

DON'T PANIC

The Grad Student's Guide
to Surviving your PhD

Don't Panic

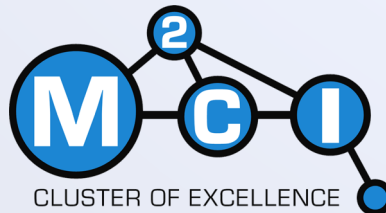
– *or* –

how to survive your PhD

Jilles Vreeken



UNIVERSITÄT
DES
SAARLANDES



Disclaimer

- 1) I'm not the "useful" type of doctor

Disclaimer

- 1) I'm not the "useful" type of doctor.
- 2) Any advice you'll get is useless.

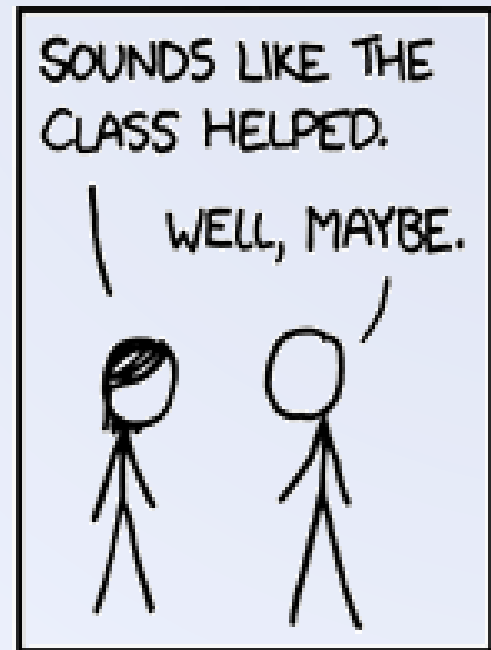
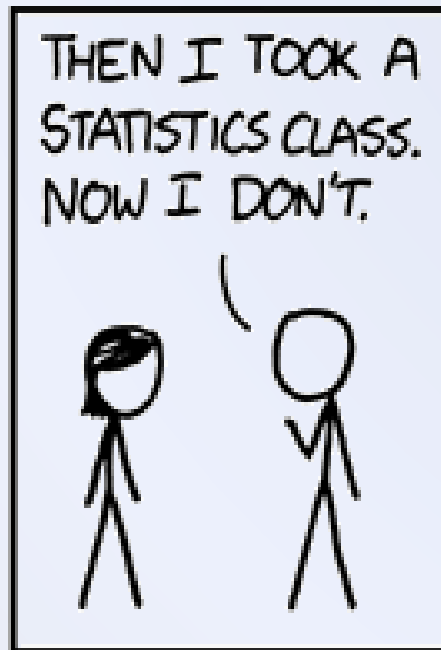
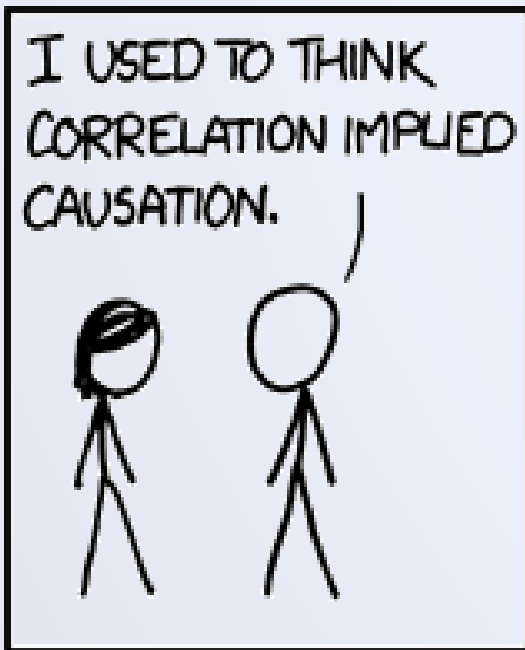
Don't ask **survivors** for advice.

*"Russian roulette is a
great way to make money!"*

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Disclaimer



Disclaimer

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- 2) Any advice you'll get is useless.
- 3) This is not a scientific presentation.
- 4) I stand on the shoulders of giants.



and many, many others


Let's start with

the **best** advice
you'll *ever* get...

**DON'T
PANIC**



I'm not afraid.



**Yes...
you will be.
You will be.**

Time of Disillusionment

I have some **bad** news for you

Doing a PhD will help you find out

- there are people who are better than you
- you are not good at everything
- being good at courses is not enough
- doing what you are told may not be enough

And, most prominently: **life is unfair**

- people less smart or hard-working will be luckier, get better results
- people who have done worse work will end up with better jobs

First things first

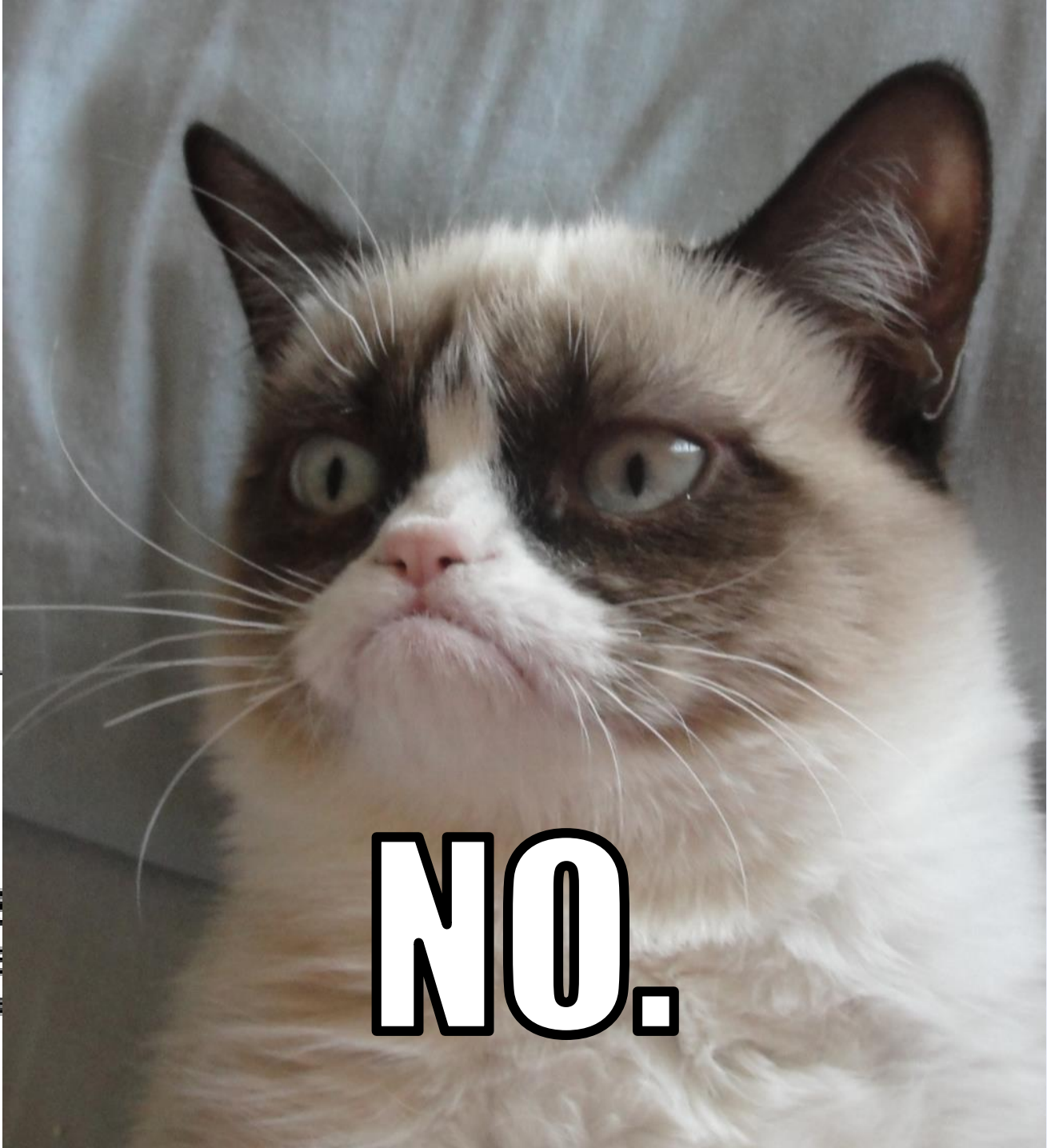
Why do a PhD?



Its gonna
make me
rich!



Its gonna
make me
rich!

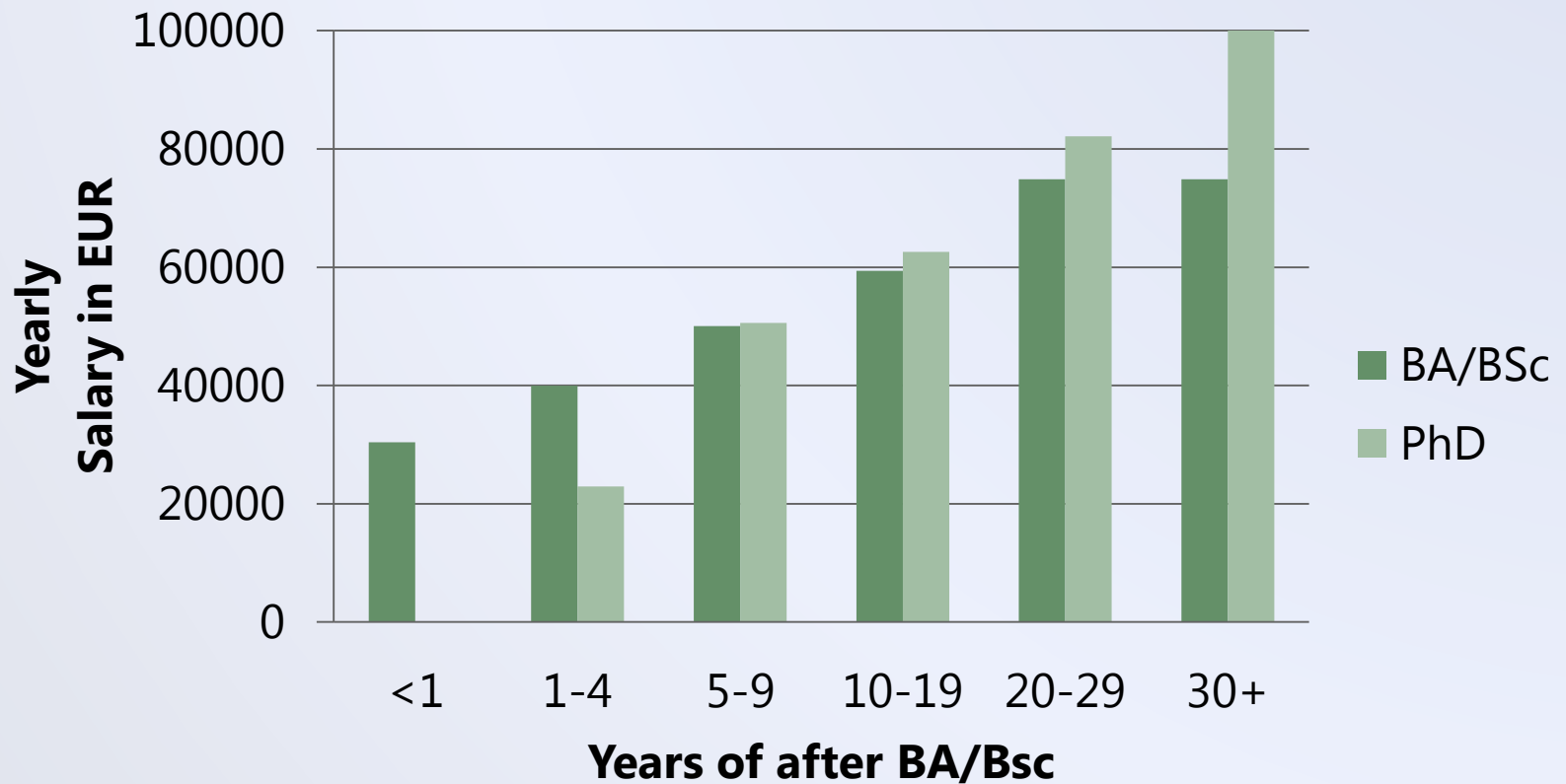


NO.

Salary by Degree



Salary by Degree



Variation in Salary

Years of experience explains 28% of the variation in salaries. Knowing whether you are a manager or have a PhD add another 4 percentage points.

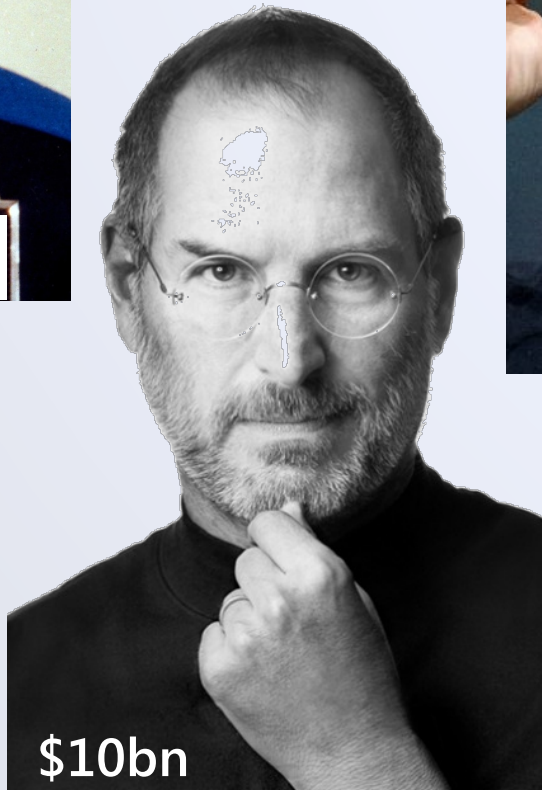
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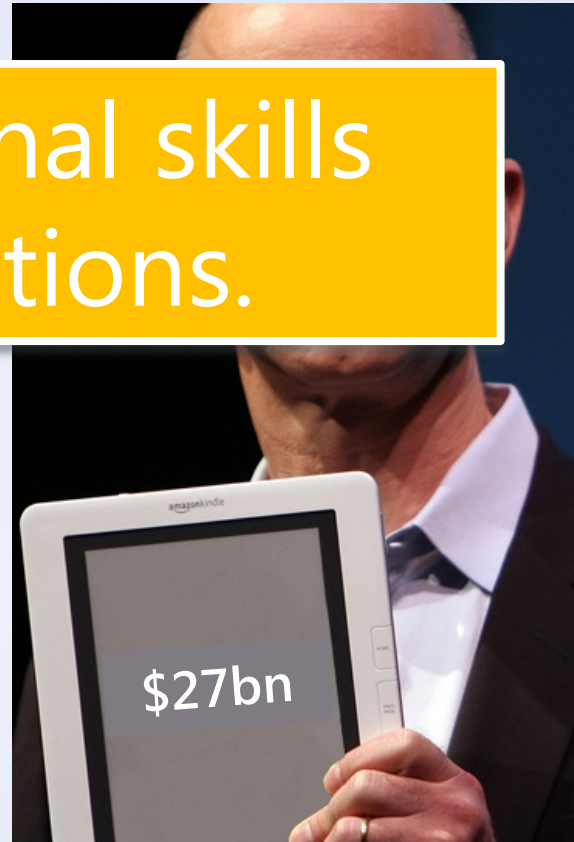
5 extra years of experience
worth **more** than a PhD!

PhD add another 4 percentage points.

Some degree-less people



Some degree-less people



Skill sets and interpersonal skills
vs. academic qualifications.



\$28bn



\$10bn

First things first, again

Why do a PhD?



Because
my PhD
is gonna
change
the world!



I'm going
to change
the world
and this is
my plan...

