

# The hidden curriculum

Lifehacks and other things that will help you in the PhD

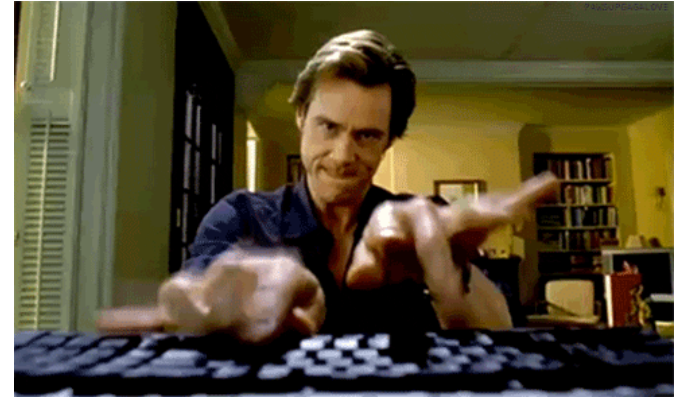
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# Being a researcher is very different from being a student

- It's fine to be a bit confused
- You are now writers, communicators, entrepreneurs and managers
  - Finding new ideas vs solving problem sets
  - Cleaning data vs getting a dataset
  - Knowing there is solution to a problem vs not knowing
- This requires skills beyond economics, finance or econometrics
  - You have to be able to come up with new ideas
  - You have to be able to turn your idea into a project and manage it
  - You have to be able to communicate your ideas clearly



# Goal today: tell you where you can find out more about being a researcher

- Many of the skills that you will require are not taught
  - And a lot of them require hands-on learning, not some weird presentation in a Friday bar
- **Thankfully there is a lot of collected knowledge out there**
- Today, I will talk about some of them, and give links to others
  - How to find ideas? How to write? How to be productive?
  - I will also summarize some of these things in my own words

# You should all go to my website.

- You can find a lot of links (and more) on my website

<https://sites.google.com/view/claesbackman/tips-for-phd-students>

- The rest of the time I will talk about what I learned during my PhD
- **Friendly reminder to also cite the papers there!**
  - (this is optional)

# How to find new ideas?

- There are a lot of project worth spending two weeks on, but very few worth spending 6 months on
  - Most projects fail. Try to fail quickly
  - Your advisor wants you to write a dissertation, not finish a specific project
- Understand that what works for others may not work for you
  - Huge heterogeneity in how people come up with ideas
- Good research ideas involve finding connections between things ([Paul Niehaus](#))
  - The more you know, the more likely you are to find connections
  - Read papers (or abstracts). I read new papers alerts to get new papers
  - Reading news probably helps too

# Sign up to emails!

- [NBER emails](#) - Super important. Sign up to get all emails every week.
- [RePEc emails](#) - sign up for the working paper series that interest you
- SSRN emails - papers and job/conference announcements. Find the link once you login to SSRN.
- [INOMICs emails](#) - courses and conferences.
- [IZA emails](#) - working papers
- You can also sign for alerts on new articles in your favorite journals. [Paul GP has a Twitter-thread](#) on how to sign up for publication alerts. This is very useful!

# #EconTwitter can be very helpful

- I get a lot out of Twitter
  - Discussions about new papers and new methods, help with problems, etc
  - Also jokes and gifs and support and all kinds of other things marginally related to economics
  - Don't have to actually tweet, you can also just read others stuff
- In general a friendly, diverse and supportive community
- Great for self-promotion
  - "Paper-threads" are quite common and a great way to introduce your papers
- [Joshua Goodman - Twitter tips for PhD Students](#)
- [Matt Clancy - A Beginner's Guide to #EconTwitter](#)

# Being productive means finding a way to focus

- Work hard to avoid things that will break your concentration
  - Close down Facebook, Twitter, emails, put your phone on do not disturb and put it away
  - It takes me about 20 minutes to get into a flow
  - A short distraction can cost you a lot of time
- Figure out when you are productive, and then protect that time
  - Is it after lunch? In the morning?
  - You can schedule time for answering emails or doing other administrative stuff at times when you are not productive
- Emails can wait if you are working on something productively
  - If you tell your advisor that you didn't answer the email within 5 minutes because you were focused on writing the paper, he/she will be happy!
- I highly recommend [Deep Work by Cal Newport](#).



