

# Effective Research

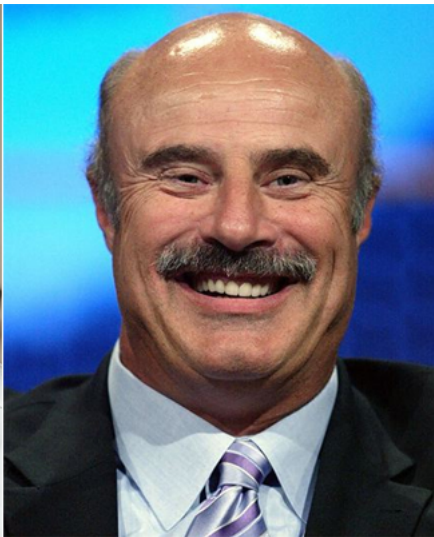
AI Colloquium April 19th 2011

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April 19, 2011

# Disclaimer

- ▶ I am not a perfect researcher.



# What determines success in academia?

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  - ▶ How much do you publish?
- ▶ Impact
  - ▶ Where published/presented?
  - ▶ How often referred to (h-index?)
  - ▶ Invited speaker/board member/frequent reviewer?

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Morss & Murray (2001)

- ▶ 'Hard' outcomes
  - ▶ journal publications
  - ▶ conference papers and presentations
- ▶ 'Soft' outcomes
  - ▶ increased confidence
  - ▶ increased motivation
  - ▶ improved strategies for productive writing
  - ▶ increased self-knowledge through reflection



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  1. Not knowing what to write
  2. Not knowing how to structure or revise writing to make it publishable, unfamiliarity with the publication process
  3. Motivational issues
    - ▶ Many intelligent, creative researchers just can't seem to get research written up and published
    - ▶ Cause: Underdeveloped writing strategies and habits

# Research is hard!

- ▶ Research problems can be open-ended, unclearly defined, and intimidating
- ▶ The nature of the work encourages procrastination
- ▶ We give/get little (professional or informal) training in the process of planning, writing, revising, networking
- ▶ We often have established ineffective habits or misconceptions that interfere with greater productivity

# Your personal situation

- ▶ What other demands are there on your time?
- ▶ How much experience do you have in completing writing projects?
- ▶ Writing Task Type? An experiment vs. arm-chair linguistics
  - ▶ Is writing part of the research process?
- ▶ What are your current habits? (Do you even know?) Are they working well for you?





# Motivational and practical barriers to writing

1. Time constraints
2. “Writer’s block”
3. Confusion and lack of focus



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- ▶ Auto-pilot schedule (Cal Newport, Study Hacks)

## *Professors as Writers* (Boice)

- ▶ most listed reason for not writing
  - ▶ lack of time...
- ▶ traditional surveys of professors
  - ▶ typical work week 60-80 hours

## Is Time the problem?

Boice (1985)

Publications	total	writing	research	teaching
0	55.9	6.1	9.0	21.0
1-9	51.0	5.6	10.9	13.1
10+	55.1	10.7	14.6	10.7



## *Professors as Writers* (Boice)

- ▶ Observational studies
  - ▶ even professors with heavy teaching loads have several 20-30 minute blocks available

## Experts: Regular writing in short bursts

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- ▶ More practical than popular, but often unusable 'binge' model of writing
  - ▶ (though see: *Write to the Top!: How to Become a Prolific Academic*(Johnson & Mullen)

# Writing as process

- ▶ **Binge model**
  - ▶ Writing is large, time consuming activity
  - ▶ Task requires large, uninterrupted blocks of time
- ▶ **Process model**
  - ▶ Writing has identifiable steps
  - ▶ Morss & Murray (2001: 49)
  - ▶ Many writer's get stuck because of
    - ▶ misconceptions about task scale
    - ▶ poor goals
  - ▶ articulating small, doable goals in writing helps

*Write your dissertation in 15 minutes a day*

# *Write your dissertation in 15 minutes a day*

- ▶ Daily writing goal:
  - ▶ the “inspiration” method, most common method for unsuccessful writers
  - ▶ the “sit there” method: write for a fixed amount of time
  - ▶ the “many pages” method



## Write your dissertation in 15 minutes a day

- ▶ Daily writing goal:
  - ▶ the “inspiration” method, most common method for unsuccessful writers
  - ▶ the “sit there” method: write for a fixed amount of time
  - ▶ the “many pages” method
- ▶ “This (many pages) method rewards learning to write faster, and from what I’ve seen, fast writing produces no worse results than slow writing does. This method also produces a large volume of writing, and at least *some* of it is likely to be useful.” (page 45)

Group	Average number of pages	modal number of days between creative ideas
Forced	3.2	1
Spontaneous	0.9	2
Abstinent	0.2	5

**Table:** Boice: Productivity difference between forced and spontaneous writing

# Make writing contingent

- ▶ No shower, email, phone, breakfast, coffee ...before writing
- ▶ Make yourself accountable
  - ▶ 'prewritten check to a hated organization'
  - ▶ "Very few checks get mailed. These writers learn to write regularly regardless of initial mood'.