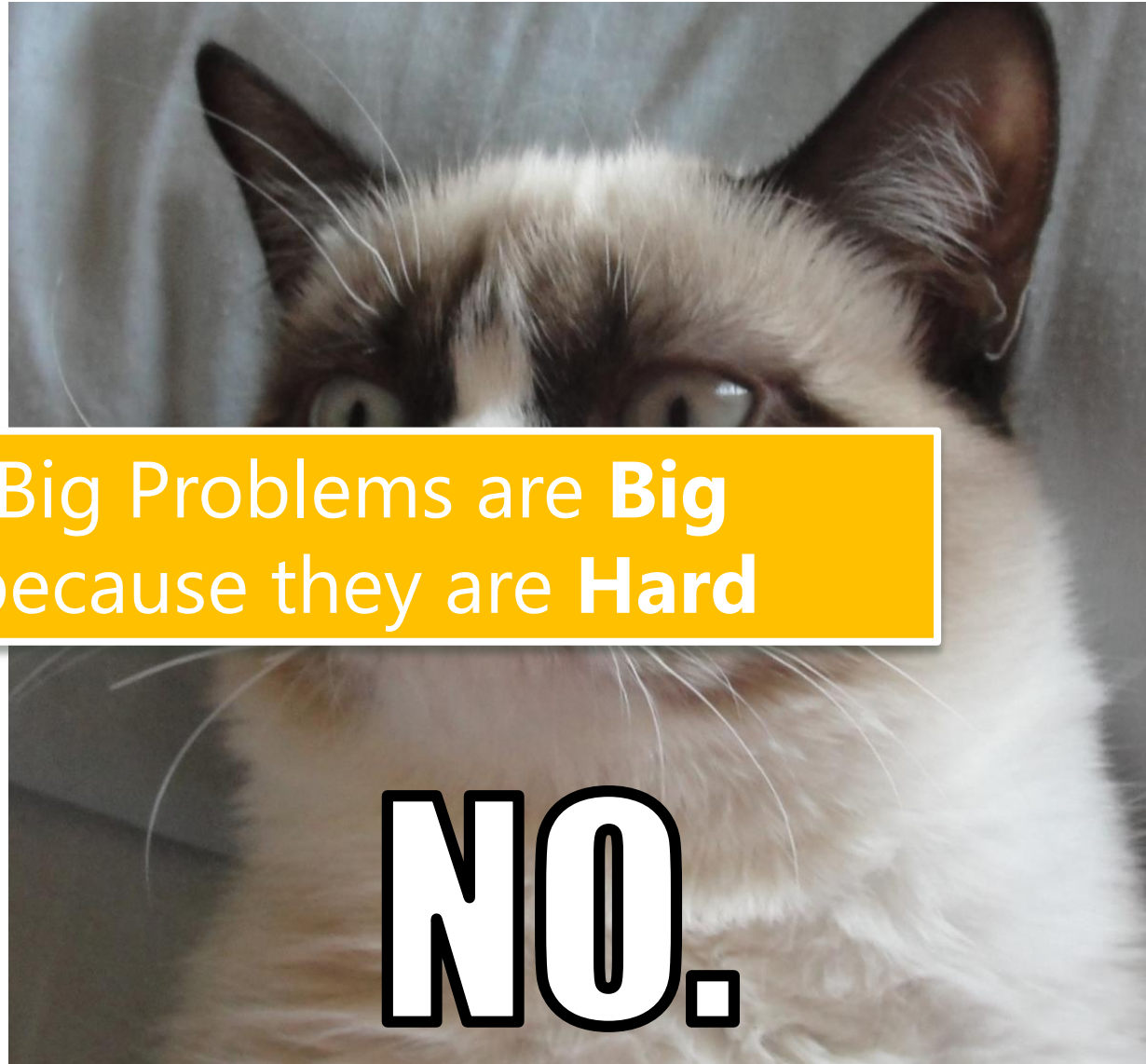
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Because
my PhD
is going to
change
the world!

Big Problems are **Big**
because they are **Hard**

NO.



Because
my PhD
is gonna
change
the world!

Big Breakthroughs
are *rare, very rare*.
Once-a-career rare,
if you're lucky.

NO.



Because
my PhD
is going to
change
the world!

If you want to change the world,
become a politician.

NO.



**DON'T
PANIC**

If you're here for the right reasons...

Doing a PhD can be **awesome**

But, what is the right reason?

If you're here for the right reasons...

**The One and Only Right Reason to
pursue a PhD:**

you are **fascinated** by a topic,
you **want** to know all there is,
and **need to discover** even more.



You'll have to like both the
big results and the little ones



Any Reasons Left...?

Any Reasons Left...?

BBC

News

Sport

Weather

Travel

Future

NEWS EDUCATION & FAMILY

Home

UK

Africa

Asia

Europe

Latin America

Mid-East

US & Canada

Business

Health

Sci/Environ

England

Northern Ireland

Scotland

Wales

UK Politics

Education

5 July 2012 Last updated at 14:36 GMT

421

Share



Well-being and education "go together"

By Angela Harrison

Education correspondent, BBC News

People who are better educated are more likely to say they are satisfied with their lives, a study suggests.

And they are more likely to say that the things they do are worthwhile, according to **research** by the Office for National Statistics.

The study is part of a £2m project launched by the prime minister to try to measure people's happiness and well-being.



People who learn as adults are also more likely to rate their well-being as high

Any Reasons Left...?

BBC

News

Sport

Weather

Travel

Future



05 July 2012

Measuring National Well-being - Education and skills

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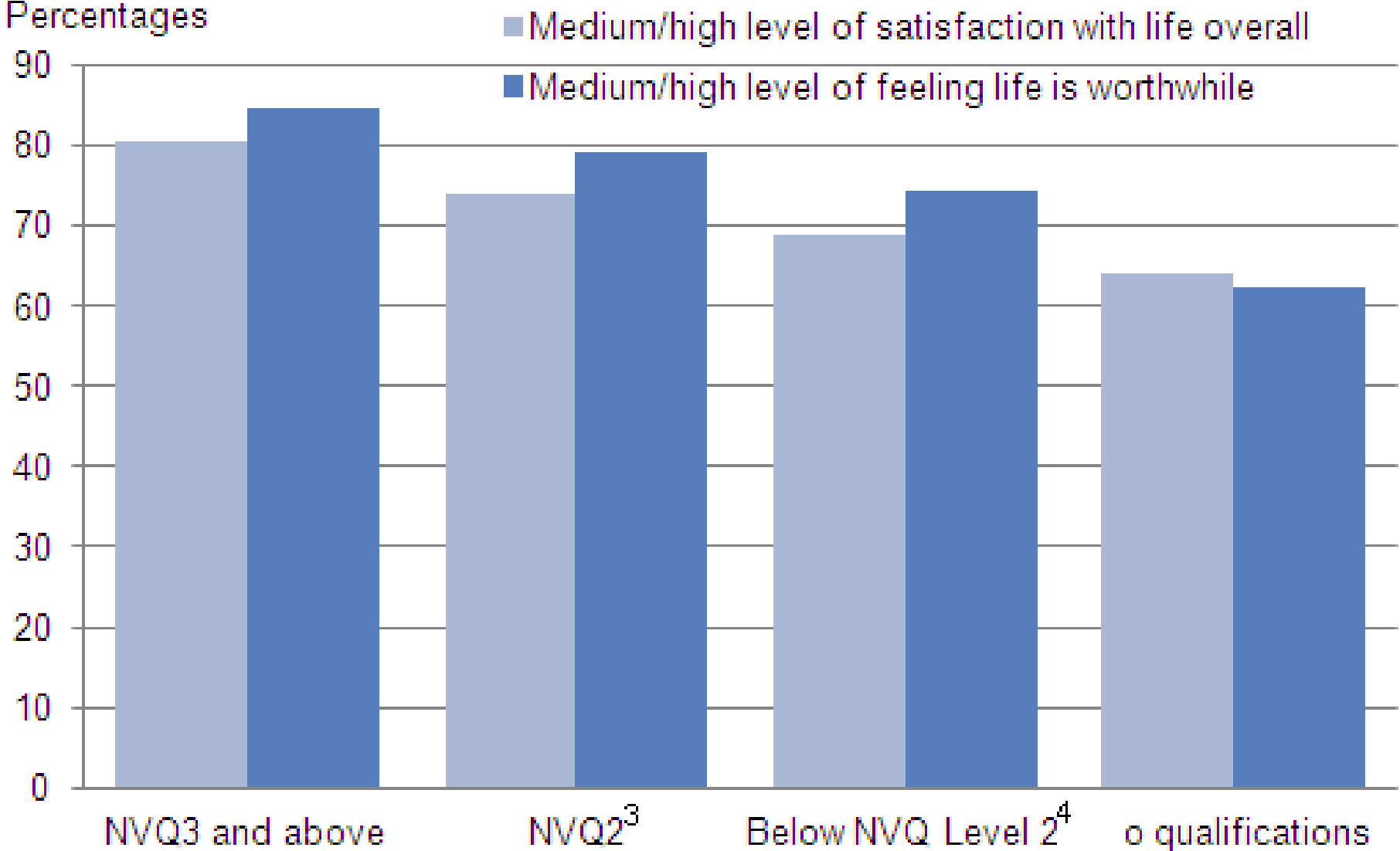
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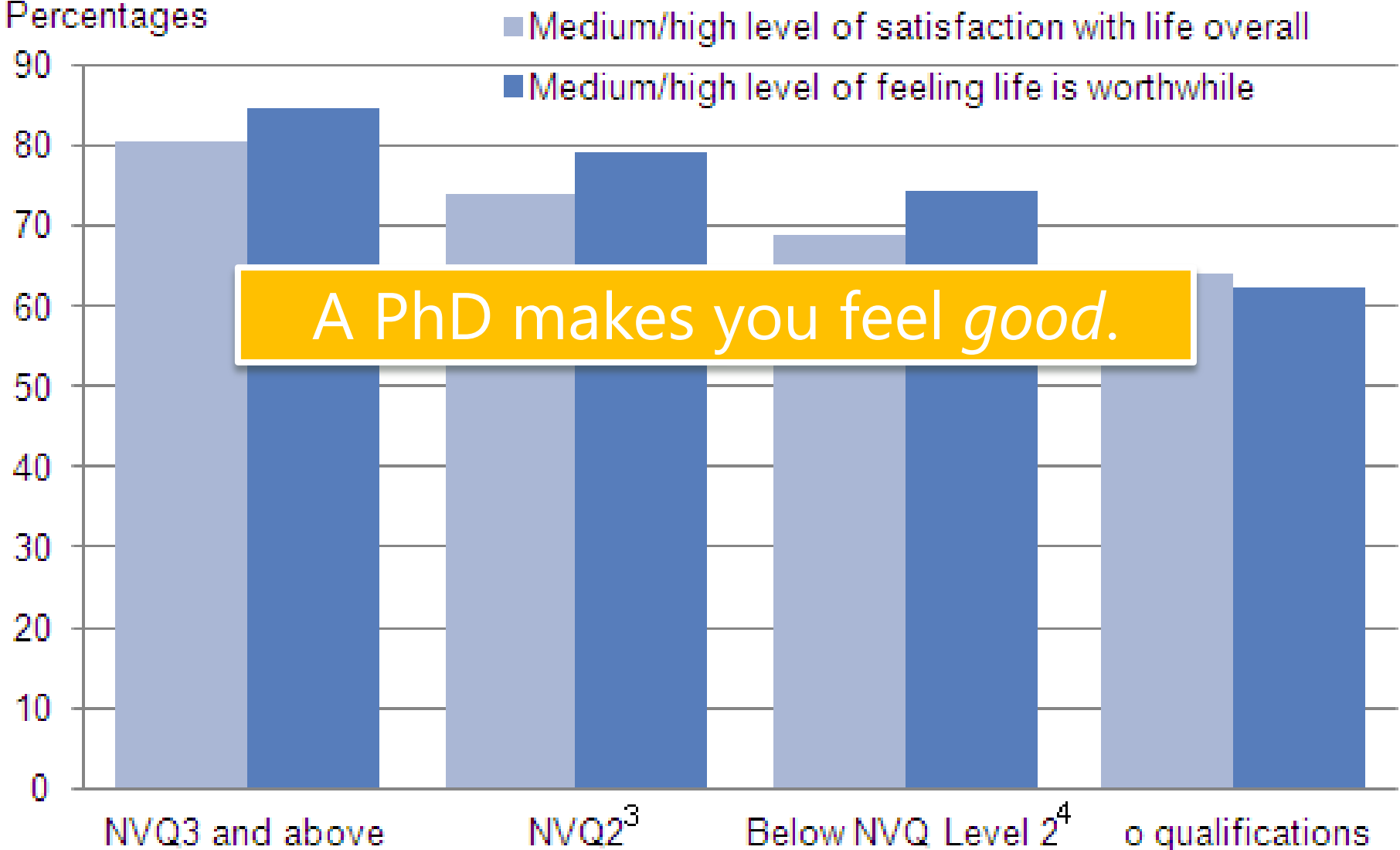
Any Reasons Left...?

Percentages



Any Reasons Left...?

Percentages



What's Great about Working in Science

Freedom!

- set your own agenda, schedule, ...

You get to travel regularly

- to Beijing, to Paris, to Barcelona, to New York, how cool ...

What dress code?

- I've seen keynote speakers in pyjamas

Invisible band uniting all geeks

- helpful, enjoy learning, similar language

Surrounded by people who never grew up

- smart kids who love to play

What's Great about Working in Science

HOW GRAD SCHOOL IS JUST LIKE KINDERGARTEN

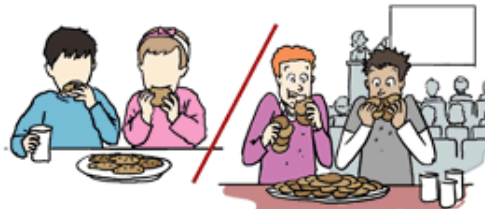
ALL DAY NAPPING IS ACCEPTABLE



THERE IS CONSTANT ADULT SUPERVISION



YOU GET COOKIES FOR LUNCH



MOST COMMON ACTIVITY:
CUTTING AND PASTING



THERE ARE NO GRADES
(YOU JUST HAVE TO PLAY WELL WITH OTHERS)



CRYING FOR YOUR MOMMY IS NORMAL



JORGE CHAM © 2010

WWW.PHDCOMICS.COM

What's Great about Working in Science

HOW GRAD SCHOOL IS JUST LIKE KINDERGARTEN

ALL DAY NAPPING IS ACCEPTABLE THERE IS CONSTANT ADULT SUPERVISION



Working in science is **amazing** ...
... if you appreciate its benefits.



THERE ARE NO GRADES
(YOU JUST HAVE TO PLAY WELL WITH OTHERS)

CRYING FOR YOUR MOMMY IS NORMAL



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Perspective



Industry,
according
to academia

Perspective



Academia,
according
to industry

Perspective

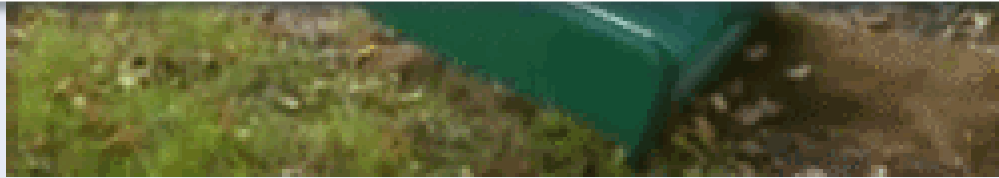


Industry,
according
to academia

Perspective



There's stress everywhere.
Just different kinds.



Industry,
according
to academia

What is a PhD?

What is ~~a PhD?~~ *science*?

What is ~~a PhD?~~ *science*?

*'knowledge or a system of knowledge
covering general truths or
the operation of general laws
especially as obtained and tested
through scientific method'*

What is a ~~PhD?~~ *science*?



What is ~~a PhD?~~ *science*?

Because!

Science is about discovering
things we didn't know

What is ~~a PhD?~~ *science*?

