

# How to survive a ~~marathon~~ PhD

Doing research is something that can be trained for...



.. but can also hurt you: Robert Cheruiyot 2006 Chicago Marathon



# A Standard PhD Run

Hand of the  
supervisor

"The Great Project"  
Mountain range

You climb  
"Thesis  
mountain"

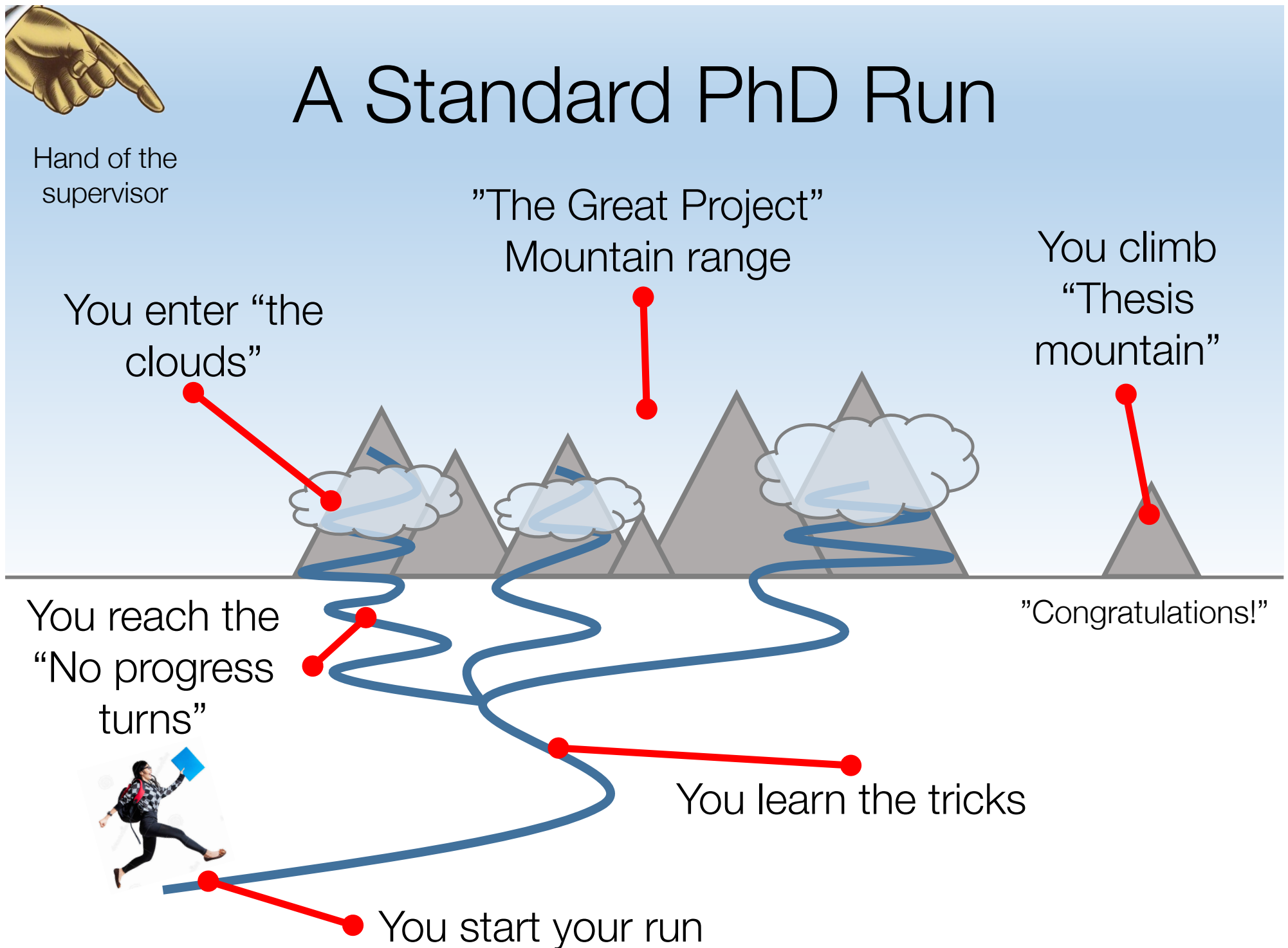
You enter "the  
clouds"

You reach the  
"No progress  
turns"

"Congratulations!"

You learn the tricks

You start your run



# Start of the PhD Trail

*This is your run:*

- **You decide what is important** and where to go
- Flipside: You are the one responsible for the project

*Setting your race goals:*

- What skills do I want to learn?
- What scientific area do I enjoy?
- What do I want to do more of?
- **What's just *interesting* to me?**



Remember to tell  
your supervisors

# Running tricks

## *Training to be an effective researcher:*

- Start off with small runs (experiments), but force yourself towards definite ones
- **You will run more efficiently in a team than alone**
- Schedule your runs: long-term and weekly
- Celebrate all your victories
- **“Only have confidence in other people’s incompetence”**
- Label everything
- **Help foster a supportive lab environment**
- Find pacers: mentors and supervisors

