

# Molecular Oncology Laboratory

**LAW AND ORDER**

T.-C. He

# **Molecular Oncology Laboratory Meeting**

## **Guide to A Research Presentation**

- 1. Objective/Goal of the project**
- 2. Introduction/Background**
- 3. Methods/Techniques**
- 4. Results (good & bad)**
- 5. Summary/conclusion**
- 6. What's next**













# Molecular Oncology Laboratory Meeting

# We are BL2 and ABSL2!

#### IV. Safety Practices

## 1. PERSONAL PROTECTIVE EQUIPMENT (PPE)/SAFETY EQUIPMENT

Please check the appropriate biosafety level and, if applicable, animal biosafety level for this agent. PPE requirements are listed under each level. If Section II.3.a. of this form indicates BL1 w/BL2 practices or BL2 w/BL3 practices, please list additional PPE that staff members will be required to use. All staff must comply with these precautions when working with this agent.

	Biosafety Level			Animal Biosafety Level		
Required PPE	 BL1	 BL2	 BL3	 ABSL1	 ABSL2	 ABSL3
Safety Goggles	X	X	X		X	X
Surgical Mask				X	X	
Face Shield*			X			X
Respirator**			X			X
Gloves	X	X	X	X	X	X
Lab Coat	X	X	X			
Shoe Covers			X	X	X	X
Tyvek Sleeves			X	X	X	X
Protective Suit/Gown			X	X	X	X
Handwash Sink***		X	X		X	X
Eyewash	X	X	X	X	X	X
Biosafety Cabinet****			X		X	X
Pull Chain Safety Shower	X	X		X	X	
Shower Out			X			X
Additional PPE						

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**Many Actions Are Contagious  
For better or worse!**



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Lab Safety: No Slippers Allowed



# Molecular Oncology Laboratory Meeting

Lab Safety: No shorts (w/o wearing lab coat) allowed



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## The Spirit of Team Work



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## Dollars and Sense



# Dollars and Sense

Item	Unit price	\$ per item
10ml pipettes	\$39/200	\$0.20 each
5ml pipettes	\$35/200	\$0.13 each
2ml pipettes	\$114/1000	\$0.11 each
T-75 flask (ISC)	\$107/120	\$0.90 each
T-25 flask (ISC)	\$100/200	\$0.50 each
T-75 flask (Corning)	\$240/100	\$2.40 each
T-25 flask (Corning)	\$140/100	\$1.40 each
100mm dishes	\$142/360	\$0.40 each
6-well plates	\$78/100	\$0.78 each
12-well plates	\$98/100	\$0.98 each
24-well plates	\$81/100	\$0.80 each
48-well plates	\$98/100	\$1.00 each
96-well culture plates	\$131/100	\$1.31 each
96-well PCR plates	\$52/25 plates	\$2.08/plate
96-well qPCR plates w/o lids	\$93.12/960	\$9.31/box of 96
20ul filter tips	\$40.50/960	\$4.05/box of 96
200ul non-filter tips	\$17.50/960	\$1.75/box of 96
Lipofectamine	\$792/4ml	~\$2/20ul transfection
DH10B, electrocompetent	\$138.40/0.6ml	\$1.20/5ul transformation
DyNamo kit	\$200/5ml (2x)	\$.40/20ul reaction
Wizard Plus Prep	\$266.34/250 preps	~\$1.0/prep
FBS	\$190/500ml	\$19/500ml complete med
Cosmic calf serum	\$52/500ml	\$5.2/500ml complete med

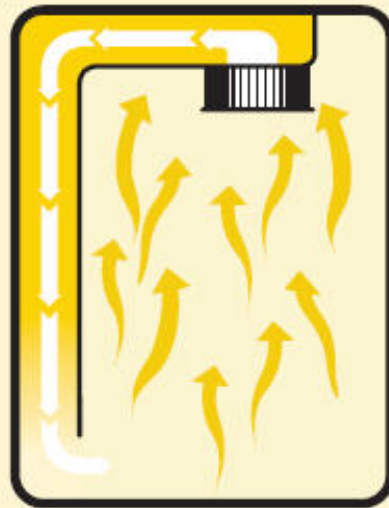
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## SOPs (Standing Operating Procedures)

- Ordering and stocking items
- Receiving and packaging slips
- Molecular cloning
- PCR reactions
- Cell Culture
- Adv packaging & amplification
- Adv infections