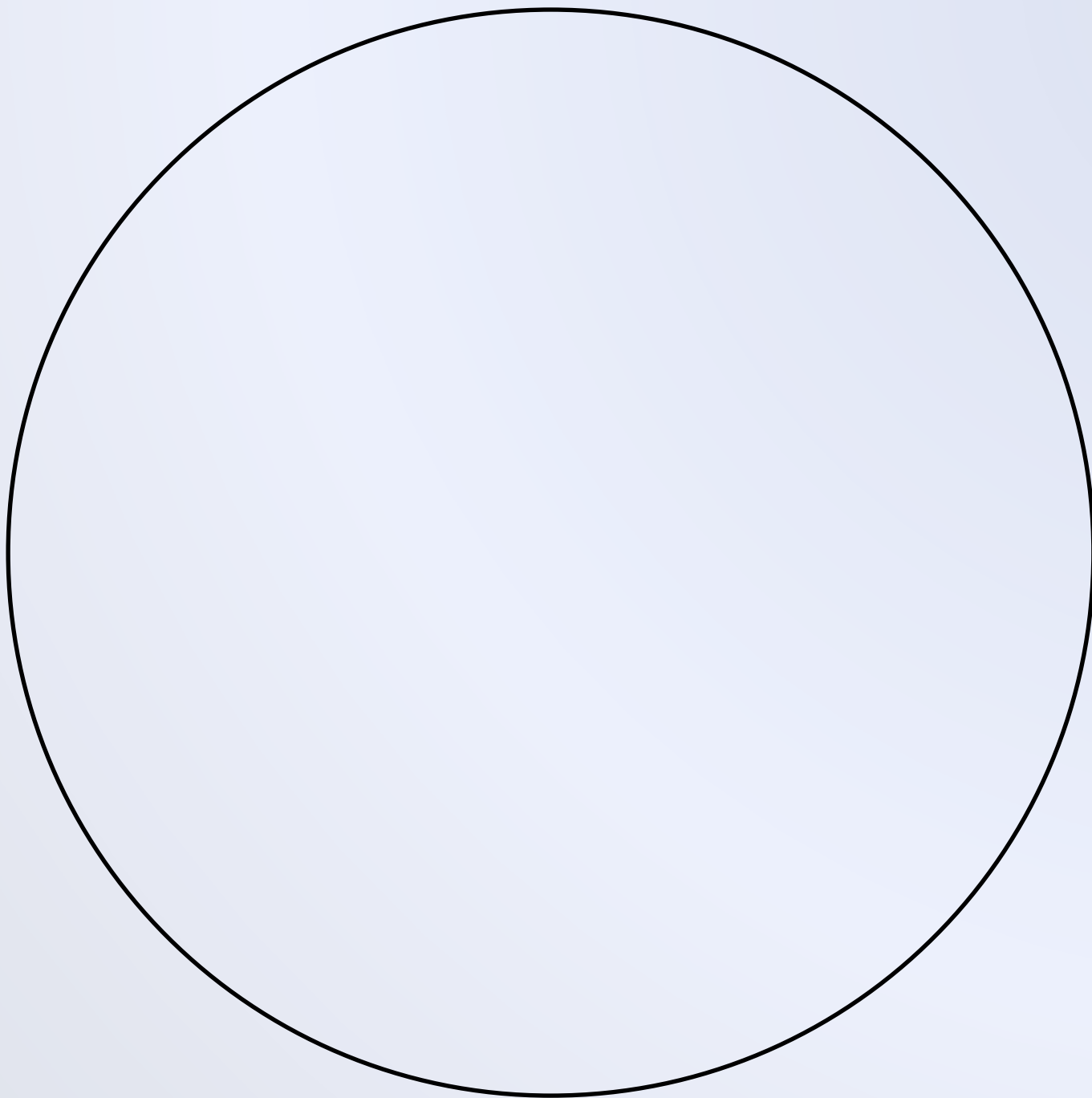
Because!

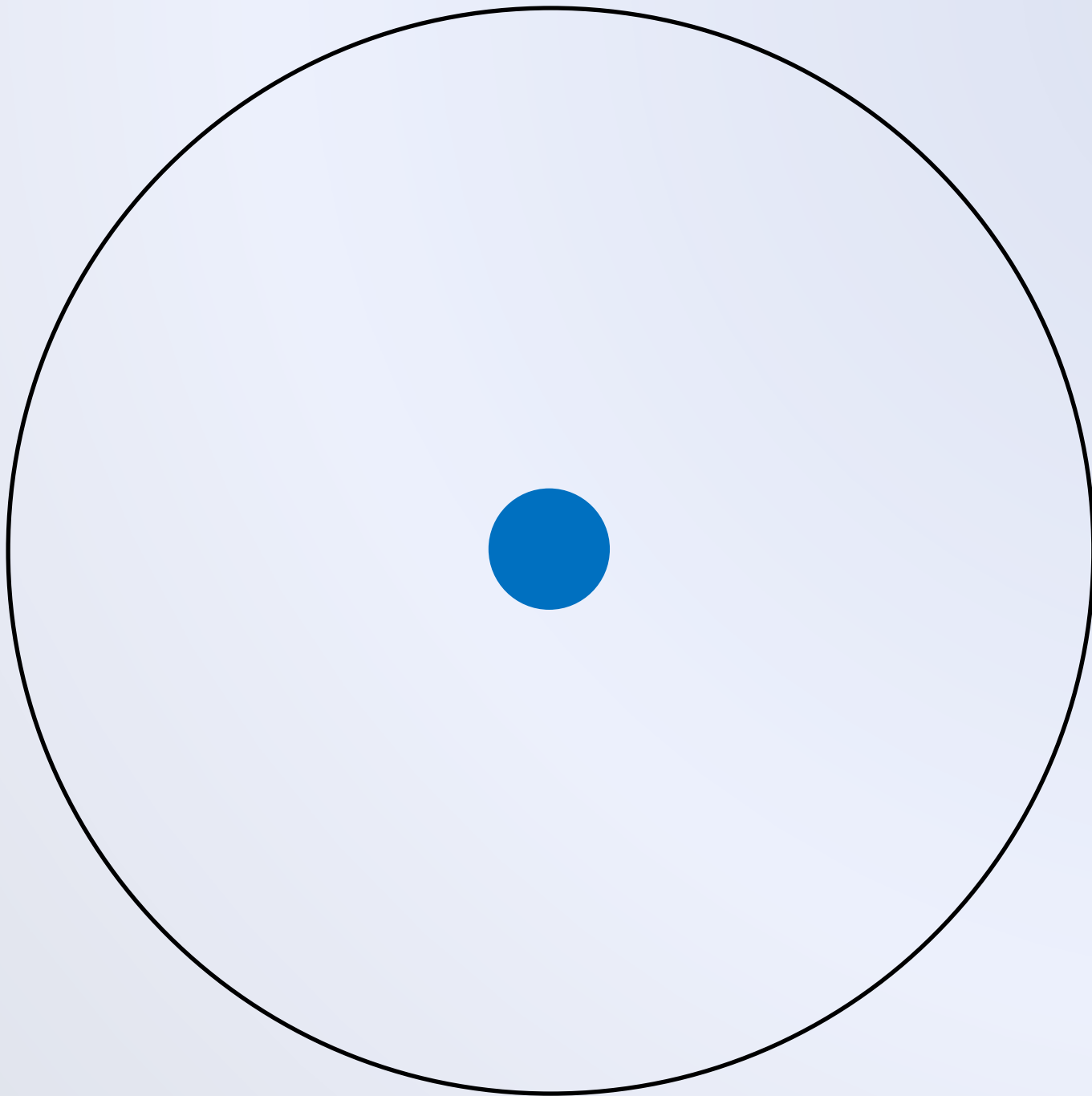
Science is about discovering
new knowledge!

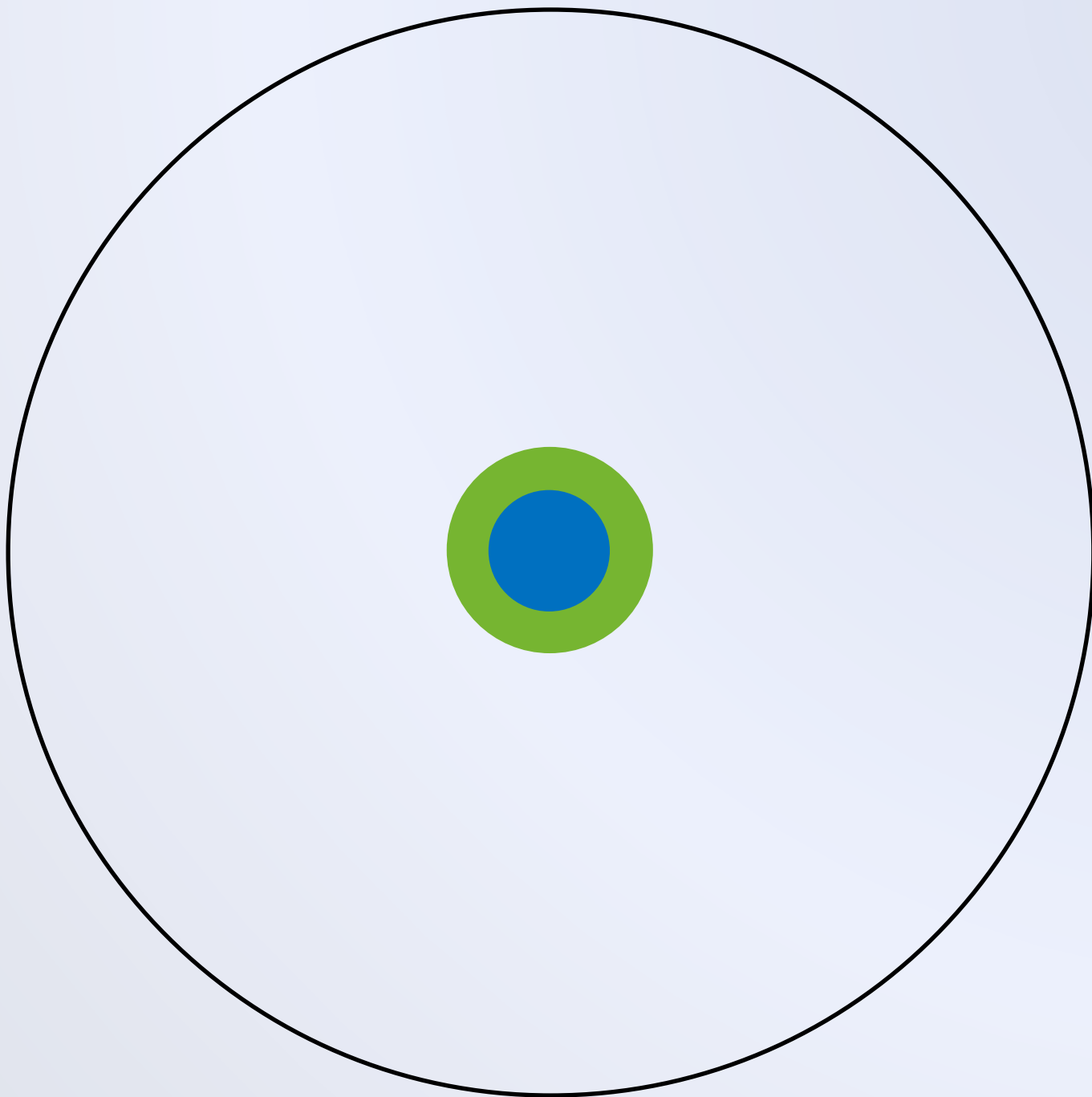
What is a PhD?

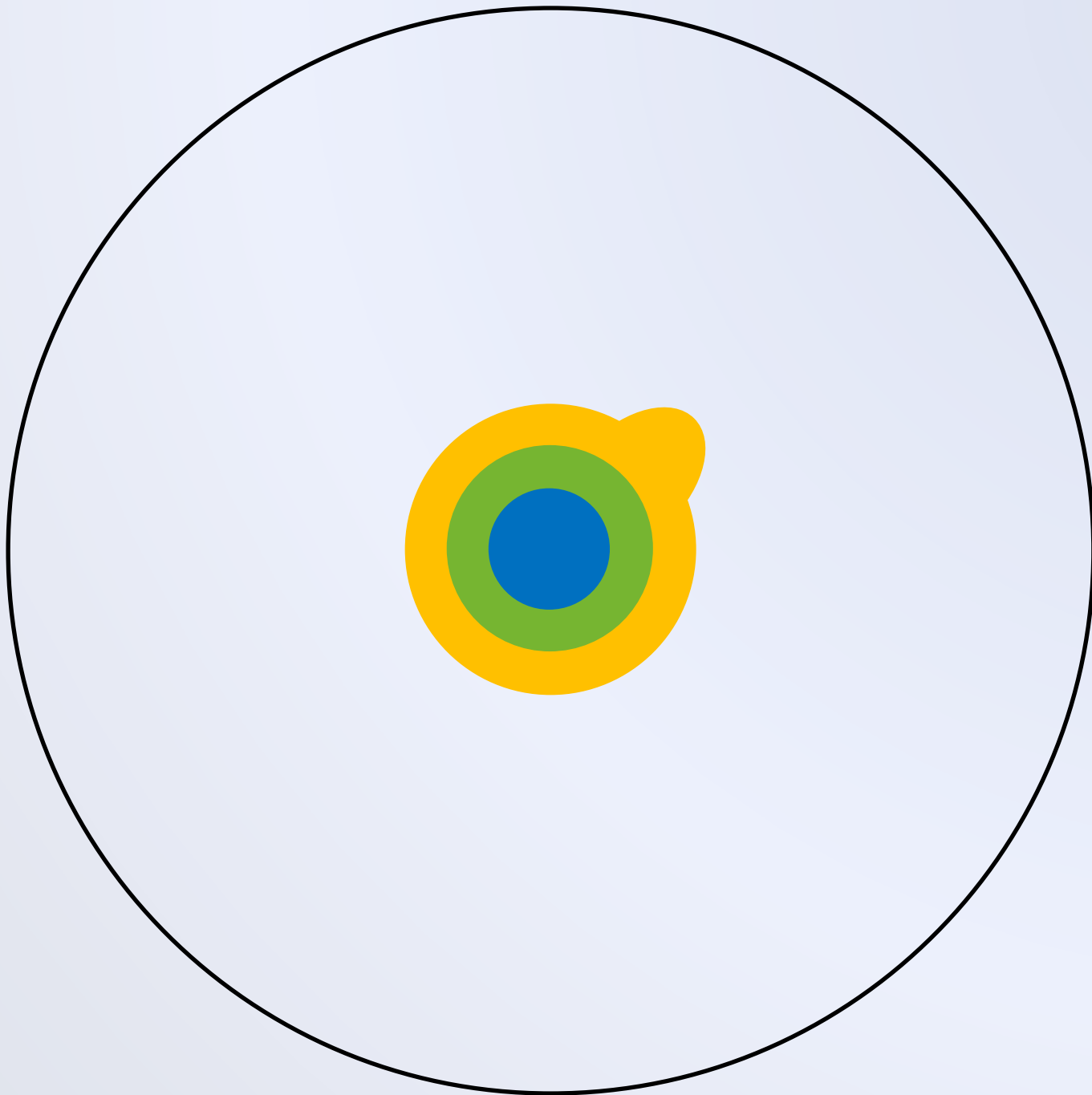
What is a PhD?