# Clear writing is critical and takes practice

- "[...] the single best predictor of getting a paper accepted, would be **clear and accessible writing**, including an **explanation of where the paper breaks down**, instead of putting the onus of this discovery on the reader" [Amitabh Chandra, the Editor of the Review of Economics and Statistics](#)
- But: no one is great at writing at first
  - Just get going!
  - "The 2nd draft is to make it look like you know what you're doing" Neil Gaiman
- I'll say it again: no one is great at writing at first. That's why we edit things
- How you write will depend on your field and the journal you are targetting.
  - An econometrics paper looks different from an applied-micro paper
  - There are however good guides you can find with general tip

# How to get going?

- You will rewrite and rewrite everything
- That is fine and good and a natural part of the process.
  - I needed to get over the fact that I didn't want to read my first drafts
  - I had a good coauthor who taught me the value of editing.



**Arpit Gupta**  
@arpitrage

Personally, I like to go with:

"Many years later, as he faced the firing squad, Colonel Aureliano Buendía was to remember that distant afternoon when his father took him to discover the incidence of corporate taxes on workers."



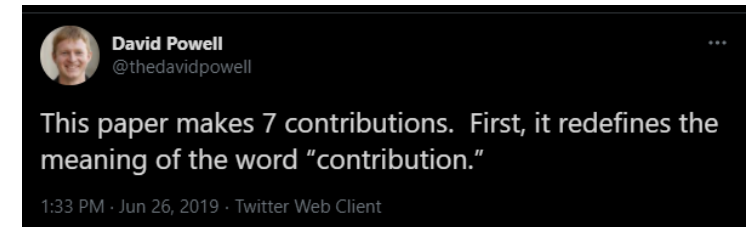
**Rachael Meager** @economeager · Nov 1, 2019

The best way to get started is to write as the title "Paper About XYZ: Shitty First Draft" and then start the first sentence with "It was a dark and stormy night, and [describe the problem your paper will then solve]."  
[twitter.com/scottjshapiro/...](https://twitter.com/scottjshapiro/)

[Show this thread](#)

# The introduction formula – inspired by Keith Head

- Motivate with a puzzle or a problem (1–2 paragraphs)
  - This is the most important paragraph of your paper and you **should** spend a lot of time on it
- Clearly state your research question and your central contribution early! (1 paragraph)
  - Do this early!
- Empirical approach (1 paragraph)
- Detailed results (3–4 paragraphs)
- Value-added relative to related literature (1–3 paragraphs)
  - Related literature can be 2-3 papers, or you can write a literature review as a separate section
- Optional paragraphs: robustness checks, policy relevance, limitations



State your contribution(s) clearly

# Abstract

- Your abstract should be 100-150 words
- The abstract should communicate your central finding and what you do
  - **“We conduct a within-county analysis using detailed ZIP code–level data to document new findings regarding the origins of the biggest financial crisis since the Great Depression.** The sharp increase in mortgage defaults in 2007 is significantly amplified in subprime ZIP codes, or ZIP codes with a disproportionately large share of subprime borrowers as of 1996.” Mian and Sufi, 2009
  - **“This paper investigates intra-family spillovers from the focal child’s timing of school start.** We first show how school starting age affects the timing of subsequent educational transitions. Exploiting quasi-random variation in school starting age induced by date of birth, we then document effects on parental outcomes.”  
Landersø, Nielsen, Simonsen, Forthcoming in *Journal of Human Resources*

# General writing tips

- Organize your introduction as a newspaper article, not as a detective story
  - Start with the most important part, then fill in the rest
- Your readers will skim and skip – make this easy for them
- Get to the central results as fast as possible
  - “There should be nothing before the main result that a reader does not need to know in order to understand the main result.” John Cochrane
  - This also goes for your results section
- Editing is absolutely key
  - Just get something on paper and you can figure out how to look competent afterwards
  - Editing will also help you cut down on the length of the paper