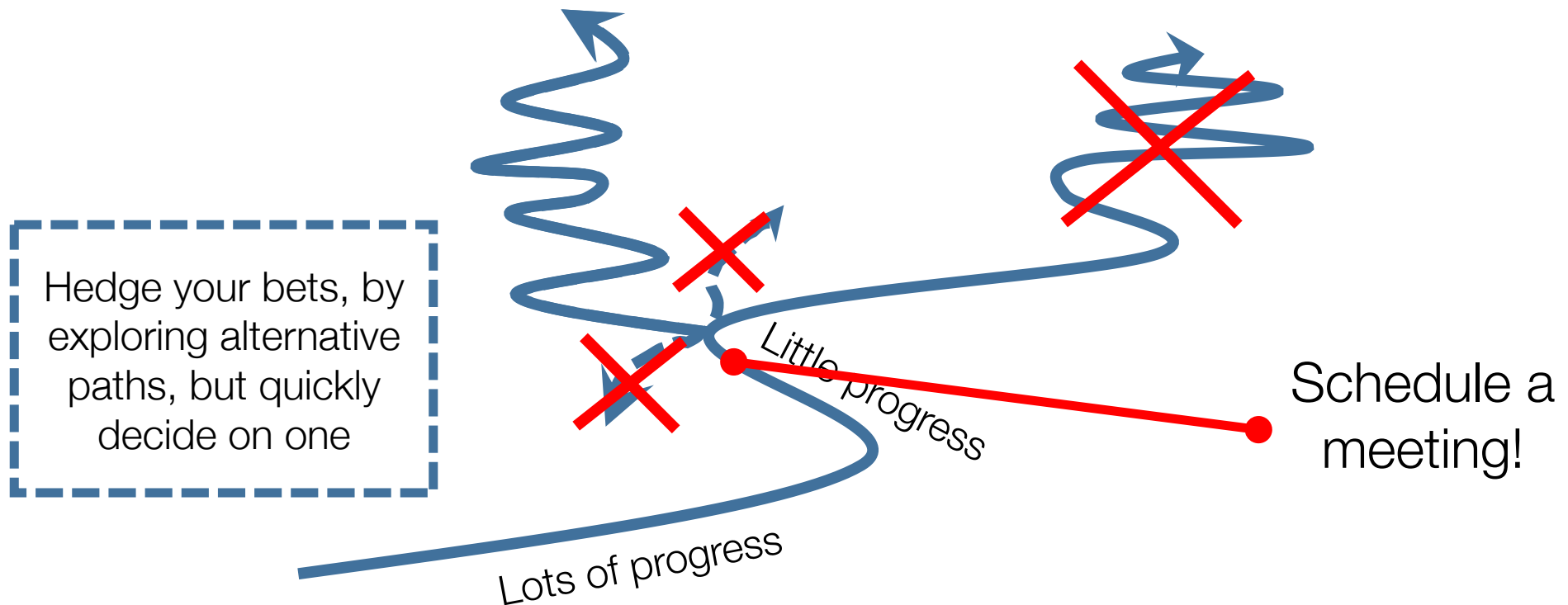


*These guys are having a fun PhD*

Sherri Rose on how to be an effective PhD researcher: <http://drsherrirose.com/how-to-be-an-effective-phd-researcher> + good advice on #phdchat

# No-progress turns

*When to utilize your supervisors*



Philip Guo on when to "course-correct" your PhD: <http://www.pgbovine.net/advice-for-first-year-PhD-students.htm>

# In the clouds

*A mental state that arises when you are fumbling around in territory so unknown that there's a real chance that you will fail*



This is where your PhD really begins

# Clouds of the unknown

## *What to do (and not) in the clouds*

### *Do:*

- Congratulate yourself for feeling stupid: **this is what science is about**
- Talk to everyone about it
- Give yourself a break to think
- **Hang out with friends**
- Say yes to new ideas and take risks

### *Do not:*

- Blame yourself
- Internalize failure
- Think you are unworthy
- Stop talking about it
- Quit

Dealing with adversity is one of the most important things you will learn during your PhD

Uri Alon on "The cloud": <https://www.youtube.com/watch?v=F1U26PLiXjM>  
Martin A Schwartz: ["The importance of stupidity in scientific research"](#)

# Thesis mountain

*That's not the project I aimed for*

*No it is not, but it will:*

- Be your legacy: the concrete outcomes of your run
- Show your mastery: the skills you have learned
- Give you the freedom to choose the career-path you want
- Most importantly, you will have made friends along the way



# Resources

- <http://serialmentor.com/toc/>
- <http://labmosphere.com>
- <https://www.oxfordsparks.ox.ac.uk/content/lessons-looking-clouds-uri-alon-and-emotions-science>
- <https://www.theguardian.com/lifeandstyle/2017/apr/16/how-run-marathon-london-months-preparation-carbs>
- <https://hbr.org/2015/02/how-to-build-a-meaningful-career>
- <https://www.youtube.com/watch?v=F1U26PLiXjM>
- <http://jcs.biologists.org/content/121/11/1771>
- <http://www.pgbovine.net/advice-for-first-year-PhD-students.htm>
- <http://drsherrirose.com/how-to-be-an-effective-phd-researcher>