# Write First

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- ▶ What do you want to have finished?
- ▶ Do that first.
- ▶ MIT: most important task

# Positive Procrastination

- ▶ Neglect Project X with impending deadline and devote time to Project Y
- ▶ Two projects are better than one (some evidence of this)

# Ph.D's, post-docs, professors: different constraints

- ▶ Phd students (and post-docs) often **do not** have the time limitations of teaching academics
- ▶ writing habits established during the Phd don't work later on
- ▶ **Practice !**
  - ▶ a “15-minute project”
  - ▶ a fake deadline

# Types of formal support

McGrail et al. (2006).

- ▶ writing courses
- ▶ writing support groups (agraphia groups)
- ▶ writing coaches



## McGrail et al. (2006)

- ▶ short term, didactic writing courses least effective
- ▶ Lawrence Folcik, 1996 (see also Baldwin Chandler, 2002)
  - ▶ single-day writing course had very little impact on publication
  - ▶ same material presented over eight weeks did increase productivity
- ▶ writing support groups most effective
- ▶ Ph.d students separate from staff may be more effective
- ▶ Interdisciplinary group has advantages
  - ▶ plus: less intimidating for some members
  - ▶ minus: feedback, comments less useful

# Self confidence

- ▶ All 'interventions' improved self-confidence
- ▶ Hemmings and Kay (2007). Writing self-confidence strongest predictor of publication output in a sample of academics from one Australian university

# Help yourself

- ▶ Team up with a writing buddy
- ▶ Announce your goals
  - ▶ Turn a solo project into a co-authored one
    - ▶ A bird in the hand is worth two in the bush.
- ▶ Start your own writing support group (info in Silvia)
  - ▶ 24-hour buddies
- ▶ Join an online writing group (often listed as ABD groups):
  - ▶ [www.phinished.org/](http://www.phinished.org/) Online dissertation writing group
  - ▶ [www.academicladder.com/](http://www.academicladder.com/) (free newsletter, 4 wks: 50 Euros)
  - ▶ [www.abdsurvivalguide.com/](http://www.abdsurvivalguide.com/) (groups, newsletter)

# Very productive people

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  - ▶ Research skills
  - ▶ Passion for the subject
  - ▶ Collaboration
    - ▶ mentoring received
    - ▶ mentoring given
    - ▶ collaboration with colleagues
    - ▶ collaboration as feedback in the writing process



Research! Yeah!





## How to write a lot Silvia, 2007:85



*I love writer's block. I love it for the same reason I love tree spirits and talking woodland creatures — they're charming and they don't exist...Academic writers cannot get writers block.*

# Tips to get started writing

- ▶ Be ready
  - ▶ dress the part
  - ▶ announce the plan
  - ▶ make sure you at least looks like you are writing!
- ▶ Get at content!
  - ▶ write an email explaining it to someone
  - ▶ enlist the help of a friend
  - ▶ write aloud with a hand held recorder



- ▶ Pomodoro technique
- ▶ change your location
- ▶ change your word processing program, pen, paper (lined, spaced, small notebook, big paper), mode, font, language(?)
- ▶ start working on the presentation, rather than the article
- ▶ make it a race/ a game
  - ▶ can you produce 200 words in 15 minutes? Test yourself

## Alley, *The Craft of Scientific Writing*, (1987, 246) Writing is revising

*In my own writing I average about five pages a day.  
Unfortunately, they are all the same page.*

# Tips to get revising

- ▶ Outline
  - ▶ Revision strategy: reverse outline
  - ▶ (Re-)outline with post-its then write a paragraph for each idea
  - ▶ Ask someone else to reverse outline it....
- ▶ Read, start new document, rewrite, compare versions
- ▶ start writing a to-do list of what has to be done, and slowly expand on it
- ▶ read it aloud
  - ▶ let your wordprocessor read it aloud
  - ▶ let someone else read it aloud



*It just doesn't seem to be "there" yet. Maybe try to revise it once more. –Mats Wiren*



## Increasing clarity in writing: WTF focusing

- ▶ What do your results say?
- ▶ Why is this reference here?
- ▶ What is new about your research?

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# Increasing clarity of thought

- ▶ Coffee, Ginseng, Gingko?
- ▶ Aromatherapy?
- ▶ Self-hypnosis ?
- ▶ Meditation
- ▶ Breathing exercises

- ▶ Special 'work music'

- ▶ iMusic

- ▶ white noise

- ▶ music for accelerated learning

- ▶ Minimal music

- ▶ Simeon ten Holt

- ▶ Brian Eno's 'Music for Airports'


- ▶ Eno's Bloom, Trope etc. for Iphone, Ipad



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- ▶ Careful not to turn these tips into another way to procrastinate.

