

Behind the Curtain: how to “do research”

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The Shot



Source: Jimmy Chin on Instagram

Getting the Shot



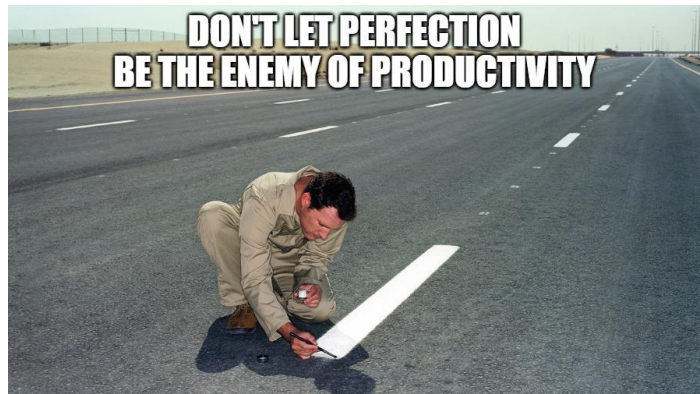
Source: Jimmy Chin on Instagram

Perfection

- You won't find the perfect project, data, research question, etc.
- You won't produce the perfect analysis, paper, grant application, etc.

BUT

- You will create work that represents a useful contribution to your field and the world!



Project Management



Deadlines

- Use meetings/check-ins with a peer or writing group to **make incremental progress**
- Use external events & deadlines to **scaffold your progress**
 - Conferences
 - Workshops
 - Internal presentations
 - Internal grants
 - (even if you don't think your work is 100% ready!)

Realistic goals

- Set goals
 - Break tasks into daily, bite-sized pieces
 - Plan backwards

BUT

- Be realistic
 - Leave time/space each day for unexpected obligations, events, etc.



Collaborating with peers

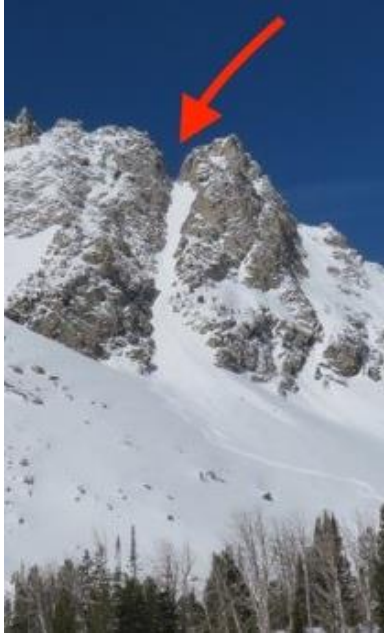
- Great tool for overcoming perfectionism and for creating deadlines
- Can be someone from your institution or elsewhere with similar, or different but complementary, interests
- It might not always work. Abandoning projects is part of the process.
- The right partnerships allow you to have honest conversations regularly
 - Ex: I need to push on project Y and won't have time to work on our joint work X for a few months until deadline Z is met.

People to have in your life

- Formal mentors
 - Advisors, Committee members, senior people.
- Peers in your field
 - Someone you may coauthor with. They can nerd out with you on specific topics.

People to have in your life

- Peers outside of your field.
 - Good for making sure your work is not completely nuanced.
 - Can be great to chat about R&Rs with
 - You will need someone to complain about your collaborators and mentors to.
- Non-academic friends
 - Good to remind you academia is not all of life



Routine Check-ins

- With yourself...on all work days.
 - Ex.: each morning, I spend 15 minutes thinking through what needs to get done over the week and what needs to be prioritized today. Make a detailed to do list for the day.
 - NO: “work on Project X”
 - YES: “code event studies for Project X”

Routine Check-ins

- With mentors...at key phases of the project
 - Ex.: when you have results, when you are reaching deadlines, when you run into a challenge.

Mentor/Mentee Relationships

- Reach out to mentors when you need specific advice or feedback on a project, and you have carefully thought through the problem.
 - Specific questions are easier for a mentor to answer than broad “Can you read this draft?” or “Can we chat about research?”
- Schedule a meeting around specific deadlines (a first draft).
- Mentors are busy. They may not always respond. After 2 weeks of non-response, you can email a second time. Otherwise, reach out to other peers or colleagues for advice

Routine Check-ins

- With peers...regularly (weekly or 2x per month)
 - Chat about challenges with projects. These can be small difficulties (e.g., coding, interpreting a coefficient, etc.) that can be discussed over coffee.
 - Writing groups can also be helpful