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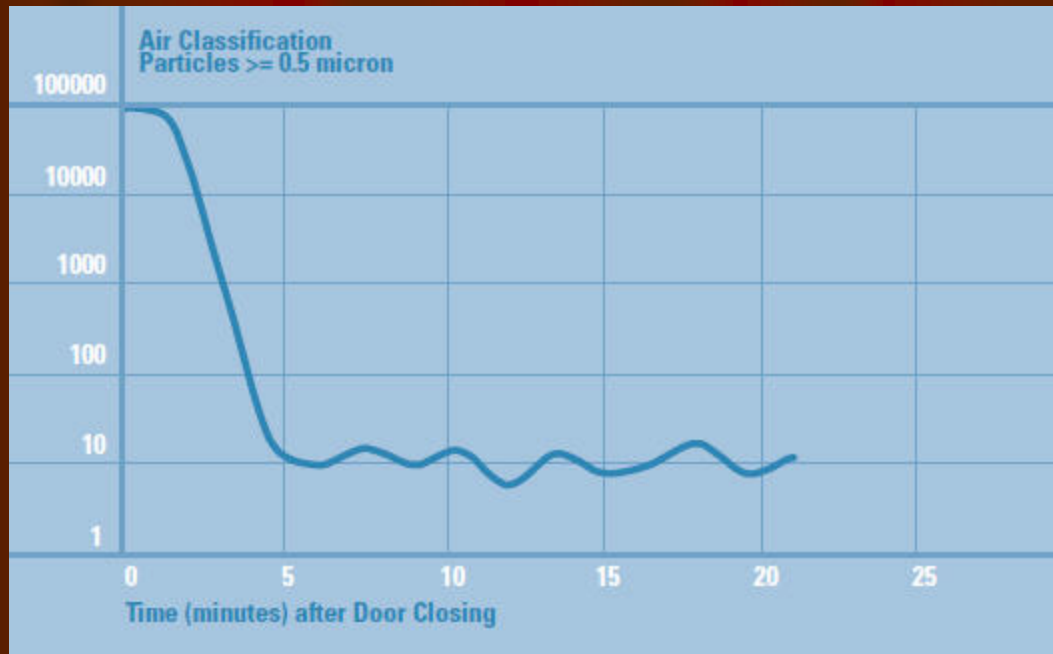
## Pictures of the Week



◀ The patented HEPA Filter Airflow System continuously filters the entire chamber volume every minute to provide an aseptic culturing atmosphere

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## Pictures of the Week



### AIR QUALITY DEFINED

Federal Standard 209E and International Standard ISO 14644-1 define air quality classifications (e.g., Class 1, 10, 100 and ISO Class 1, 2, etc.).

The Federal class number is the maximum allowable number of particles 0.5 microns and larger per cubic foot of air. ISO Class 2 correlates most closely to Federal Standard Class 100.

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**Your messy bench will reduce your productivity!**

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## Chaotic electrophoresis



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Cuvettes are taking a bath!