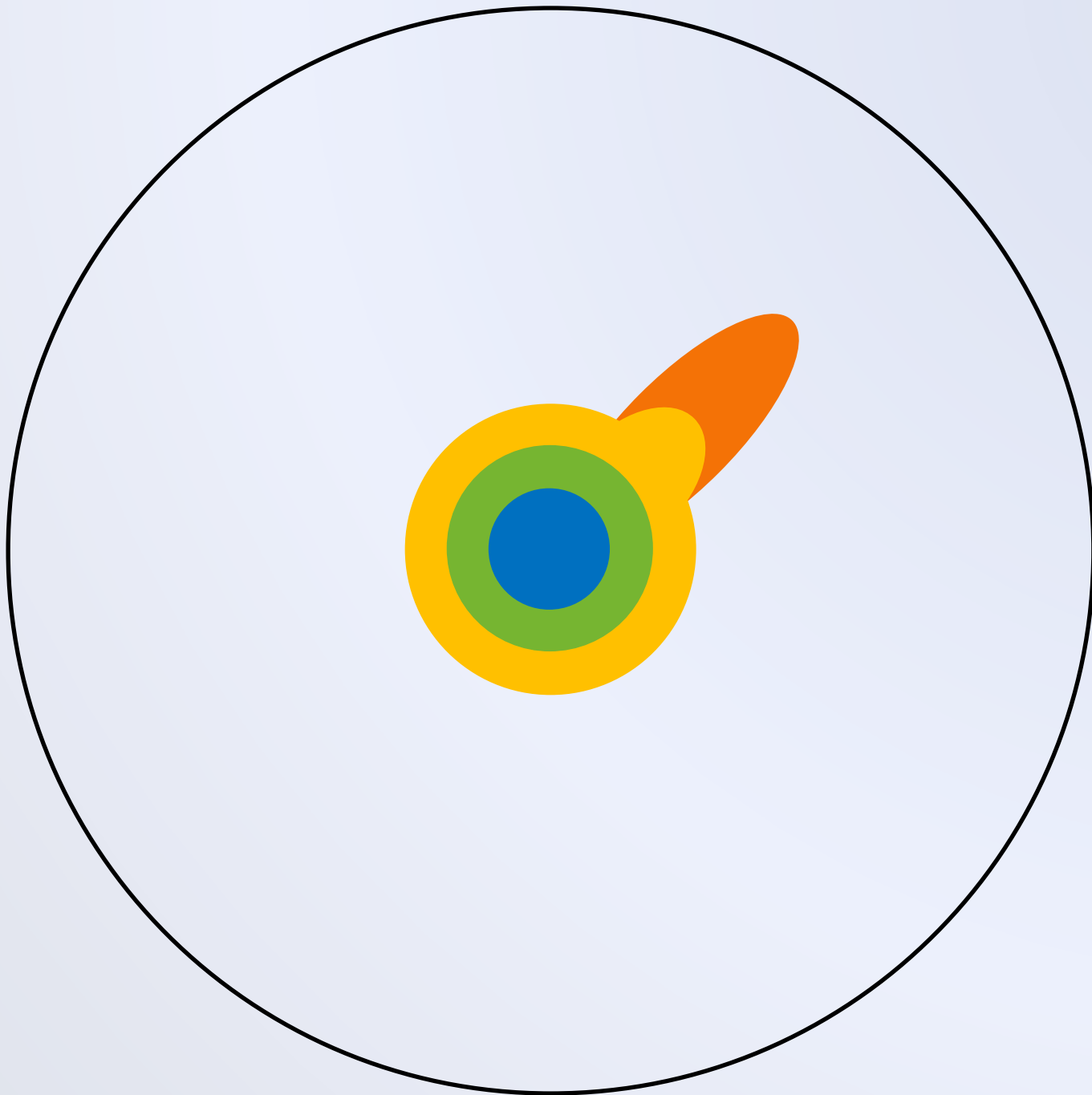
No, really, what is a PhD?