# Track your progress and reward yourself



A close-up photograph of a baby with light brown hair and blue eyes, looking slightly to the side with a frustrated or determined expression. The baby is wearing a green and white long-sleeved shirt and is holding a small amount of sand in their right hand. The background is a blurred beach scene with sand and the ocean.

Success.

# Effective Research

- ▶ Researchers are judged on their productivity and impact, no matter the field
- ▶ Motivational barriers to productivity can be overcome
  - ▶ You can train yourself to have the habits that give you control over your success
  - ▶ You can create an environment where your research success is supported!

## Recommended reading

- ▶ Paul Silvia: How to write a lot.
- ▶ Wendy Laura Belcher: Writing Your Journal Article in Twelve Weeks: A Guide to Academic Publishing Success (Especially for humanities)
- ▶ Michael Alley: The Craft of Scientific Writing
- ▶ Abby Day: How to get research published in journals
- ▶ Robert Boice: Professors as writers
- ▶ Bolker: Write your dissertation in 15 minutes a day

## Selected References

- ▶ McGrail, Matthew R. , Rickard, Claire M. and Jones, Rebecca(2006) 'Publish or perish: a systematic review of interventions to increase academic publication rates', Higher Education Research Development, 25: 1, 19 35
- ▶ Hemmings, Brian and Kay, Russell(2010) 'University lecturer publication output: qualifications, time and confidence count', Journal of Higher Education Policy and Management, 32: 2, 185 197

# Jorge Hirsch

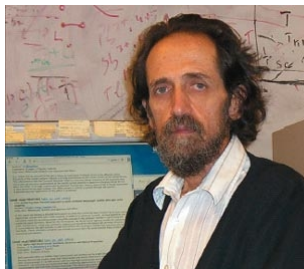


Figure:

[conf.ncku.edu.tw/research/commentary/e/20080815/1.html](http://conf.ncku.edu.tw/research/commentary/e/20080815/1.html)

- ▶ Physicist at University of California, San Diego
- ▶ Developed the h-index in 2005
- ▶ Hirsch's h-index was then 49

# H-index

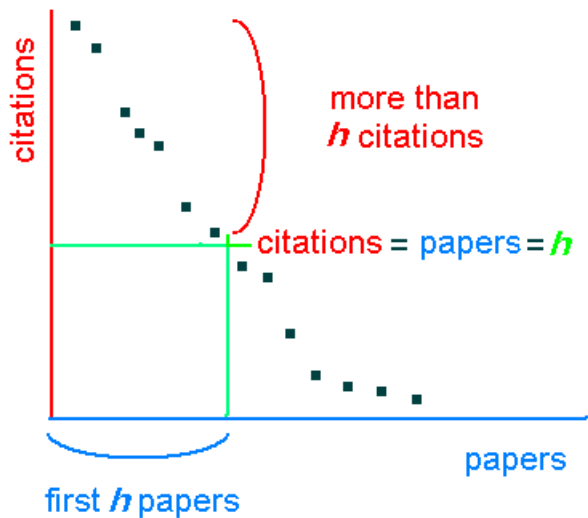
- H-index of 39 means the author has published 39 articles that have at least 39 citations each.

**This researcher has a H-index of 5**

Papers	Number of citations
1	15
2	11
3	9
4	7
5	5
6	2
7	1

Figure: taken from: <http://www.library.usyd.edu.au/rqf/hindex.html>





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- ▶ Do popular work.
- ▶ Make yourself and your work visible.

# Get cited

- ▶ Make sure people **hear** about your work.
  - ▶ Give seminars and attend conferences
  - ▶ Network
  - ▶ Get a clear profile
- ▶ Make sure people **can find** your work.
  - ▶ Internal seminars or national meetings are *not* sufficient
  - ▶ Homepage!
- ▶ Make sure people **know** you.
  - ▶ Meet relevant people
  - ▶ Ask good questions. (Prepare for this!)

# Jack of all trades, Master of none?





# “Research Outreach”

- ▶ Participate in the conversation about your topic
- ▶ Important for publishing as well.

# Networking on the Network: Phil Agre (1994)

1. Choose someone
2. Study their work
3. Make sure it relates to your work in some substantial way
4. Mail this person your article
5. Include an email saying something intelligent about their work
6. Include a concise statement of how your work overlaps with theirs
7. Project ordinary self-confidence
8. Refrain from praising, self-deprecation or cuteness
9. Don't make it sound like you're presupposing or demanding that you'll get a response.

## Phil Agre on Conferences

*Go ahead and attend the research presentations, especially the ones that specifically seem likely to be valuable to you. But spend most of your time tracking people down and talking to them.*