

Importance of Safety in Biology Laboratory

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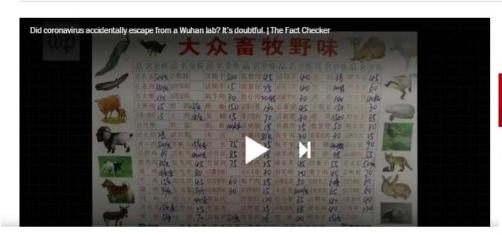
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Fact Checker · Analysis

Was the new coronavirus accidentally released from a Wuhan lab? It's doubtful.

BBC 选项(英文)



Origin of COVID-19?



Accident in Bio Lab can Lead to Pandemic



First U.S. scientist to die of plague in 50 years worked in labs with 'harmless' bacteria

By DAILY MAIL REPORTER

UPDATED: 13:24 BST, 28 February 2011













A scientist died after becoming the first American researcher to contract the plague in 50 years, it has been revealed.

Malcolm Casadaban, 60, was working with a weakened form of the plague's bacteria thought to be harmless to humans when he died in September 2009, a report said.

The University of Chicago genetics and cell biology professor's work with the live bacteria was not even noted when he fell ill and he followed proper safety protocols.



Dead: Chicago genetics and cell biology professor Malcolm Casadaban, 60, is the first U.S. scientist to die after contracting the plague in 50 years



Yersinia Pestis: The bacteria causes pneumonic, bubonic and septicemic plague, which killed millions of people in medieval Europe and still affects others today

Deadly Germ Research Is Shut Down at Army Lab Over Safety Concerns

Problems with disposal of dangerous materials led the government to suspend research at the military's leading biodefense center.

《纽约时报》2019年8月5日报道称:安全堪忧,美军实验室致命细菌研究被关闭

《纽约时报》报道称,美疾控中心表示,关闭德特里克堡生物实验室,原因是实验室没有"完善的系统来净化废水"(did not have "sufficient systems in place to decontaminate wastewater")。但是,疾控中心以"国家安全原因"("national security reasons")为由,拒绝公布有关其决定的信息。



The three R's: Responsibility, Reliability & Respect

Respect your own work and time;

Respect others' work and time.

Do NOT Touch Others' Work!

熬了幾個通宵終于培養出菌,心想吃完飯後回來進行下一步,剛拿起筷子,師妹發來短信:我幫你把培養皿刷乾淨了。

After a few overnights, I finally cultivated the bacteria. I wanted to come back to the next step after lunch. I just picked up the chopsticks and my lab mate sent a text message: I've helped you clean the petri dishes.

Correctly Label Your Reagent



有次把沒貼標簽的硝酸當成了 酒精,倒進另外一個裝有酒精的瓶 子裏混合,兩者產生反應,噴上房 頂。

Once the unlabeled nitric acid was used as alcohol and poured into another bottle containing alcohol to mix, the two reacted and sprayed on the roof.

Correctly Label Your Reagent



Lysis buffer = SDS lysis buffer? RIPA lysis buffer?

Running buffer = 10 x SDS running buffer?

1 X SDS running buffer?

TAE running buffer?

TBE running buffer?

MOPS running buffer?

Why Gloves ONLY in the Lab?

Lysis buffer was transferred from outside of the gloves to the inside.



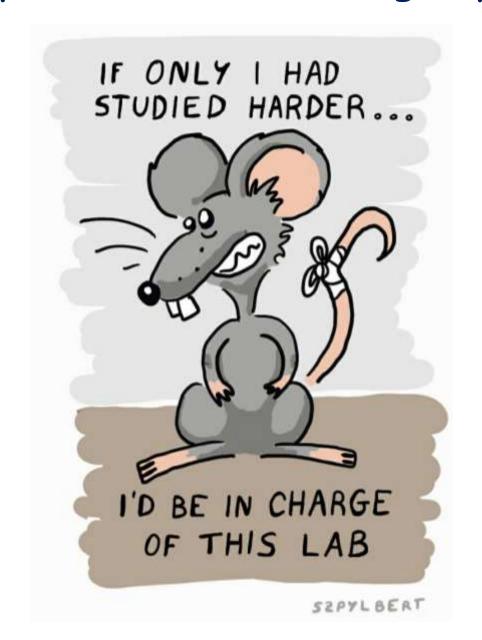
有人做實驗戴著 手套撩自己的頭髮就 算了,還去按電梯按 鈕、開實驗室的門來 膈應別人。

Wear gloves outside of the lab, and press the elevator button or open the door of the laboratory.



- Respect your own work and time;
- ·Respect others' work and time.

How long do you want to take to get your degree?



As simple as to - Follow the instructions for safety practice



To avoid excessive time and risk of productivity loss