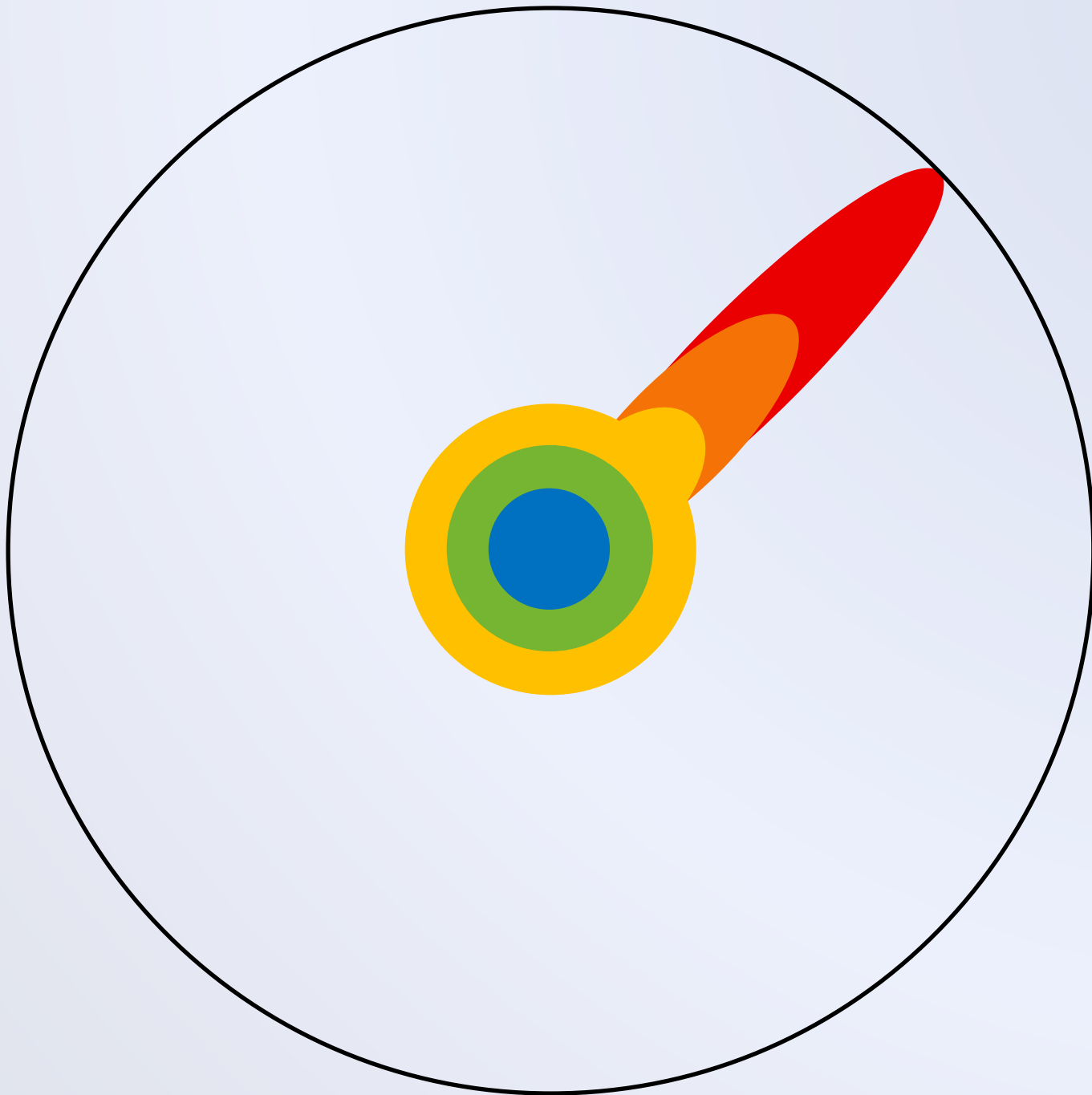


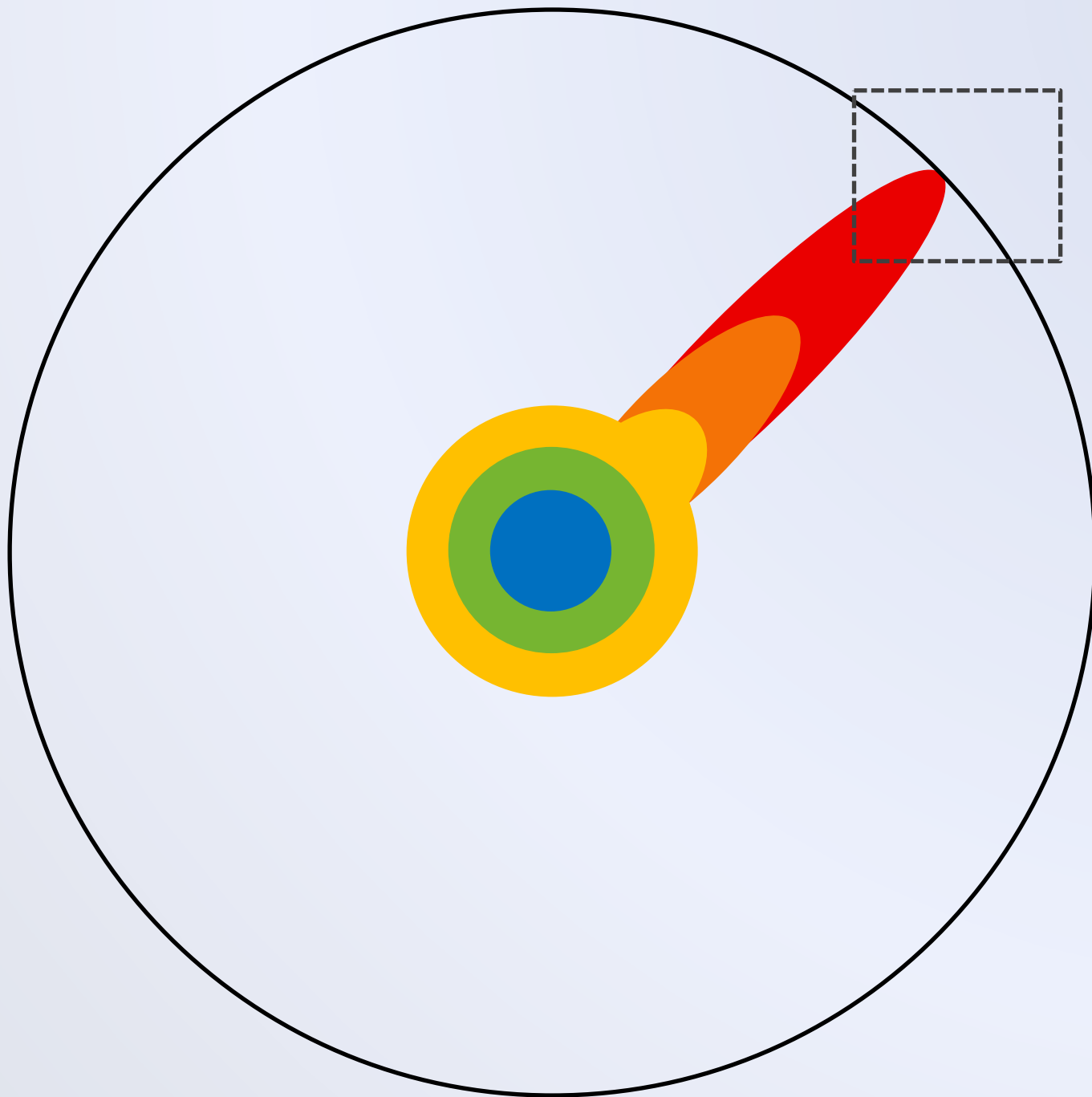


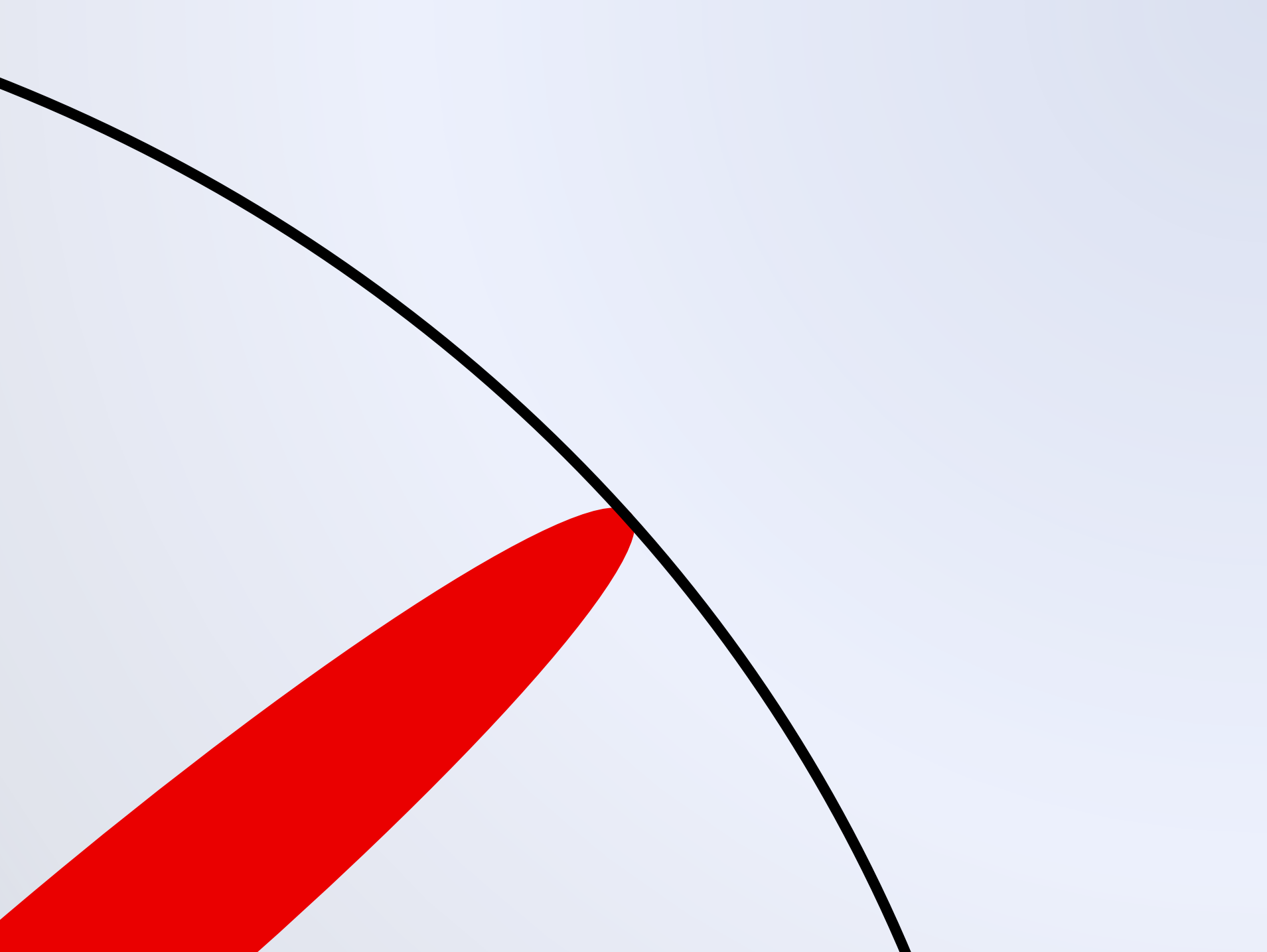


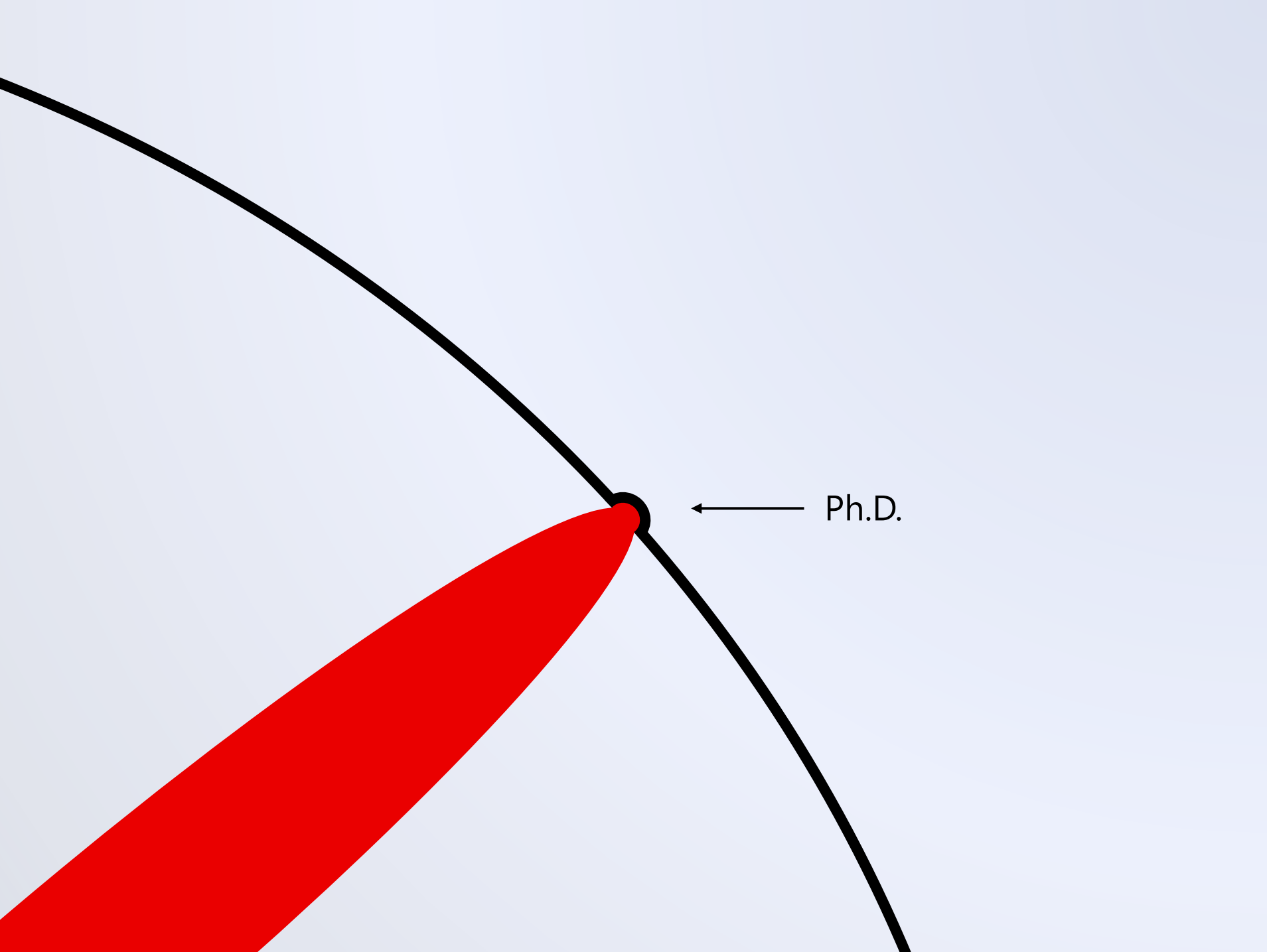






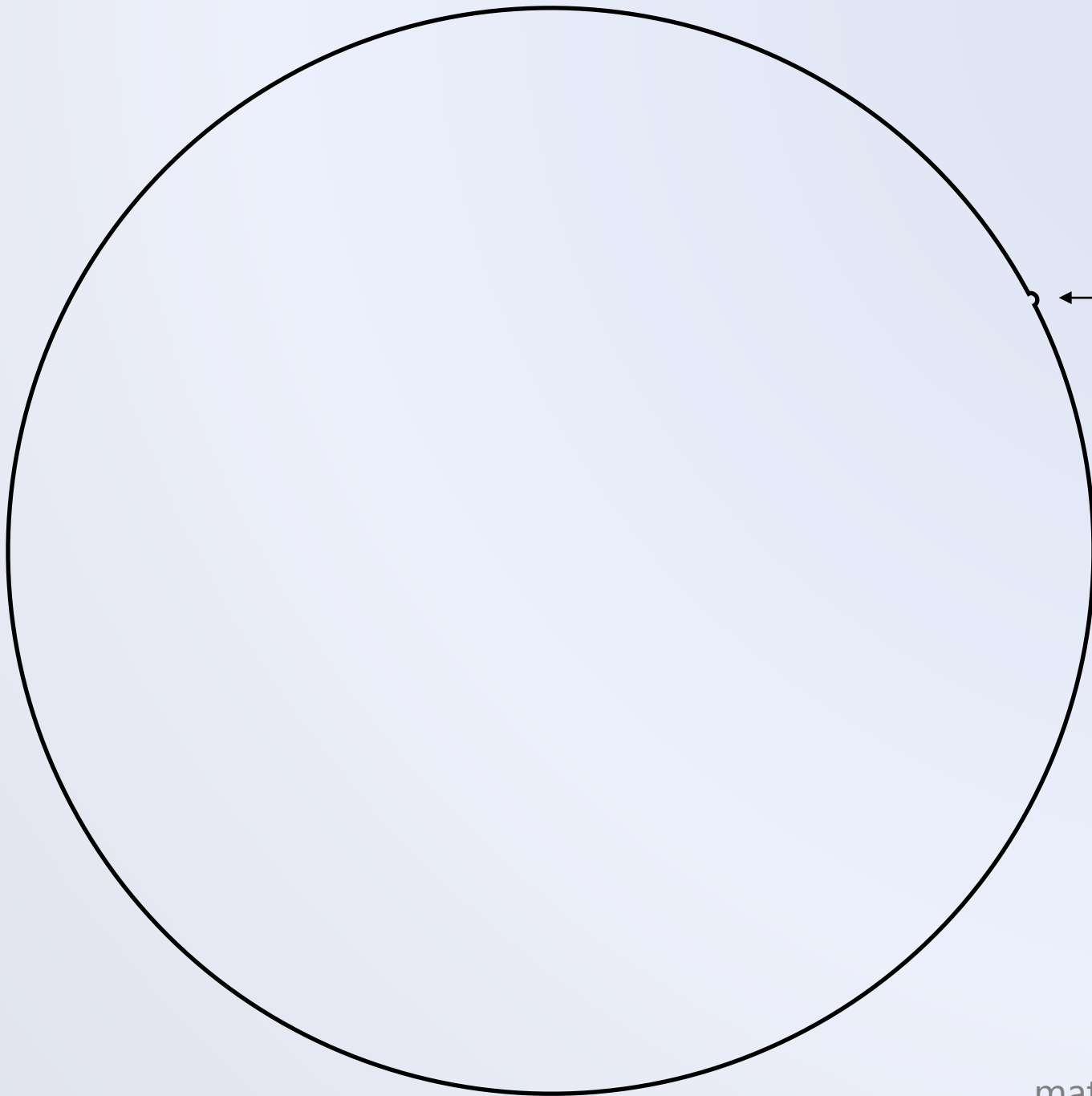






← Ph.D.





← Ph.D.



Don't forget the
bigger picture

← Ph.D.



and
keep pushing.

← Ph.D.

Sometimes...



WELL CRAP

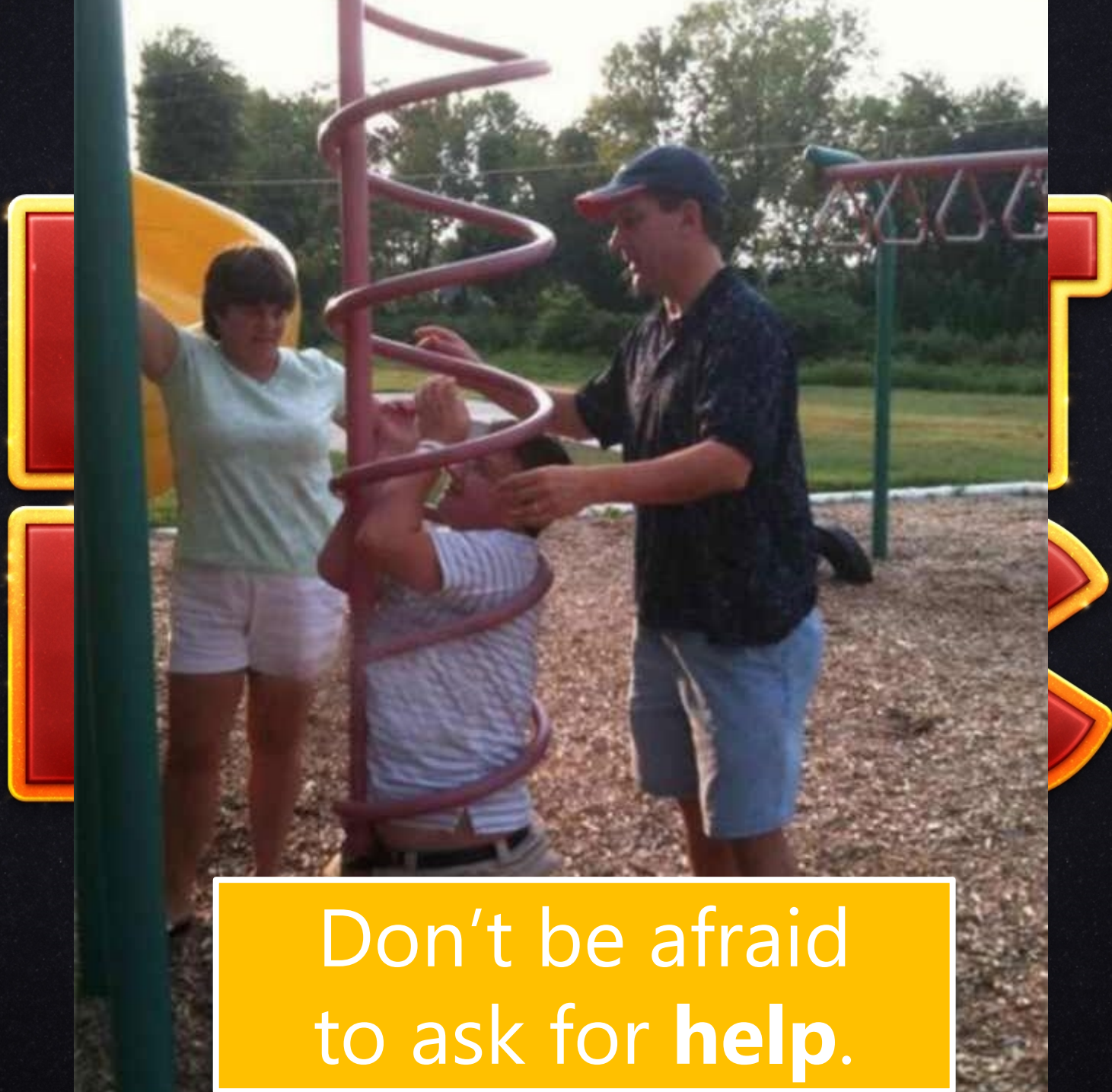


You're stuck.

**DON'T
PANIC**



I NEED AN ADULT



Don't be afraid
to ask for **help**.



JORGE CHAM © 2012

Choosing an Advisor



"Hey, that's just one omniscient guy's opinion."

Choosing an Advisor

Research area matters ...

- ... but less that you might think (**especially** in CS)

Big Shot vs. Young and Exited

- depends on overall support network

Stability

- people move, change positions

Talk to current and former students

- how long did they take? did they enjoy it?

Choosing an Advisor

Research area matters ...

- ... but less that you might think (**especially** in CS)

Big

■ c

Stal

Whole environment matters.
Find out by talking to students.

- people move, change positions

Talk to current and former students

- how long did they take? did they enjoy it?

Getting a position

PhD **positions** are (much more) **abundant** (than you think)

- often not advertised

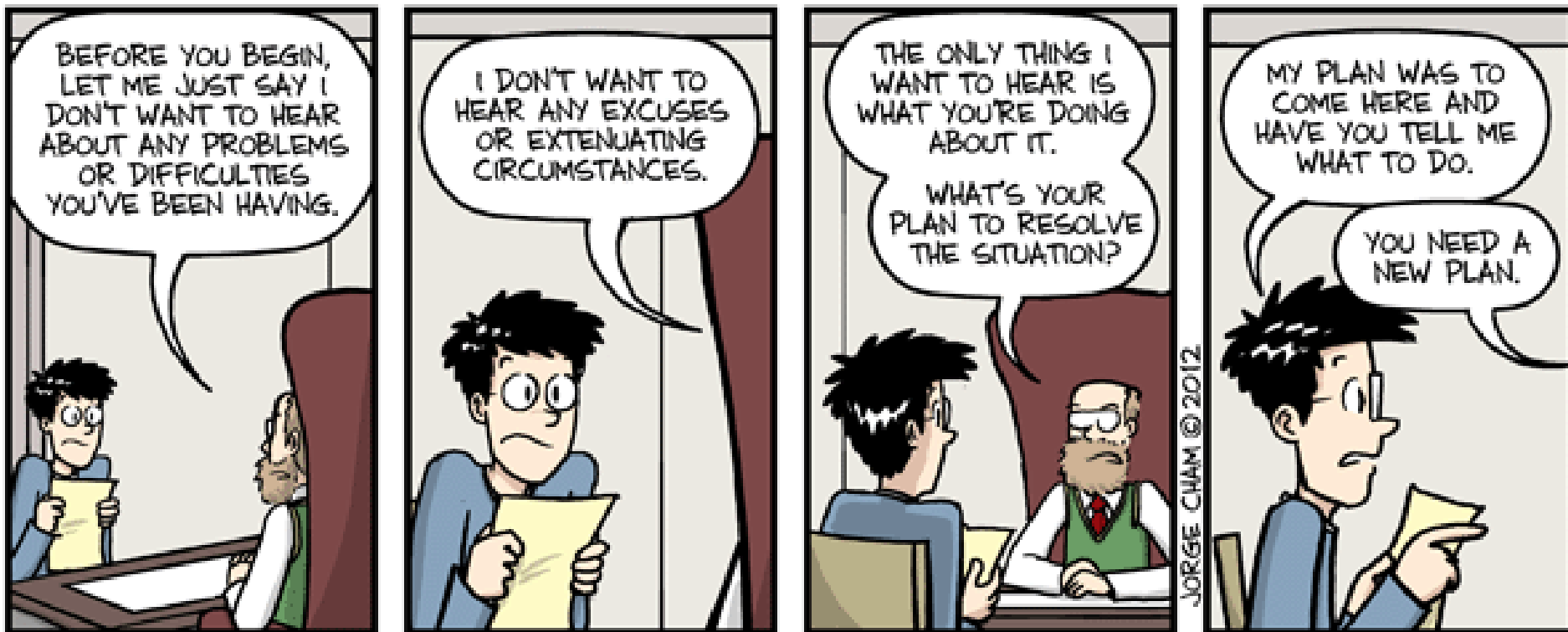
PhD **candidates** are (much more) **rare** (than you think)

- especially good ones

If you have **good grades**, did **relevant projects**, and **good recommendations**, your chances are **very good**.

- publications matter much less than you'd think
- and even if your choice supervisor has no money or time to supervise you, she'll be happy to help you in your search

You & Your Advisor



Are you afraid of the Dark?



We're **explorers**

- we may strike gold, or
- find dirt, dirt, and more dirt

We don't **know** the way

- we follow intuition, and see where it leads us...
- soon, you'll know 'the way' better than your supervisor

Are you afraid of the Dark?



We're explorers

If you're afraid of the dark
research is not for you.

, or
more dirt

We don't know the way

- we follow intuition, and see where it leads us...
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You & Your Advisor

- You are 1 of N students
- Your paper is 1 of M papers
- (S)he reviews P papers a year
- (S)he teaches Q courses a year
- (S)he attends X committee meetings a week
- (S)he travels Y times a year

Do the math!!! (S)he only has

$$\frac{(365 - 14 - 52 * 2 - 5Y) * \left(8 - \frac{X}{5}\right) - 4P - 3 * 16Q}{52 * N * M}$$

hours /week for you
answer = 0.54

$N=5, M=10, P=20, Q=2, X=5, Y=4$

You & Your Advisor

- You are 1 of N students

■ Be **realistic** about
■ your advisor's time
■ (and hence, *choice* of advisor)

Do the math!!! (S)he only has

$$\frac{(365 - 14 - 52 * 2 - 5Y) * \left(8 - \frac{X}{5}\right) - 4P - 3 * 16Q}{52 * N * M}$$

hours /week for you
answer = 0.54

$N=5, M=10, P=20, Q=2, X=5, Y=4$

You & Your Advisor

Keep your advisor up-to-date, but don't spam

- Be interesting, not pestering

Agree on and check against SMART goals

- Specific, Measurable, Attainable, Realistic, Timely

Try to phrase suggestions, not questions

- "I think we should do X" vs. "Should we do X?"

There are other helpful people, you know?

- officemates, postdocs, fellow students

You & Your Advisor

Keep your advisor up-to-date, but don't spam

- Be interesting, not pestering

Agree

- Spe

Try to

- "I t

Be proactive.
Agree on concrete goals.
Learn from fellow students.

There are other helpful people, you know?

- officemates, postdocs, fellow students

EVERYBODY'S PUBLISHING



AND I'M JUST SITTING HERE...

**DON'T
PANIC**

What is a PhD about?