# Your presentation need to convince the audience to listen to you

- Tell them quickly what you are doing
  - What is the research question?
  - Motivate it with a graph if possible
  - Every slide should have a purpose and you should go through it
- Nicely formatted graphs and tables that are actually readable are a must
  - Don't annoy your audience with unreadable figures and tables
- Read Jonathan Schwabish's Better Presentations

# You are there to convince the audience that your paper matters

- Prepare well and know your paper
  - Practice beforehand if it is an important presentation. Not just once, but multiple times
- State the question you are asking early
  - You want to frame the presentation for the audience. If you state a question right away, they are less likely to start thinking about other things
- Link motivation to what the paper actually does
  - Don't confuse the audience!
  - Examples has to fit your purpose.
- Every slide must have a purpose
- Convey what makes the paper work
  - What assumption do you need for your model to work? What is the identifying assumption in your empirical paper?

# Conference presentations

- Make sure you know how long you have to present
  - Going over time means that you take time from someone else. Don't do that
  - What you present is a function of that time. The shorter the time, the less slides you have
- Practice your talk
- Don't show off your proofs or your data too much if it's a short presentation.
  - This does not apply to crucial proofs for your paper or your identification strategy
- Don't have a literature slide in a conference presentation
- (Smaller conferences in your field are usually better to network)
- (Large conferences can be lonely and boring)



# Spend time learning how to make nicely formatted tables and graphs

- Find ways to automate the process of creating graphs and tables
  - With R/Stata and LaTeX this can be done almost seamlessly
- Don't use the default schemes for graphs!
  - For Stata, plotplain or plotplainblind are the ones I use ("set scheme plotplain, **permanently**")
  - For R, there are similar schemes and changes you can make
- For tables, only include the variables you want to interpret and label them properly
  - Dgdppercap is not a useful label. Growth in GDP per capita is useful.
  - We also don't need to see all the controls variables in the final paper or presentation
- Each table and graph should have a self-explanatory caption

# Links for writing

- [John Cochrane - Writing Tips for Ph. D. Students](#)
- [Jesse M. Shapiro - Four Steps to an Applied Micro Paper](#)
- [Plamen Nikolov - Writing Tips For Economics Research Papers](#)
- [Mike Munger on writing a dissertation](#)
- [Steven Pinker - Why Academics Stink at Writing](#)
- Deirdre McCloskey - Economical Writing ([book](#)) & [Summary](#)
- [David Evans - How to Write the Introduction of Your Development Economics Paper](#)
- [Keith Head - The Introduction Formula](#)
- [Marc F Bellemare - The Conclusion Formula](#)
- [Claudia Sahm - We need to talk MORE ...](#) (advice about writing a job market paper)
- [Florian M. Hollenbach - Academic Writing: Exercises and Guides on Writing](#) (Lots of links to writing resources)
- [Ed Glaeser on how to write a theory paper](#)
- [Hal Varian - How to Build an Economic Model in Your Spare Time](#)

# Links for presenting

- Jon Schwabish - Better Presentations ([book](#)) and [website](#) for making better presentations.
- [Rachael Meager - Public Speaking for Academic Economists](#)
- [Jesse M. Shapiro - How to give an applied micro talk](#)
- [Paul Goldsmith-Pinkham Beamer Tips](#)
- [Kjetil Storesletten - The Ten Commandments for How to Give a Seminar](#)
- [Eliana La Ferrara - How to present your job market paper](#)
- [Carmine Gallo - How to Rehearse for an Important Presentation](#)
- [Marc F. Bellemare - 22 Tips for Conference and Seminar Presentations](#)
- Tip: If you are presenting at your own university, get a fellow PhD student to take notes for you. This saves lots of time and ensures that you won't miss any good comment. Also ask your friends for feedback on your presentation.