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## Pictures of the Week

### Chaotic electrophoresis



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## Pictures of the Week



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Cover me

Enzymes are dislocated

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## Pictures of the Week



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## Pictures of the Week



When disposables are not disposed of

# We are what we eat?!



# Pictures of the Week



# Pictures of the Week



# Pictures of the Week



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## Pictures of the Week

Not so nice

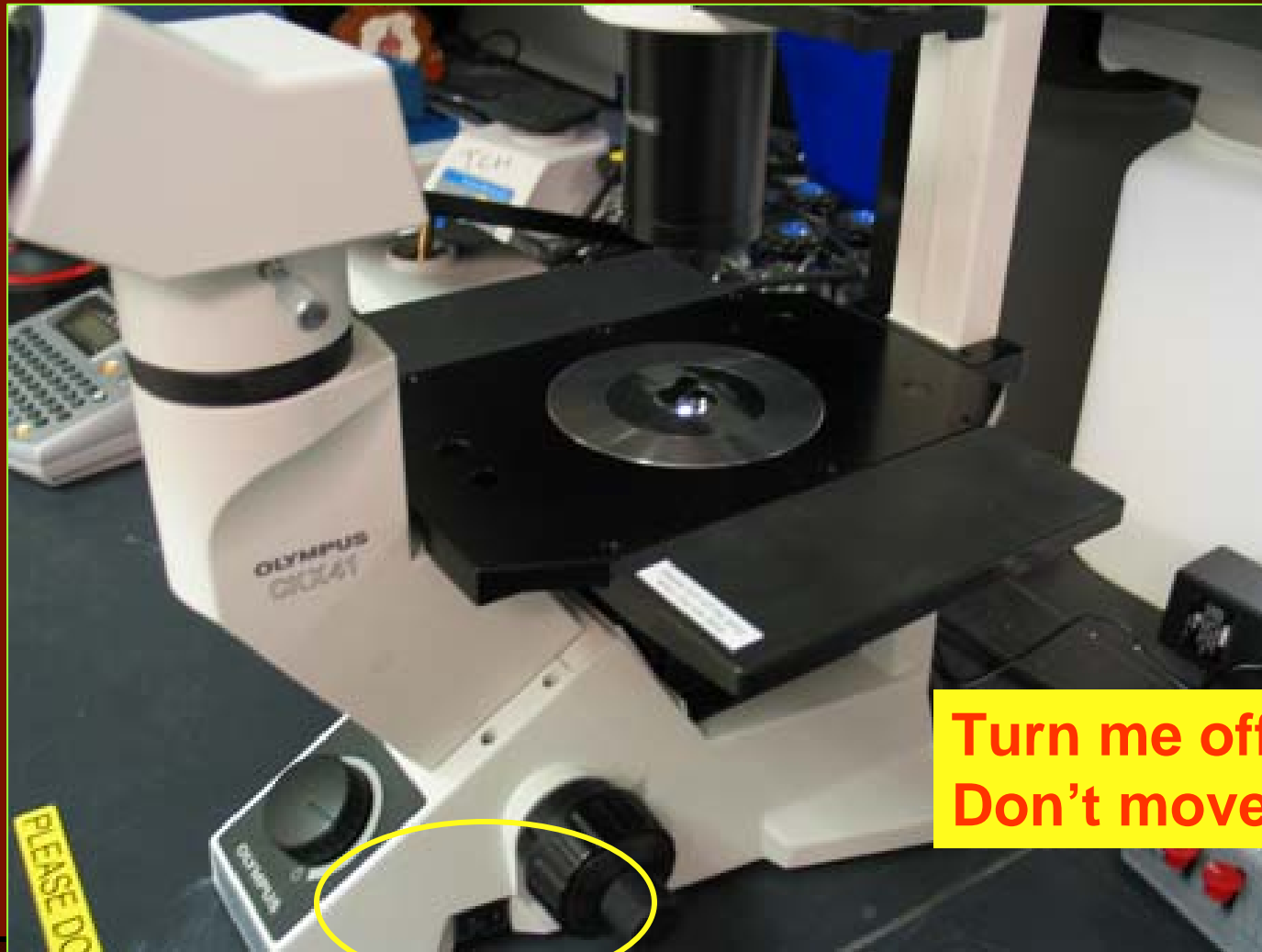


Nice



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## Pictures of the Week



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## Pictures of the Week