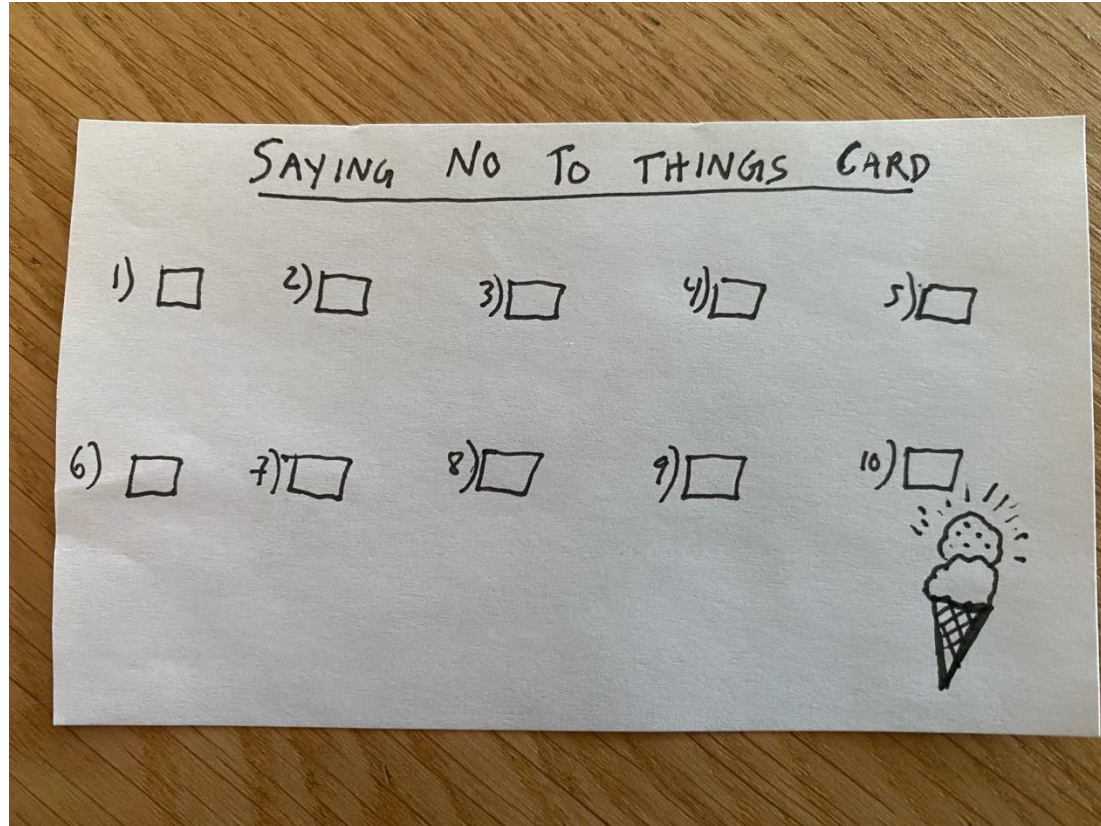
Practice good work habits

- Work in the hours you are most productive
- Back up files
- File naming
 - Version control—dates can be useful in titles.
 - Clean project folders
 - Code
 - Data
 - Draft
 - Slides

Good coding habits

- Comment, comment, comment, and comment some more
- Always set a directory once
- Spend time coding up good figures. You will be able to use this later!
- Spend time getting your code to output numbers from tables.
- Getting “in the zone” is helpful. Carve out several hours at a time.
 - Do not code on days you are pre-occupied. (More work later de-bugging!)

Just say no



Writing an Intro:
5 items in 5 pages or less

It's good to use sample papers from a different field in econ.

American Economic Journal: Applied Economics 2019, 11(2): 143–175
<https://doi.org/10.1257/app.20170411>

Was the First Public Health Campaign Successful?[†]

By D. MARK ANDERSON, KERWIN KOFI CHARLES,
CLAUDIO LAS HERAS OLIVARES, AND DANIEL I. REES^{*}

It's only 2 pages!

The US tuberculosis (TB) movement pioneered many of the strategies of modern public health campaigns. Using newly transcribed mortality data at the municipal level for the period 1900–1917, we explore the effectiveness of public health measures championed by the TB movement, including the establishment of sanatoriums and open-air camps, prohibitions on public spitting and common cups, and requirements that local health officials be notified about TB cases. Our results suggest that these and other anti-TB measures can explain, at most, only a small portion of the overall decline in pulmonary TB mortality observed during the period under study. (JEL H51, I12, I18, N31, N32)



(1) Why do we care?

