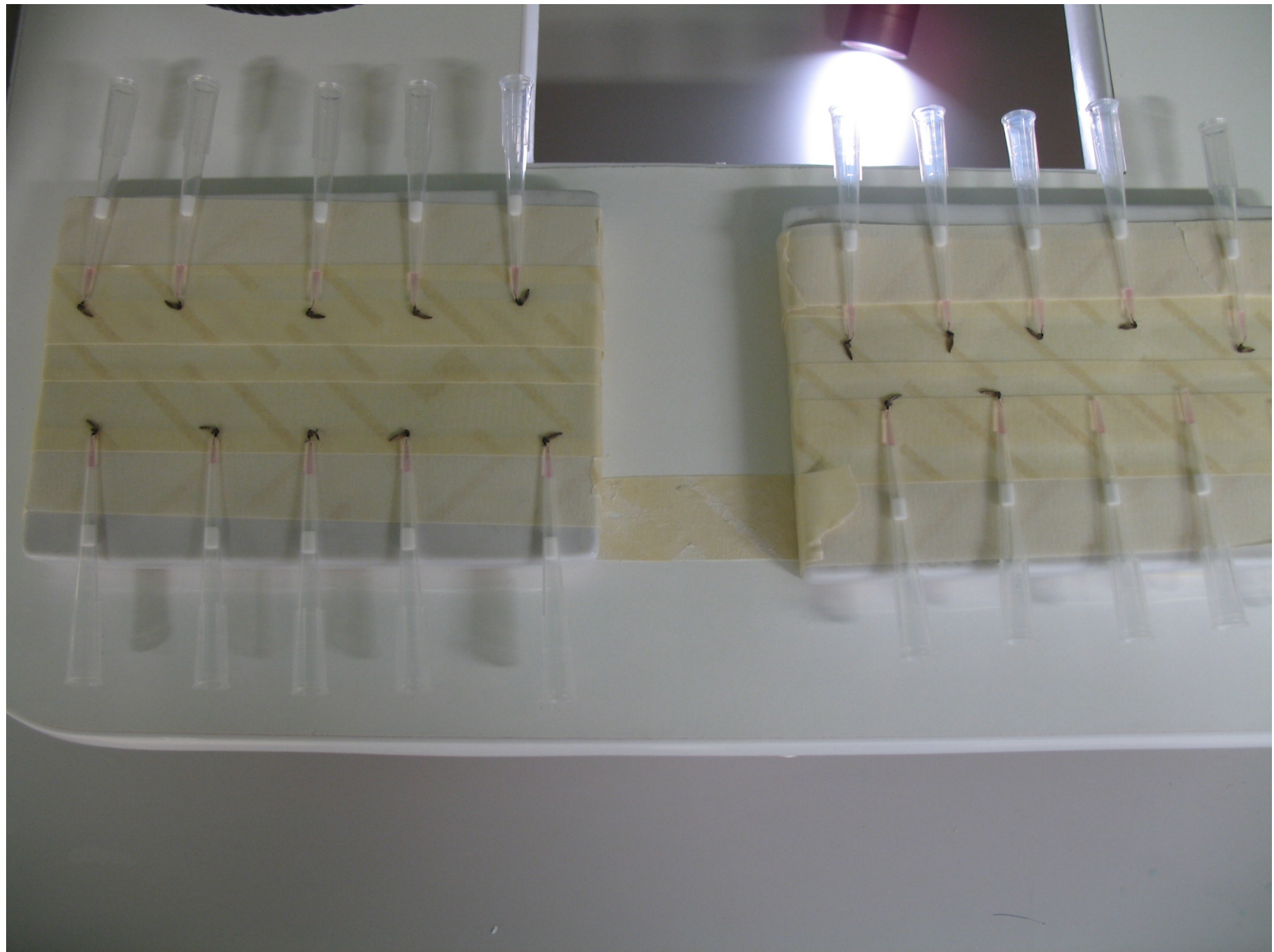














notizen	o getrennte Entsorgung
	o von Lichtquelle abgewandt
	o Abdecken aufpassen, nicht
Kontrollen	o vorsichtiger, umständlicher Bewegungsmuster
	o unsicherer Grip (Axtklinge)
	o kein Gefährdungsfeld

with animals!!!

Erdgas