Learning how to do science,

such that you *become*

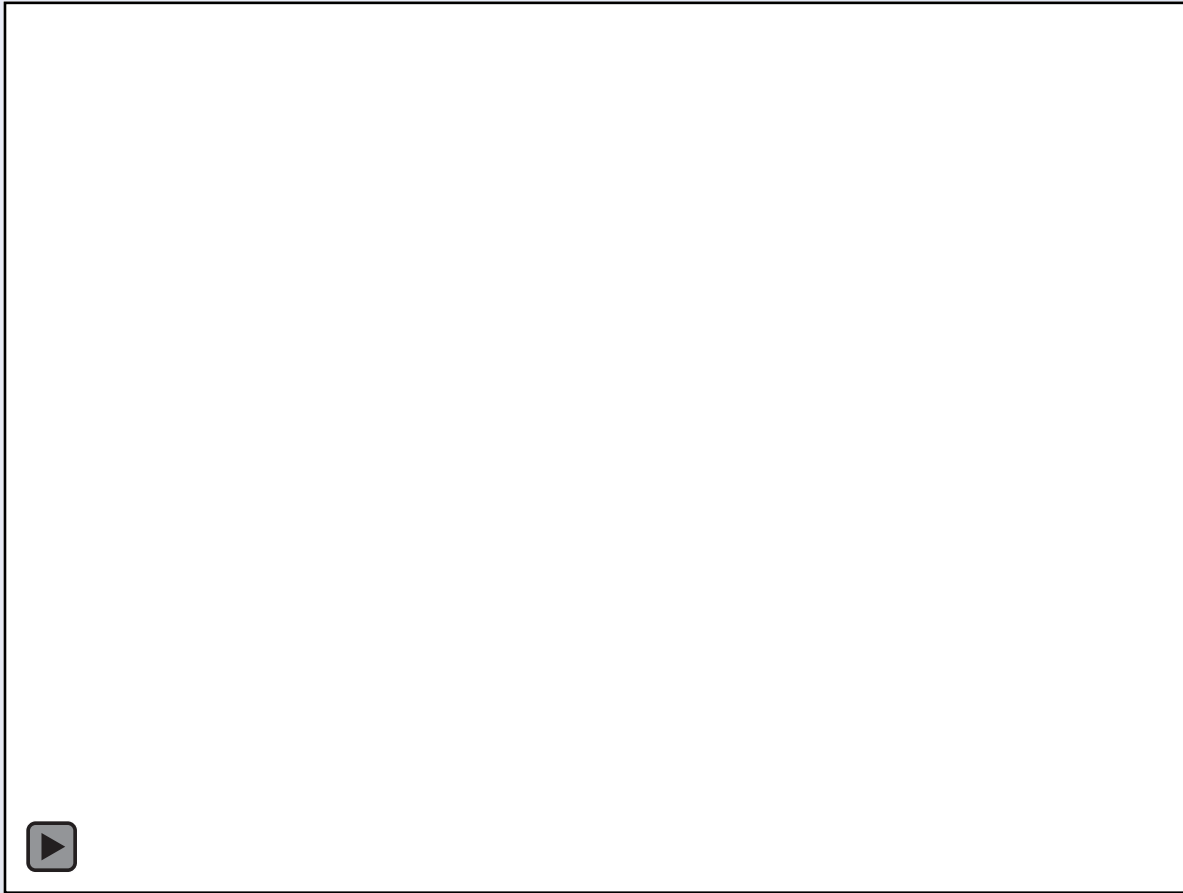
an independent researcher

What is a PhD about?

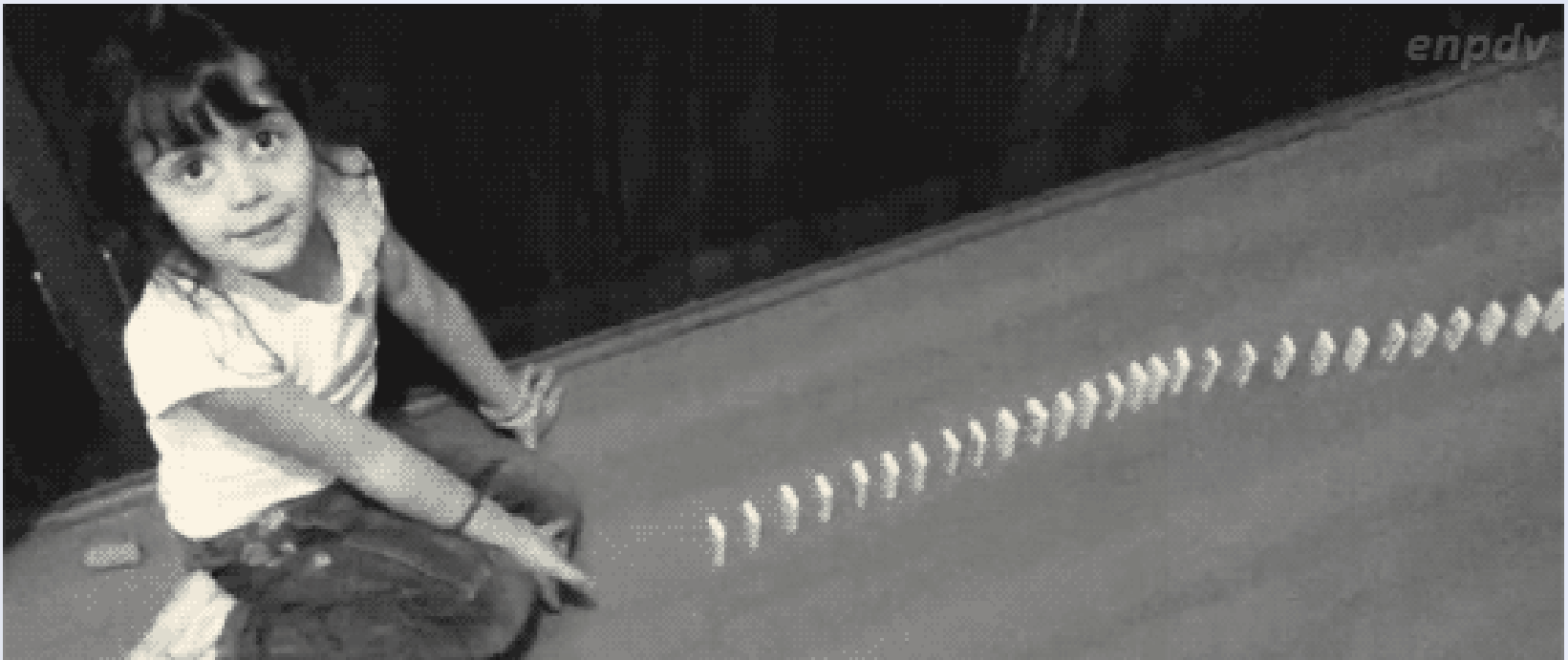
Do **not** compare yourself
to more senior people.

an independent researcher

All these papers are so nice...



All these papers are so nice...



and my research is not going anywhere...

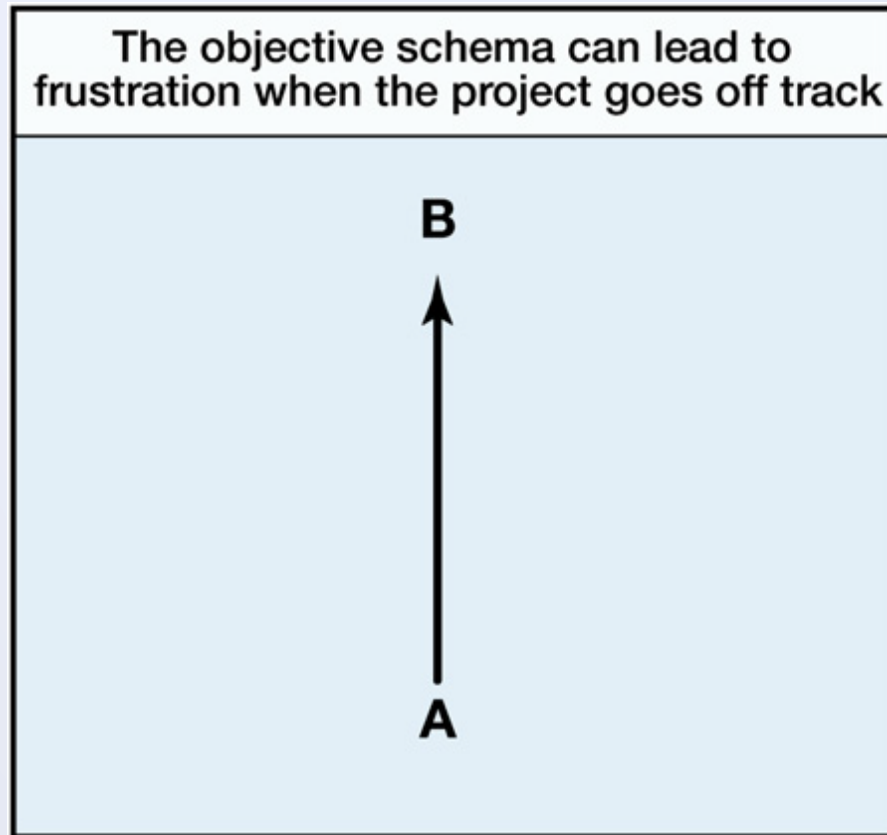
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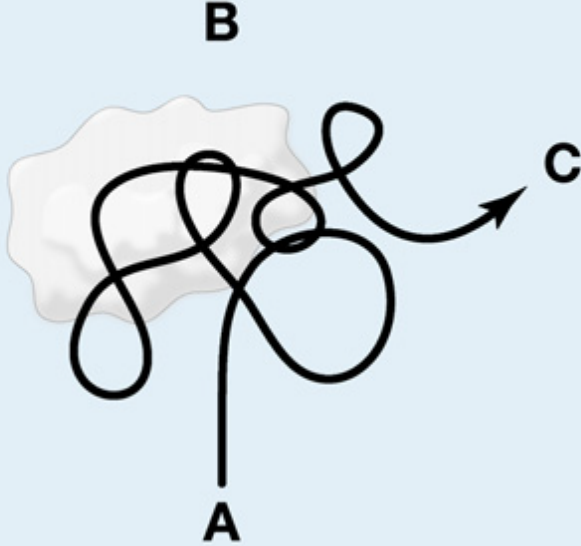
and my research is not going anywhere...

Reaching the Goal


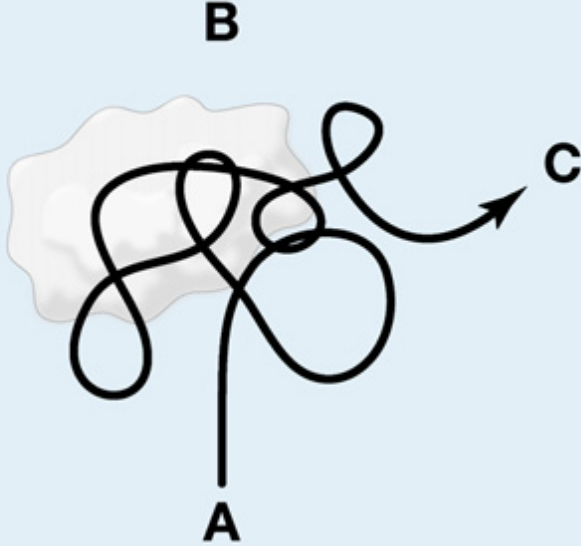
Reaching the Goal



Reaching the Goal

The objective schema can lead to frustration when the project goes off track	The nurturing schema gives support and opens new directions
	

Reaching ^athe Goal

The objective schema can lead to frustration when the project goes off track	The nurturing schema gives support and opens new directions
 <p>A diagram illustrating an objective schema. It shows a straight vertical line starting from a point labeled 'A' at the bottom and ending with an arrow pointing to a point labeled 'B' at the top. This represents a direct, linear path towards a goal.</p>	 <p>A diagram illustrating a nurturing schema. It shows a path starting from a point labeled 'A' at the bottom. The path is not straight; it loops and branches. One branch leads towards a point labeled 'B' at the top, while another branch leads towards a point labeled 'C' on the right. A light gray, cloud-like shape is positioned behind the loops of the path, suggesting a supportive or guiding environment. This represents a more flexible, exploratory path that can adapt and open up new directions.</p>

Reaching ~~the~~ Goal

A good **problem** is often worth more than a good **solution!**



Time to learn

As a grad student you have to learn a *lot*

- new students often think they know everything.
- no bachelor student can immediately make a contribution

However, you're being **paid** to learn

Find out what you need to know.

Learn what it is. Read about it. Take classes. Practice.

Time to learn

As a grad student you have to learn a *lot*

- new students often think they know everything.

Time to learn



**Logic: another thing that
penguins aren't very good at.**

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As a grad student you have to learn a *lot*

- new student
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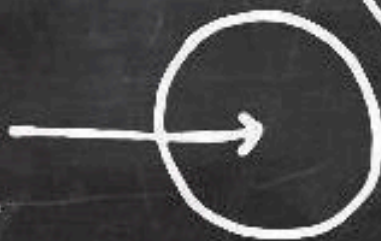
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T
A
F

Your
Comfort
Zone



Where the
magic happens

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Time to learn

As a grad student you have to learn a *lot*

- new students often think they know everything
- no

You're being *paid to learn*
How **cool** is that?

Find out what you need to know.

Learn what it is. Read about it. Take classes. Practice.

Scientific Writing – in English

Science means a *lot* of writing

A paper is a story, not a shopping list

- there needs to be a plot

Any draft can be shortened without loss

- don't believe information theoretic lower bounds

Get help with concise but complete writing

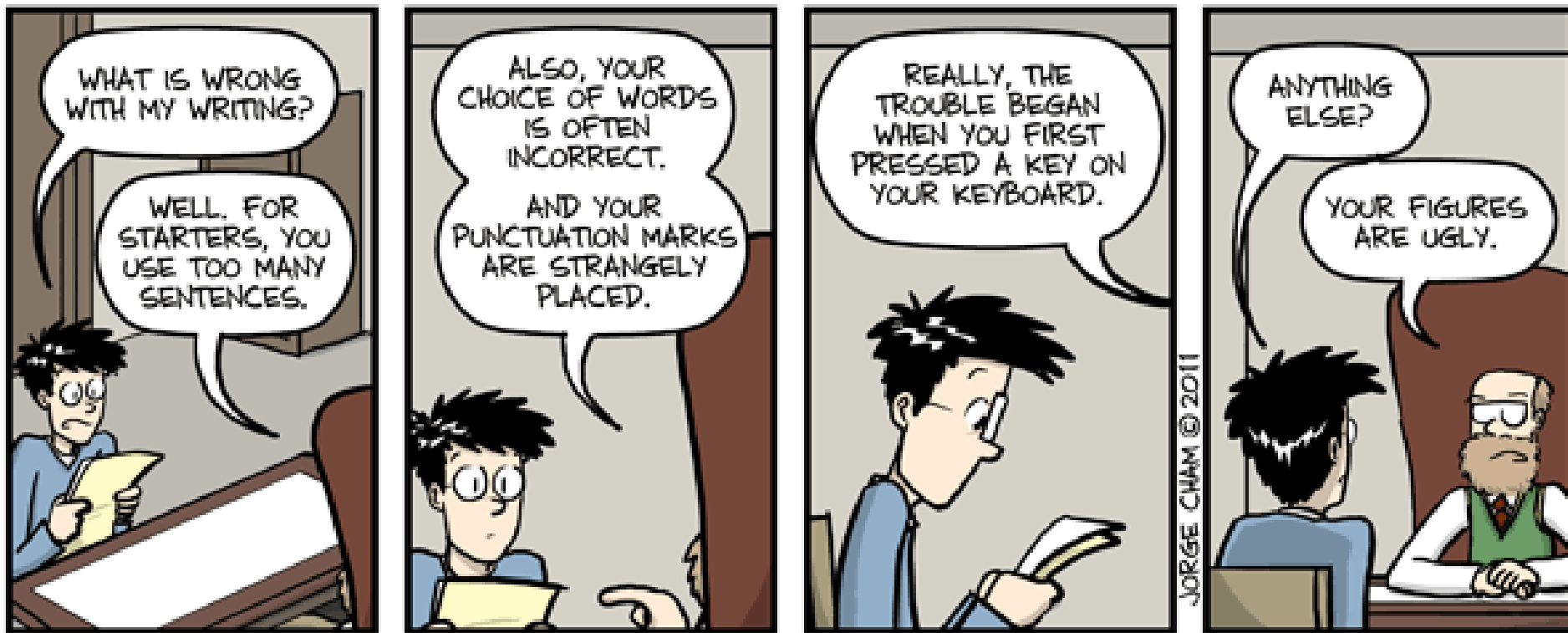
- don't forget reproducibility

Don't have sentences being written in passive voice

- they will not be easily read

Hard to improve without detailed feedback

Scientific Writing – in English



- they will not be easily read

Hard to improve without detailed feedback

Scientific Writing – in English

Science means a *lot* of writing

A paper is a story, not a shopping list

For every word ask: is it *necessary*?
Train your language and writing skillz

Get help with concise but complete writing

- don't forget reproducibility

Don't have sentences being written in passive voice

- they will not be easily read

Hard to improve without detailed feedback

Notification

So you finished your masterpiece, submit it, wait...