# Links for new ideas and being productive

- [Deep Work by Cal Newport \(book\)](#). (see also his [blog](#), Study Hacks)
- [Steve Pavlina](#) - 7 Rules for Maximizing Your Creative Output
- [Ben Olken - My Epic Failures](#)
- For new ideas: See this Twitter-thread [started by Ivan Werning](#). I enjoyed this presentation by [Frank Schilbach](#), and this point by [Sally Hudson](#): great questions may also come from the industry or policy world. In general, the Twitter-thread contains a lot of advice, some of it contradicting other advice. Find the thing that works for you!

# Links for tables and graphs

- [Luke Stein's tips for generating Stata output that can be outputted directly to LaTeX \(Don't miss the working examples with code\)](#).
- [Stata Cheat Sheets](#)
- [Jörg Weber - Automated Table generation in Stata and integration into LaTeX](#)
- [Alessandro Martinello - How to export tables from Stata to LaTeX](#)
- [Nicholas T. Davis - A 2019 New Year's Resolution for Stata users: Make cleaner, prettier graphs](#)
- [Michael Norman Mitchell - Create good-looking graphs and figures in Stata](#)
- [Daniel Bischof - Stata Figure Schemes](#) (paper that explains the scheme)
- [Paul Goldsmith-Pinkham Best Figure Page](#) (good inspiration!)
- [Chiu Yu Ko - TikZ guide \(Code for drawing graphs in LaTeX with so many examples\)](#)
- If you use Stata I suggest that you install the lean scheme package (net install gr0002\_3, replace) and use this package for your graphs (you can type "set scheme lean2, permanently" in stata to always use it). There are of course other schemes out there that you can use. Google is your friend here.

# Links for data and project management

- [Coding for economists - Ljubica “LJ” Ristovska](#)
- [Code and Data for the Social Sciences: A Practitioner’s Guide - Matthew Gentzkow & Jesse M. Shapiro](#)
- [How To Make A Pie: Reproducible Research for Empirical Economics & Econometrics](#)
- [Maximilian Kasy - Useful Computational Resources \(Guides to machine learning, programming in R, Latex](#)
- [Grant McDermott - Data science for economists](#)
- [Tobias Oetiker Hubert Partl, Irene Hyna and Elisabeth Schlegl - The Not So Short Introduction to LATEX](#)
- [Hans-Martin von Gaudecker - Setting up a Python Environment](#)
- [Michael Stepner - Coding Style Guide](#)
- [Michael Stepner - Git vs Dropbox](#)

# Being a researcher

- [Claudia Goldin - The Economist as Detective](#)
- [Esther Duflo - The Economist as Plumber \(Alternative link\)](#)
- [Martin A. Schwartz - The importance of stupidity in scientific research](#)

# Links for dealing with stress

- [Chris Woolston - Faking it](#)
- [Jennifer Walker - There's an awful cost to getting a PhD that no one talks about](#)
- [Valerie Valdes - Smart kids eventually grow up](#)
- [Matthew Pearson - How to survive your first year of graduate school in economics](#)
- [Diana Leonard - A woman's guide to doctoral studies](#)
- [Maggie Berg - The Slow Professor](#)



# Links for publishing and refereeing

- [Marc F. Bellemare - How to Publish in Academic Journals](#)
- [Campbell R. Harvey - Reflections on Editing the Journal of Finance, 2006-2012](#)
- [Jonathan B. Berk, Campbell R. Harvey, and David Hirshleifer - How to Write an Effective Referee Report and Improve the Scientific Review Process](#)
- [Journal of the European Economic Association - Ask the Editor with Juuso Välimäki](#)

# Links for Job market advice

- [Claudia Goldin and Lawrence Katz - The Ten Most Important Rules of Writing Your Job Market Paper](#)
- [Johannes Pfeifer - Job Market Resources \(Plenty of other links here\)](#)
- [European Economics Association - A Guide for European Job Market Candidates](#)
- [Science - How to put your best foot forward in faculty job interviews](#)
- [Job market cover letter replicator & spreadsheet for keeping track of applications](#)
- (see also presentation tips from Eliana La Ferrara and Kjetil Storesletten)