

# Chicken soap

## HUST Bioinformatics course series for undergraduates

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# Section 1 : outline

# Outline

- 实力与包装: who i am underneath vs. whom people see in me
- how people in science see each other
- think in English
- think creative

## section 2 : contents

# 信号传递理论：Michael Spence

观察：

- MBA 学生在进哈佛大学之前没什么了不起
- 出去就能比教授挣几倍、甚至十几倍的钱
- “这是为什么？”

结论：

- 教育具有信号传递的作用

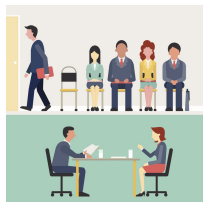
Michael Spence, “Job Market Signaling”, Quarterly Journal of Economics, 1973

2001 Nobel price in Economics

# 信号传递理论：实力与包装

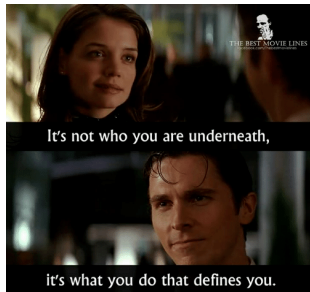
信号传递理论的核心：动态不完全信息对策

- 1 发送信息
- 2 决策



**Figure 1:** Job interview cartoon

# 包装与实力



- Batman Begins 2005

**Figure 2:** The Batman Begins movie 2005

# 包装的素材

## 教育经历

- 名校
- 学科

## 科研经历

- 项目
- 成果
- 奖项

## 个人经历

- 干部
- 实习（领域知名企业）



## how people in science see each other



**Figure 3:** The most important illustration in science

# lessons learned so far

- know your audiences (what they expect from you)
- be useful (in the long run)

# think in English

怎么练习口语和语感？

- 1 Find a short article that you know every word
- 2 Read it aloud at a quiet place so that you can hear it
- 3 Do this everyday for **three years**

# think creative

How?

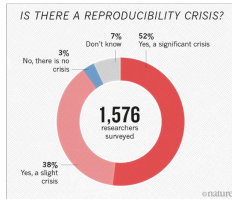
- 1 Read a research paper
- 2 Find three limitations of the research
- 3 Address these issues with your own ideas
- 4 Do this once a week for **three years**

# try find your own truth

未经调研，不要轻易相信别人结论，特别是科普文章。

There is a reproducibility crisis in scientific community:

- 70% of researchers failed to reproduce others' experiments
- 50% failed to reproduce their own



**Figure 4:** reproducibility crisis (Nature 2015 survey)

# Concluding remarks

- 有实力、会包装
- 不轻信
- 执着