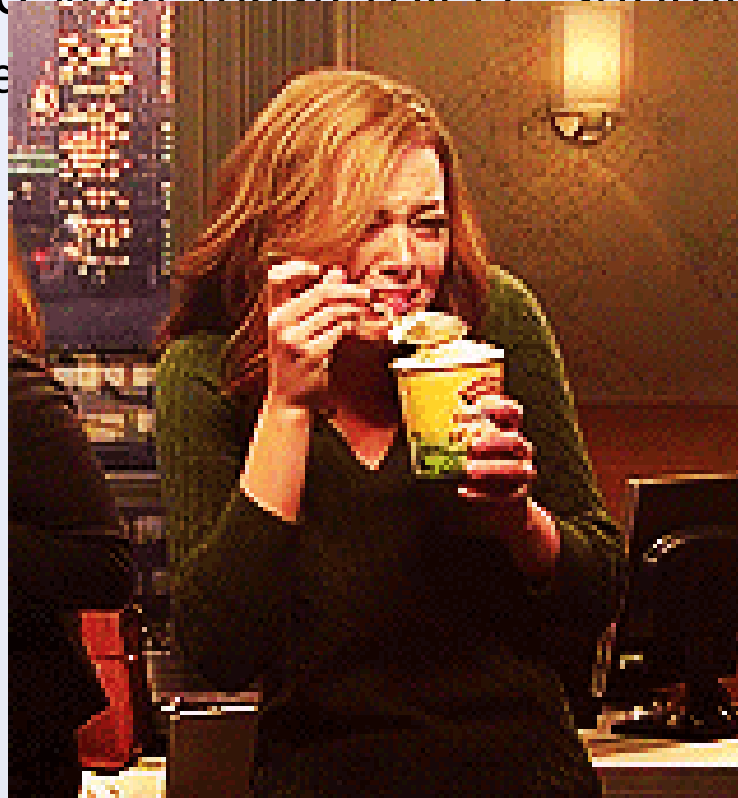
- and then the reviews come in

Reject

Notification

So you finished your masterpiece, submit it, wait...

- and then the re



**DON'T
PANIC**

Reject

So you finished your masterpiece, submit it, wait...

- and then the reviews come in

Happens to the best

Getting something published can be hard

- 10 to 20% **acceptance rate** means
- 80 to 90% of the papers get **rejected**

Reject

So you finish

- and then the r

it, wait...

Getting somet

- 10 to 20% acc
- 80 to 90% of th



st

Reject

So you finished your manuscript and wait...

- and then



Getting so

- 10 to 20%
- 80 to 90% of the papers get rejected

Reject

So you finished your masterpiece, submit it, wait...

- and then the reviews come in

Happens to the best

Getting something published can be **hard**

- 10 to 20% **acceptance rate** means
- 80 to 90% of the papers get **rejected**

Lots and lots and lots and lots of noise in the review process

- take reviews seriously, re-evaluate, improve your paper, resubmit

Reject

So you finished your masterpiece, submit it, wait...

- and then the reviews come in



Getting so

- 10 to 20%
- 80 to 90%

Lots and lots and lots and lots of noise in the review process

- take reviews seriously, re-evaluate, improve your paper, resubmit

Reject

So you finished your masterpiece, submit it, wait...

- and then the review process

Can take time to get publish.
Use reviews to improve your
paper, don't **overfit**.

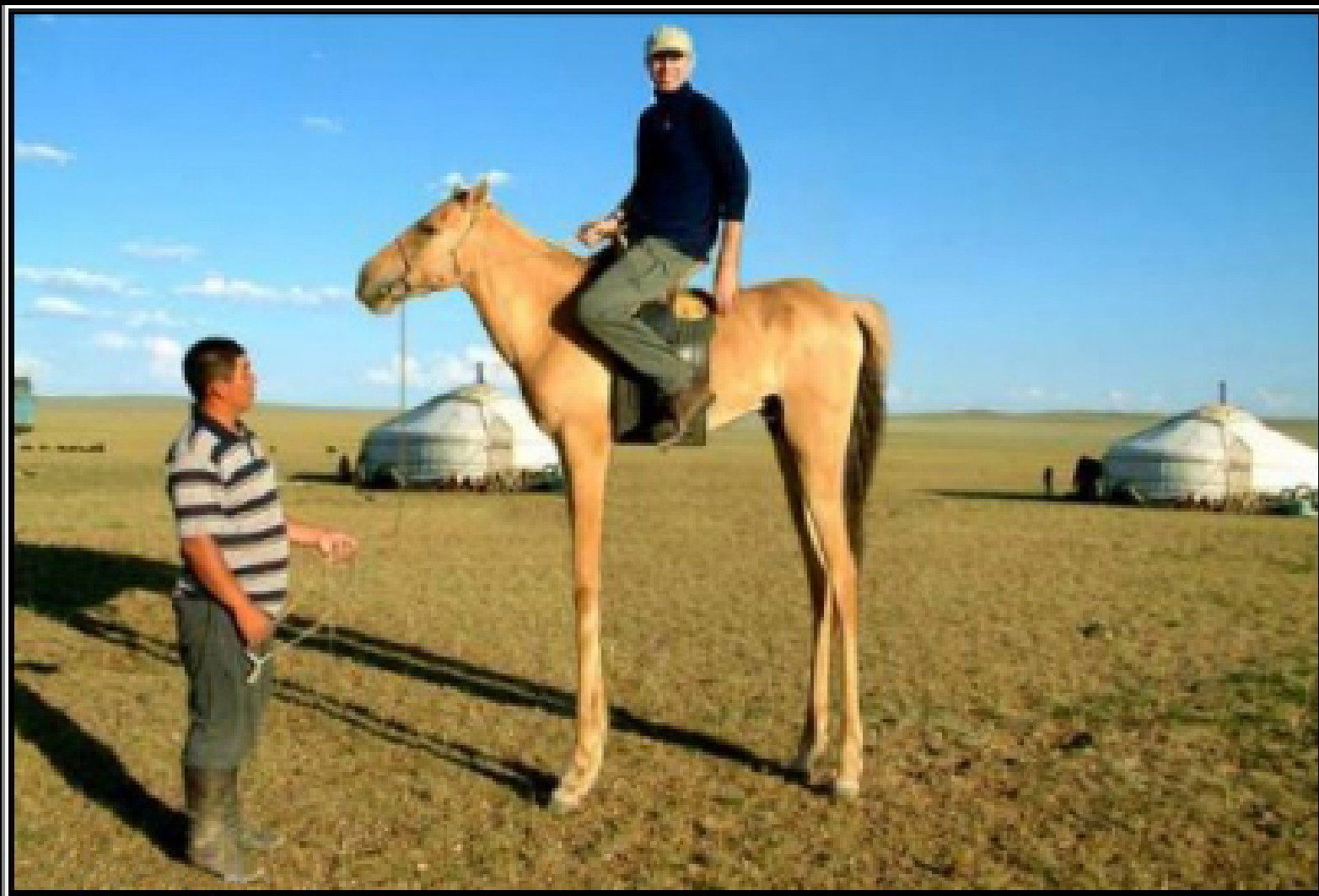
Get:

- 10 to 20%
- 80 to 90%



Lots and lots and lots and lots of noise in the review process

- take reviews seriously, re-evaluate, improve your paper, resubmit



YOUR HIGH HORSE

Get off it.



When you are the reviewer:
do your job **well**, don't be *that* guy.



YOUR HIGH HORSE

Get off it.

How to work

Everybody works differently

- find out what works for *you*



How to work

Everybody works differently

- find out what works for *you*

It's **not** about how many hours — *stupid!!1!!!one!*

- say no to peer pressure

Create a stimulating environment

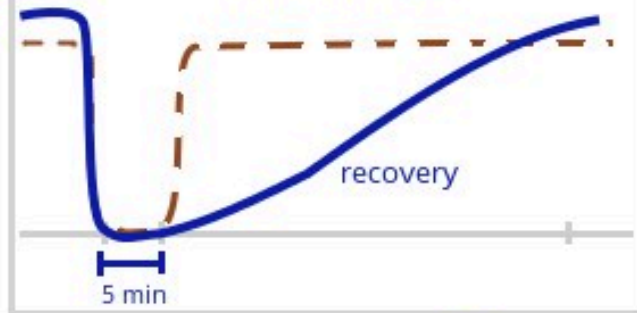
- optimize your workplace

geek productivity at work

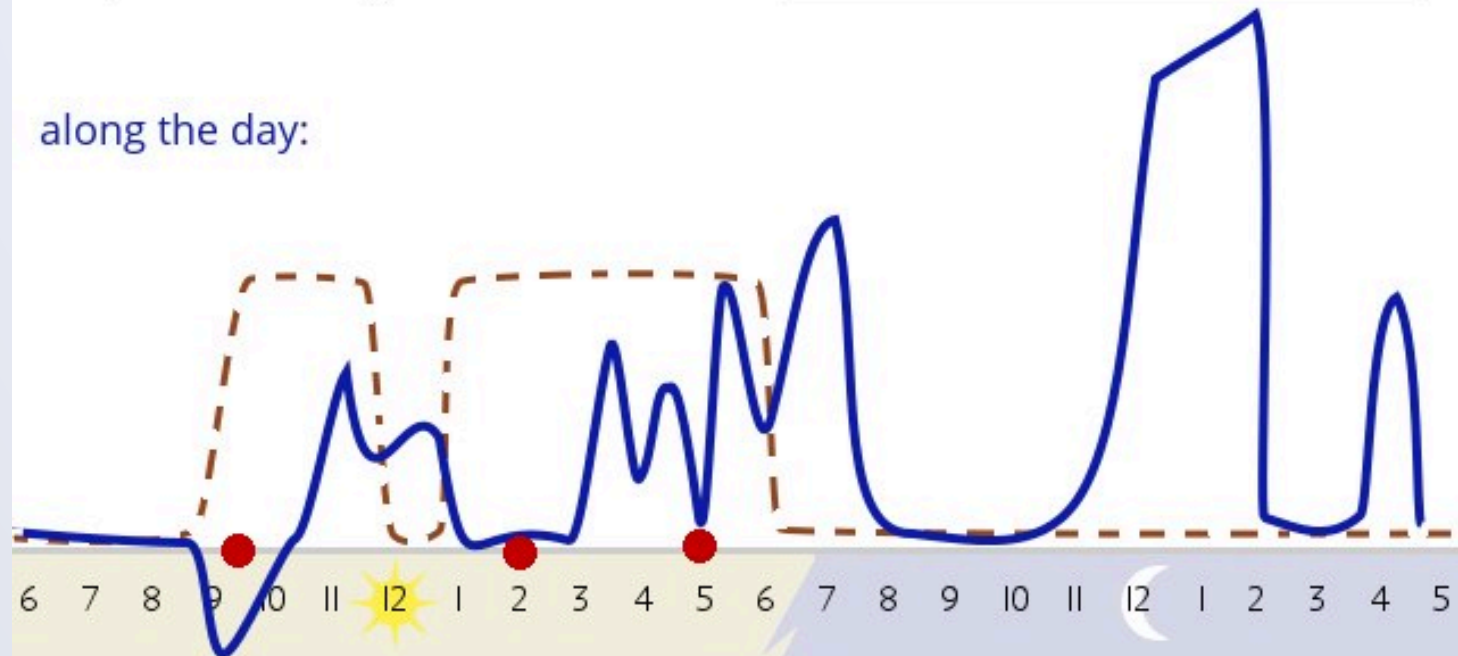
- how non-geeks think it works
- how it actually works

- sampling points likely to be used by non-geeks to get a general picture of how geeks work

effect of a 5-min interruption (or a meeting!)



along the day:



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How to work

Everybody works differently

- find out what works for *you*

It's **not** about how many hours — *stupid!!1!!!one!eleven*

- say no to peer pressure

Create a stimulating environment

- optimize your workplace

Focus

- and **procrastinate** when you can't

How to work

Everybody works differently

- find out what works for *you*

It's **not** about

- say no to pe

Create a stim

- optimize yo

Focus

- and **procrastinate** when you can't

PhD Goal:
figuring out how
you get your
best ideas

even

I don't know man..

VIA 9GAG.COM

**Sometimes, I don't want to
move it move it.**

I don't know man..

Sometimes, it's just not happening. No need to keep your chair warm, call it a day – go out, have **fun**. Who knows, maybe you'll even get a good idea.



Sometimes, I don't want to move it move it.

When You're Feeling Low

It's not so bad, really

- don't get yourself down

Acknowledge the good times

- keep a **folder** with past **accomplishments**,
with e.g., graduation photos,
acceptance notifications,
awards, conference visits, etc.

When You're Feeling Low

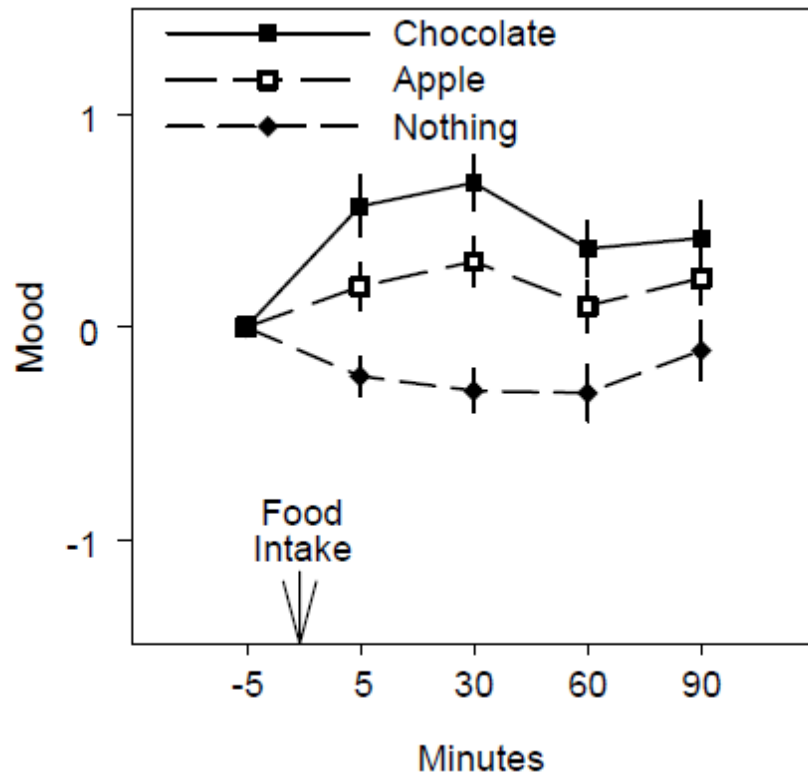
Everyday mood and emotions after eating a chocolate bar or an apple

