



The Star Wars guide to good practice in a laboratory



There so much 'stuff' that goes on in a lab. People are busy, they've got important jobs to do. And all these questions and requirements about compliance and needing information and good practice! Honestly, what's the point?

That's why you need information from someone who has presence. Someone with authority and The Force to back it up.

So, here's the Star Wars guide to good practice in a lab.

Ditch the protective gear

Darth Vader: *Humans are fragile creatures. Apparently, they're incapable of working with chemicals without needing some kind of barrier so they're not damaged.*

But dealing with hazardous chemicals should make them more resilient. Surely if they make a mistake once and splash themselves with something corrosive, it will make them more careful next time!

Obi Wan says: PPE is cheap, durable, and easily replaced. Humans are not. You are not droids. Wear your Personal Protective Equipment (PPE) every time!

Control samples show weakness

Darth Vader: *There's no need to have a sample that shows comparisons. This shows weakness. You know what you're doing.*

Obi Wan: Without a control sample every time you won't know whether your experiment worked. Make sure your data is correct by running a control sample every time. Don't trust to luck. In my experience, there is no such thing as luck.

Master Yoda: Control, control, learn control you must!

Use your own language

Darth Vader: *Keep your information secret. Use special codes. Make sure your notebooks are locked away!*

Obi Wan: Thorough notes help you make sense of what you've done. Notes such as 'the sample did not work' are unhelpful and could mean you need to re-do work unnecessarily. Don't risk a disturbance in the Force. If you've kept extra notes in a computer file, write down the location so you don't have to go searching.

You shouldn't be writing anything down

Darth Vader: *Even puny humans should be able to remember what they've done! Don't waste time writing down every step!*

Obi Wan: You, and others, need to be able to repeat what you've done. Be sure you've noted your procedures and data right from the start. Someone once said, "if it's not written down, it probably didn't happen". They were very wise.

Master Yoda: Me, this was not.

Don't calibrate your equipment

Darth Vader: *Equipment doesn't need checking or calibration. It was fine when you purchased it, why question your judgement?*

Obi Wan: Using uncalibrated equipment means your measurements could fall into the realms of fantasy. But even calibrated machinery used incorrectly could over or under measure your sample. Take a moment to ensure your equipment is calibrated. And be sure you know how to use it correctly.

Use anything to measure volume

Darth Vader: *Measuring volume is easy! It doesn't matter what size equipment you use. The bigger the better!*

Obi Wan says: Of course, you could measure 100ul with either a 100ul pipette or a 1000ul pipette. BUT the exact, accurate measurement between those pipettes will be different. Be sure to choose the right size instrument for the test you're doing to keep the variability low.

Don't talk to others

Darth Vader: *Those others in the lab aren't there to help, they're there to steal your secrets! Tell them nothing!*

Obi Wan says: The path to successful completion is paved with collaboration and communication. Your teammates are there to support you. If you come up against problems, they can help you find solutions. Your colleagues will be there. Always.

Master Yoda: What you have learned, pass on you must!

Work faster, not safer

Darth Vader: *It's all about speed! Getting things done means moving faster – run if you have to!*

Obi Wan says: There should be NO running in the lab! Be sure hazards such as chemicals, scissors and lightsabres are put away carefully. The best labs have well-structured paths between tasks. If yours doesn't, you must come up with a plan for making sure you work safely and efficiently.

Master Yoda: Patience you must have!

Labelling wastes time!

Darth Vader: *WHY must you waste time on foolish activities! If you're not sure what's in a container, just taste it!*

Obi Wan says: Clear, colourless containers may contain water. Or it could be something much much worse. Label it with what it is, who prepared it, and what it's for. If it's perishable, include the date of preparation and how long it's good for. Do **NOT** taste, touch, or sniff the contents of any beakers, even if they look harmless!

You're better off alone

Darth Vader: *Your best work is done when you're completely by yourself. Work on your own and be sure to lock the door!*

Obi Wan says: There is always safety in numbers. Working alone in a lab is risky. If something goes wrong, you won't have any support. Even though you're surrounded by The Force, having humans around is always your best option.

Master Yoda: Solitude? Secrets? Bah! A scientist craves not these things!

The Final Word

We know you don't want your lab to veer into the Dark Side. And we know how easily it can be to lose focus and perhaps let your systems slip a little sideways. Even Obi Wan had his moments!

If you need help to stay on the path, email info@masmanagementsystems.com.au or phone Maree on 0411 540 709.

Remember, alone you are not!