# Molecular Oncology Laboratory Meeting

## Pictures of the Week



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## Pictures of the Week

**Organized cell culture hood**



# Molecular Oncology Laboratory Meeting

## Pictures of the Week



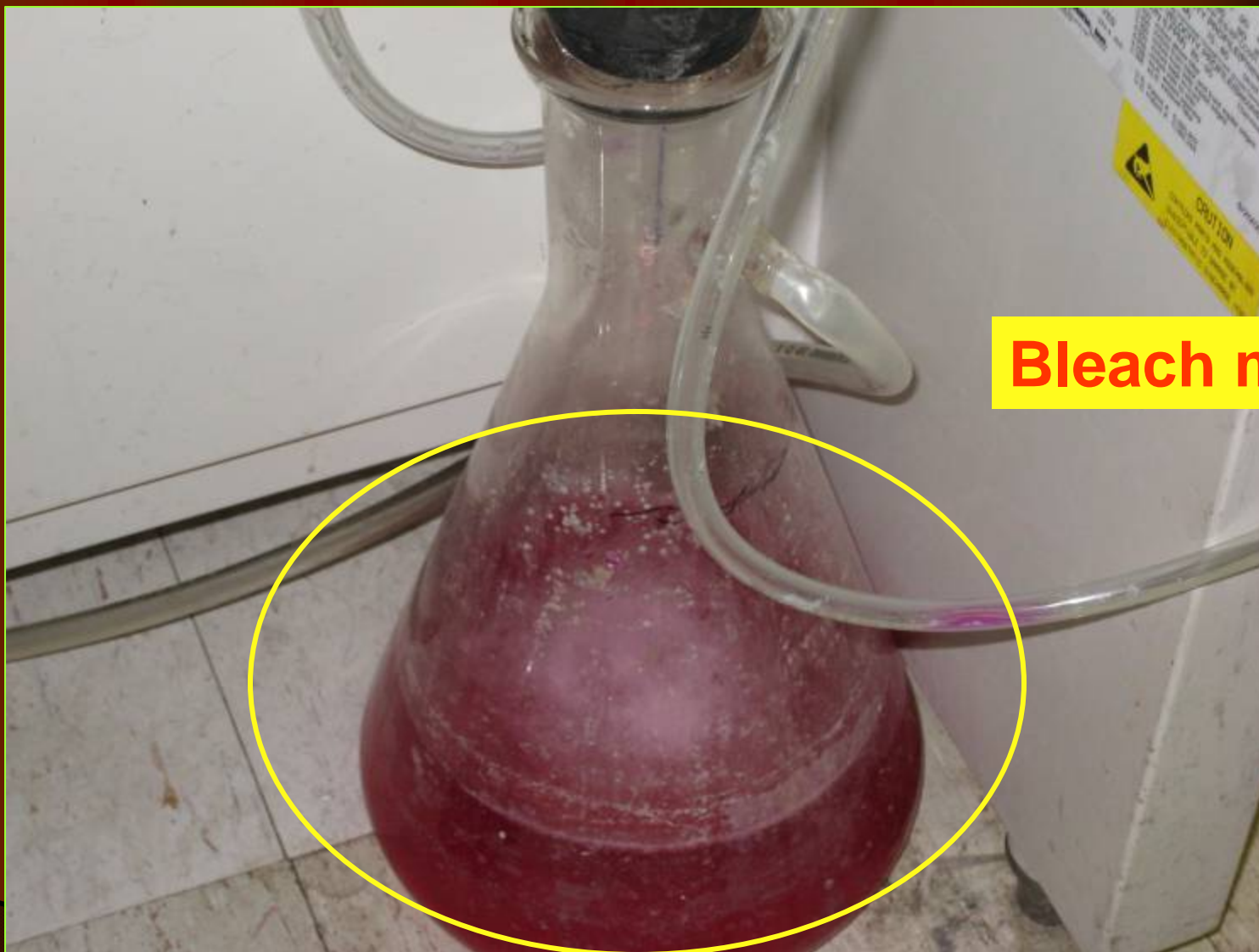
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## Pictures of the Week



# Molecular Oncology Laboratory Meeting

## Pictures of the Week



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Take care of the microscope



# Molecular Oncology Laboratory Meeting

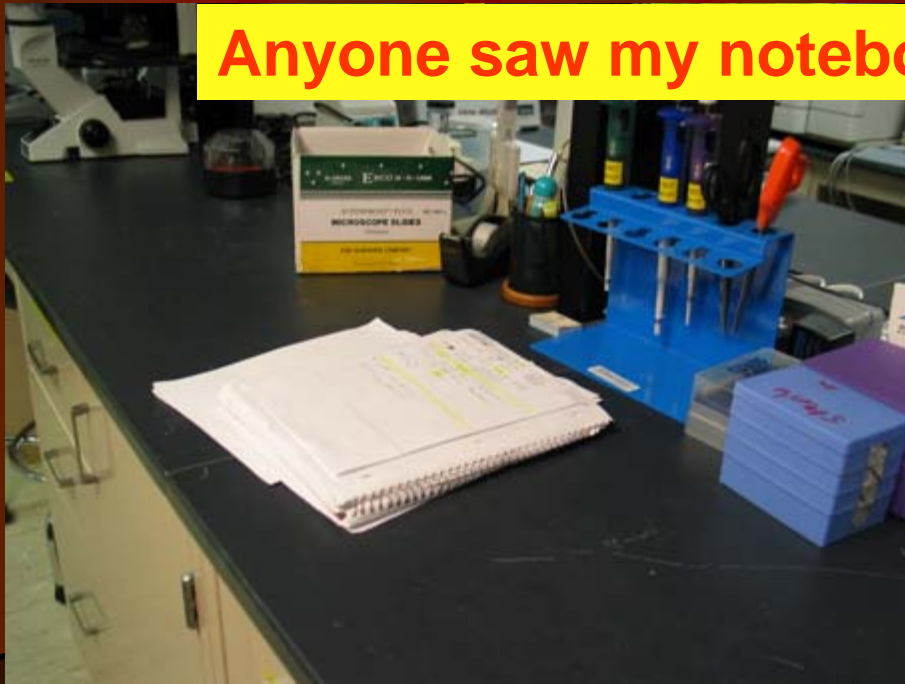
Beat the Crowd in J-607



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## Pictures of the Week

Anyone saw my notebook?



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Thank you for your attention