Michael Macht *, Dorothee Dettmer

When You're Feeling Low

Everyday mood and emotions after eating a chocolate bar or an apple

Michael Macht *, Dorothee Dettmer

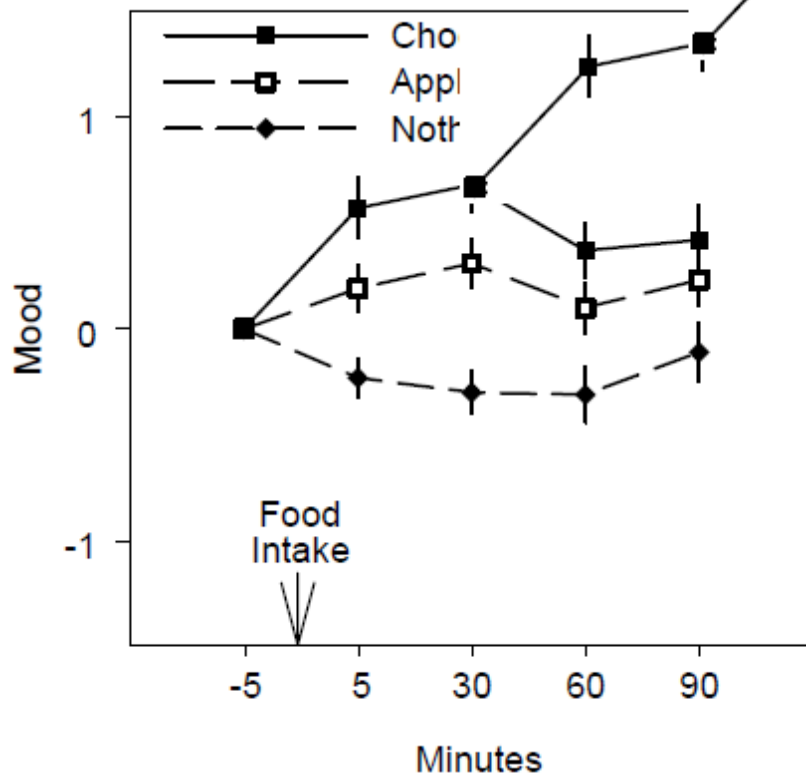


When You're Feeling Low

Even

chocolate bar or an apple

er



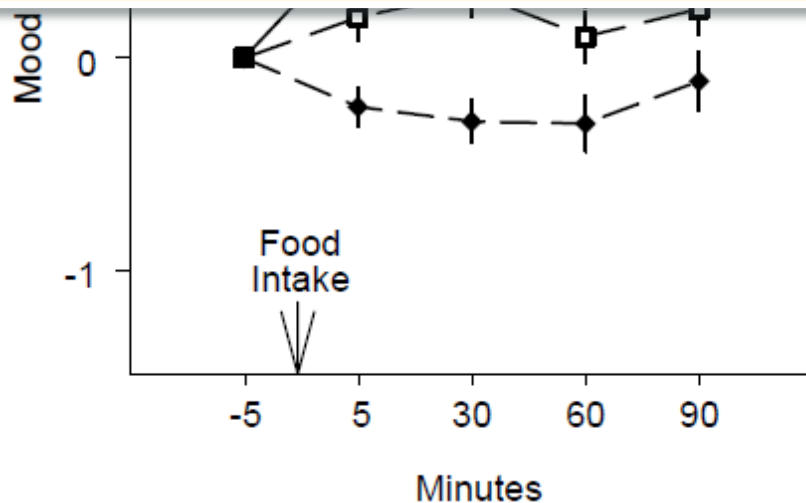
When You're Feeling Low

Ever

chocolate bar or an apple

er

Who cares about "an apple a day ...",
it's: "a chocolate bar every 30 minutes"!



Celebrate Your Victories

Celebrate Your Victories

© Original Artist

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www.CartoonStock.com



"REMEMBER, WINNING ISN'T THE ONLY THING. YOU ALSO
NEED TO DEVELOP A GREAT VICTORY DANCE."

http://www.cartoonstock.com/directory/v/victory_dance.asp

Celebrate Your Victories

"Success is not the key to happiness.
Happiness is the key to success.
If you love what you are doing,
you will be successful."

Albert Schweitzer

Some groups have "publication cakes"

- Make it chocolate, please!

Acknowledge everyone somehow involved

- Create a positive group atmosphere

Celebrate Your Victories

"Success is not the key to happiness.
Happiness is the key to success.
If you love what you are doing

If you're **happy** and you know it,
then you really ought to **show it!**

Some groups have "publication cakes"

- Make it chocolate, please!

Acknowledge everyone somehow involved

- Create a positive group atmosphere

Attending a Conference

Attending a Conference



Attending a Conference



Attending a Conference

Talk to people at all occasions

- after presentations, in coffee breaks, ~~in rest rooms~~

Plan which sessions/presentations to attend

- combination of topic and presenter

Make the most out of a poster presentation

Attending a Conference

Talk

■ aft

Plan

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Mak



Attending a Conference

Talk to people at all occasions

- after presentations, in coffee breaks, ~~in rest rooms~~

Plan which sessions/presentations to attend

- combination of topic and presenter

Make the most out of a poster presentation

- engage people, offer free candy and advertise it

S

A DATA-DRIVEN SKETCH OF WIKIPEDIA EDITORS

ROBERT WEST**
INGMAR WEBER*
CARLOS CASTILLO*

Y!

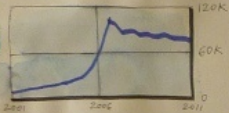
WIKIPEDIA IS...

IMPORTANT DIFFERENT LOSING EDITORS

"largest and most popular reference work on the Internet"

Source: Wikipedia

"The free encyclopedia that anyone can edit."



CURRENT INFO SOURCE

WIKIPEDIA EDITOR SURVEY

1. How old are you? **28** (median)

2. What is your gender? ☒ male (87%) ☐ female

3. What is your highest degree? ☐ high school ☐ college ☐ Master's ☐ PhD (61%)

HERE: COMPLEMENTARY INFO FROM WEB-USAGE LOGS:

Y! SEARCH

YAHOO! TOOLBAR

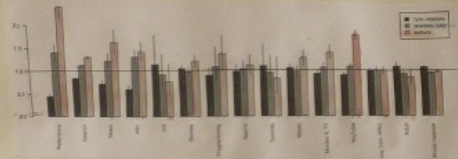
BUT WHO DOES?

1

EDITORS HAVE MORE ONLINE TIME

3x AS MUCH AS READERS-ONLY
9x AS MUCH AS NON-READERS

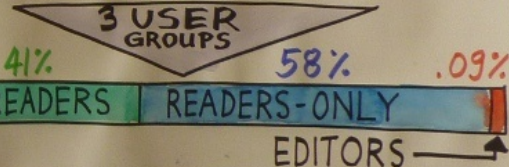
- BUT HOW DO THEY SPEND IT?



13K EDITS ON 5.1K ARTICLES BY 1.9K EDITORS
5.3K EDITOR-ARTICLE PAIRS

(40% ENTERTAINMENT-RELATED)

1334276331 Af_fHtx8 http://eigenbraeu.de
1334282011 Af_fHtx8 http://en.wikipedia.org
"EDIT" IF ALSO IN WIKI LOGS /w/index.php?title=...&action=submit



2 HOW DO EDITORS DIFFER MOST?

47% OF VARIANCE (PCA) EXPLAINED BY...

- + MORE ENTERTAINMENT
- MORE SCIENCE & NEWS+MEDIA
- LARGER EDITS
- HIGHER CHANCE OF BEING LOGGED IN
- MORE EDITS PER USER

3 ARE THEY EXPERTS?

MEAN EXPERTISE PER CATEGORY

4.16 SPORTS	1.92 BUSINESS
2.70 TECHNOLOGY	1.80 HEALTH
2.66 NEWS+MEDIA	1.68 SCIENCE
2.16 HUMANITIES, LAW + SOCIAL SCIENCE	1.65 ENTERTAINMENT
2.03 SHOPPING	1.54 ARTS
	1.53 HOBBIES



BIAS?

SAMPLE 1,000 SEARCH QUERIES PER EDITOR: Q_e

INTEREST_e(a): $\frac{1}{|Q_{e,a}|} \sum \text{sim}(q,a)$

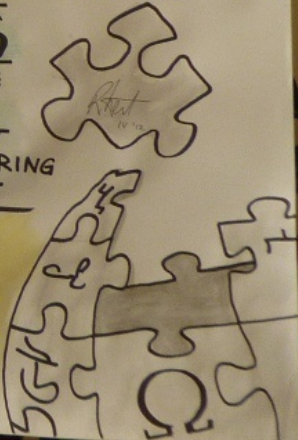
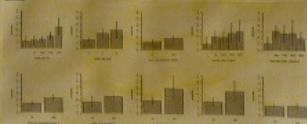
INTEREST_r(a): $\frac{1}{|Q_{r,a}|} \sum \text{sim}(q,a)$

EXPERTISE_e(a): $\frac{\text{INTEREST}_e(a)}{\text{INTEREST}_r(a)}$

FUTURE IDEAS

- HOW DO READERS BECOME FIRST-TIME EDITORS?
- USE RESULTS TO TARGET PROMISING READERS DURING EDITOR RECRUITMENT

CORRELATES OF EXPERTISE:



Attending a Conference

Talk to people at all occasions

- after presentations, in coffee breaks, ~~in rest rooms~~

Plan which sessions/presentations to attend

- combination of topic and presenter

Make the most out of a poster presentation

- engage people, offer free candy and advertise it

Combine a conference with visits

- universities and institutes nearby

Attending a Conference

Talk to people at all occasions

- after presentations, in coffee breaks, ~~in rest rooms~~

Plan which

- combining

Be as active as possible.
It is boring if you're not.

Make the most out of a poster presentation

- engage people, offer free candy and advertise it

Combine a conference with visits

- universities and institutes nearby

Giving a Presentation

**DON'T
PANIC**

Surviving on Stage

Just a few things to remember

The **medium matters** as much as the message

- it is all about **confidence**

Realise that **you** are the expert

- attendees want to **learn** what **you** discovered

It is **not** a competition (anymore)

- your paper was accepted, now it is about **advertising**

The Body shapes the Mind

How you **feel**
influences how you **behave**.

The Body shapes the Mind

How you **behave**
influences how you **feel**.

The Body shapes the Mind

How you **behave**
influences how you **feel**
influences how you **behave**

Carney D.R., Cuddy, A. J. C., Yap, A. J. (2010). Power Posing: Brief Nonverbal Displays Affect Neuroendocrine Levels and Risk Tolerance. *Psychological Science*, 21, 1363-1368.

The Body shapes the Mind

Only **two** minutes of
power posing reduces stress
levels **and** changes behaviour

Carney D.R., Cuddy, A. J. C., Yap, A. J. (2010). Power Posing: Brief Nonverbal Displays Affect Neuroendocrine Levels and Risk Tolerance. *Psychological Science*, 21, 1363-1368.

Power Posing



Amy Cuddy (2012) Your Body Language Shapes Who You Are, TEDglobal

Power Posing



Amy Cuddy (2012) Your Body Language Shapes Who You Are, TEDglobal

Power Posing



Giving a Presentation



DEATH BY POWERPOINT

Giving a Presentation

Don't overestimate your audience

- Go sloooow on technical details – or **leave out**

Don't overestimate your **time**

- 90-100 seconds per normal slide

Who on earth invented overview slides?!?

- Introduction, ... Experiments, ... Conclusions

Clearly **emphasize** the key points

- Visually *and* audibly

Think about the **take-home** message

- say thanks on the last slide, keep the conclusion **visible**

Get **feedback** on all aspects and **practice**

Giving a Presentation

Don't overestimate your audience

- Go sloooow on technical details – or **leave out**

Don't overestimate your **time**

- 90-100 seconds per normal slide

Who o

- Intro

Highlight the key points.

Clearly **emphasize** the key points

- Visually *and* audibly

Think about the **take-home** message

- say thanks on the last slide, keep the conclusion **visible**

Get **feedback** on all aspects and **practice**

The Pitch

You're taking an elevator with Donald Trump

- Donald: "So, what are you working on?"

You: ...

The Pitch

You're taking an elevator with Donald Trump

- Donald: "So, what are you working on?"

You: ...



The Pitch

You're taking an elevator with Donald Trump

- Donald: "So, what are you working on?"

You: ...

Forces you to focus on the essential,
see the big picture, get others excited,
and remember **you & your work**

The Pitch

HOW EXCITING!!
PLEASE TELL ME
MORE!!



The Pitch

Perhaps even more important: **Cocktail Party Pitch**

- Next family reunion
- “My child does something with computers.”

So, how is your work useful?

The Pitch

Perhaps even more important: **Cocktail Party Pitch**

- Next family m
- "My child do

S



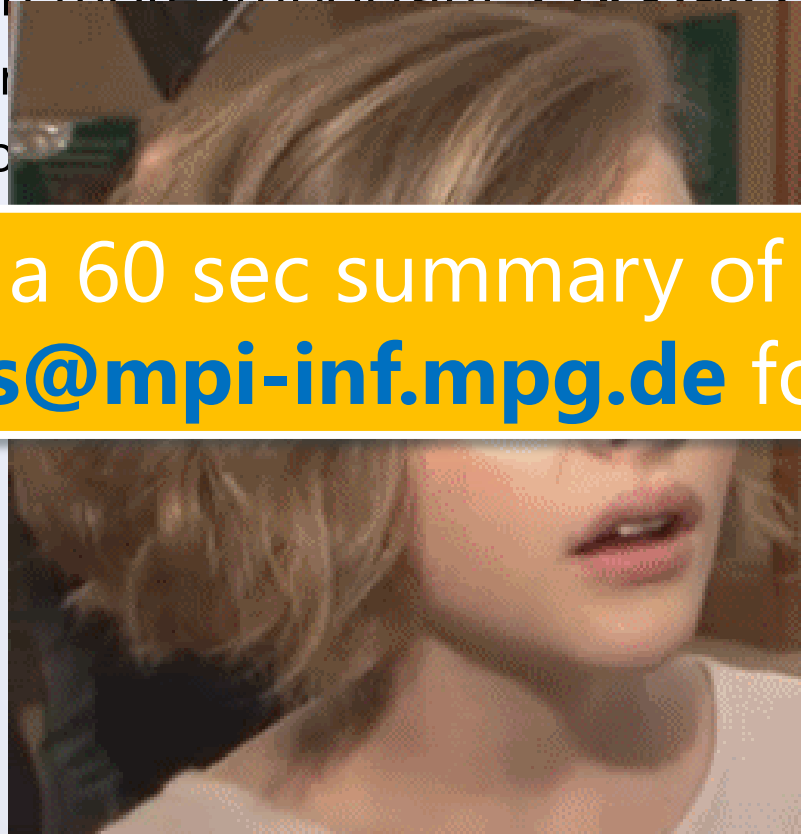
ul?

The Pitch

Perhaps even more important: **Cocktail Party Pitch**

- Next family m
- "My child do

Think of a 60 sec summary of your work.
Ask jilles@mpi-inf.mpg.de for feedback.



The Thesis

In CS, typically a collection of papers

- in the best case on a related topic

Rewrite per-paper introductions

- there'll be a long introduction

When you don't know what to write

- just write something

It will take longer than you think

- even if you expect it to take longer than you thought

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- there'll be

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- just write

It will take

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FINAL.doc!



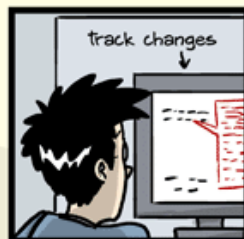
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FINAL_rev.6.COMMENTS.doc



FINAL_rev.8.comments5.
CORRECTIONS.doc



FINAL_rev.18.comments7.
corrections9.MORE.30.doc



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JORGE CHAN © 2012

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- just write

It will take

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The Th

In CS, typic

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In CS, "easy" if you have published.
But, takes longer than you think.

- just write

It will take

- even if yo



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Survival Checklist

Put yourself in the shoes of **your audience**

- your advisor, your readers, conference attendees, ...

Get your priorities **straight**

- define achievable short-term goals and stick to them

Learn when to say **no**

- don't get involved in too many things

Be thoughtful about networking opportunities

- personal story

Some references

Good Books

- "A PhD is not Enough", Feibelman
- "Mastering your PhD", Gosling & Noordman
- "How to Get a PhD", Philips & Pu

Informative Sites

- <http://matt.might.net/articles/>
- <http://public.randomnotes.org/richard/>

Great Slides

- Sue Moon "A few tips I wish I had before I met my advisor"
- Yannis Smaragdakis "PhD Rants and Raves – be afraid, be very afraid"
- Eamonn Keogh "How to do good data mining research, get it published, and get it cited"

Special thanks to **Ingmar Weber** for his **excellent** talk

- "Advice for young Jedi knights and PhD students" at PIKM 2012

Google [title] filetype:pdf

- "From Research to Manuscript", Katz
- "Scientific Writing", Peat
- "Writing for Science", Goldbort

Funny Sites

- *Research in Progress* – [researchinprogress.tumblr](http://researchinprogress.tumblr.com)
- Piled Higher & Deeper – phdcomics.com

DON'T PANIC

For comments, praise, pointers to books, slides, sites, ...

jilles@mpi-inf.mpg.de