- Make a pitch. Make this broad-based but try to ground it in numbers if you can.
- Include general motivation and specific motivation

General motivation

In 1900, 194 out of every 100,000 Americans died of tuberculosis (TB), making it the second-leading cause of death, behind only pneumonia/influenza (Jones, Podolsky, and Greene 2012). Although an effective treatment would not be introduced until after World War II (Daniel 2006), the TB mortality rate fell dramatically over the next three decades. By 1920, it had fallen to 113 per 100,000 persons; by 1930, it had fallen to 71 per 100,000 persons (Jones, Podolsky, and Greene 2012).

Specific motivation that appeals to scholars working in this area.

How was TB vanquished, or at least controlled, in the United States and other developed countries? Scholars have proposed several explanations, including better living conditions, herd immunity due to natural selection, reduced virulence, and improved nutrition (Smith 2003; Daniel 2006; Kunitz 2007, 96–197; Lönnroth et al. 2009; and Mercer 2014, 127–29). The introduction of basic public health measures (e.g., isolating patients in sanatoriums and TB hospitals) is another potential explanation (Wilson 1990, Fairchild and Oppenheimer 1998), but scholars have questioned whether such measures contributed meaningfully to the decline in TB mortality (McKeown 1976, Coker 2003, and Daniel 2006).¹

(2) What is your question

- Should come very early
- It can start broad and become more specific

How was TB vanquished, or at least controlled, in the United States and other developed countries? Scholars have proposed several explanations, including bet-

Next paragraph: research question

Drawing on newly transcribed data from a variety of primary sources, the current study explores whether the TB movement contributed to the decline in TB mortality in the United States. The movement began with the establishment of the Pennsylvania Society for the Prevention of Tuberculosis in 1892 and gained momentum when the National Association for the Study and Prevention of Tuberculosis (NASPT) was founded in 1904 (Shryock 1957, 52; Teller 1988, 30). Spearheaded by voluntary associations and supported by the sale of Christmas Seals, the US TB movement pioneered many of the strategies of modern public health campaigns (Teller 1988, 1, 121–26; Jones and Greene 2013; and Rosen 1993, 226–31).

(3) How do you do it?

- This is where you explain your variation (policy variation).
- Briefly explain your setting if relevant (esp. if in a unique country, time frame, experimental setting, etc.)
- Readers should be able to explain the intuition behind your method without knowing extreme details.

Next paragraph: how (quickly)

Between 1900 and 1917, hundreds of state and local TB associations sprung up across the United States (NASPT 1916, Knopf 1922). These associations distributed educational materials and provided financial support to sanatoriums and TB hospitals, where patients with active TB were isolated from the general population and, if lucky, could recover. In addition, these associations advocated, often successfully, for the passage of legislation designed to curb the transmission of TB, including bans on public spitting and requirements that doctors notify local public health officials about active TB cases.

The X.

Although remarkable in its scope and intensity, the effectiveness of the US TB movement has, to date, not been studied in a systematic fashion.² Using municipal-level data for the period 1900–1917 from *Mortality Statistics*, which was published on an annual basis by the US Census Bureau, we estimate the relationship between pulmonary TB mortality and the introduction of public health measures designed to curb the spread of the disease. Our estimates, which control flexibly

The Y.

(3) What is your contribution?

- This should be SHORT! This is NOT a literature review.
- You should be able to explain your relative pitch in just a couple of paragraphs at most. The topic sentences of each paragraph should say how you contribute.

Next paragraph: contribution (quickly)

Although remarkable in its scope and intensity, the effectiveness of the US TB movement has, to date, not been studied in a systematic fashion.² Using municipal-level data for the period 1900–1917 from *Mortality Statistics*, which was published on an annual basis by the US Census Bureau, we estimate the relationship between pulmonary TB mortality and the introduction of public health measures designed to curb the spread of the disease. Our estimates, which control flexibly

(5) What do you find?

- Many people won't read past the intro.
- Explain your findings.
- Do not explain every robustness check—only one or two that people ask about every time you talk about your results.
- Do not overstate (e.g., if something is not robust, note the exceptions).
- Try to put your results into context where appropriate.

Findings

designed to curb the spread of the disease. Our estimates, which control flexibly for common shocks and municipal-level heterogeneity, suggest that most anti-TB measures had no discernable impact on pulmonary TB mortality. Two exceptions stand out: there is evidence, albeit tentative, that requiring TB cases to be reported to local health officials led to a modest reduction in pulmonary TB mortality; likewise, the opening of a state-run sanatorium is associated with a modest reduction in pulmonary TB mortality. However, these two measures can explain, at most, only a small portion of the overall decline in pulmonary TB mortality during the period 1900–1917.

This writing
takes more
time.



Questions?

