

# Responsible Publishing



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[www.skillassist.org](http://www.skillassist.org)

# Types of papers

- Review papers or chapters
- Case reports
- Peer reviewed papers
  - Short or rapid communications
  - Full communication

# Components of a Paper

- Title
- Authors
- Address
- Abstract
- Introduction
- Results
  - Text
  - Figures
- Discussion
- References
- Acknowledgements

# Major areas of concern

- Title
- Authors ←
- Address
- Abstract
- Introduction ←
- Results
  - Text ←
  - Figures ←
- Discussion ←
- References ←
- Acknowledgements ←



# Major areas of concern

- Authorship
- Conflicts of interest
- Dual publication
- Plagiarism
- Falsification and fabrication
- Scholarship
- Quality of writing
- Quality of tables and figures

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# Who is an author?

- Program director – provided funds
- Lab director – conceived of question
- Colleague #1 – provided critical antibody
- Grad student – data collection, analysis, 1<sup>st</sup> draft
- Research assistant – data collection
- Colleague #2 – edited manuscript

# What are the criteria?

1. Intellectual contribution
2. Understanding of the content
3. Approval of final draft

How many of these criteria are required?

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# What else should be identified?

- Source of funding
- Other sources of assistance (with permission!)
  - Reagents
  - Advice
  - Technical help
- Potential conflicts of interest

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# What constitutes dual publication?

Contribution #1	Contribution #2
Conference proceeding	Research publication
English	Another language
Initial study	Study with more groups
Initial study	Study with much larger “n”

What is the harm in dual publication?

What to do if comparisons useful?

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# Is it plagiarism?

We found that the incidence of drug abuse peaks at 18 yrs of age (Jones and Liu, 2011).

- Drug abuse peaks at 18 years of age.
- Drug use is highest at 18 years.
- Risky behavior seems to increase in late teens.

- Quotation marks?
- Citation?
- Nothing

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# Falsification and fabrication



"You are completely free to carry out whatever research you want, so long as you come to these conclusions."

# Falsification and fabrication

- What are they?
- How frequent?
- What is the danger?

Daniele Fanalii

“How many scientists fabricate and falsify research?”

*PLoS One* (2009)

- Meta-analysis of 18 surveys
- Frequency of own misbehavior behavior
  - 2% researchers admitted fabricating/falsifying
  - 34% admitted to other misconduct
- Frequency of misbehavior of *colleagues*
  - Estimate that 14 % committed falsification
  - Estimate that 72% committed other misconduct
- Authors believe estimates are conservative

# Who is hurt?

- You
- Co-authors
- Lab members
- Institution
- The field
- The public at large

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- **Scholarship**
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# Citing the work of others

- When?

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- **When?** Whenever credit is due.

# Citing the work of others

- When? Whenever credit is due.
- What?

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- **What?** Include earliest peer-reviewed papers

What if not readily accessible?

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- What? Include earliest peer-reviewed papers
- How many?

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- What? Include earliest peer-reviewed papers
- **How many?** As needed up to max. of ~6-7

What is the harm in poor scholarship?

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Jorge Cham, in Nature's Scitable e-books, 2011

# What does it mean?

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“The physician failed to provide intravenous fluids to the patient although he was severely dehydrated. ”

# Why so many words?

- The samples were analyzed by the student.
- The student analyzed the samples.

# Just say it!

- It is believed that the pharmacological agent may possibly increase blood pressure.
- The drug may increase blood pressure.

# Good writing

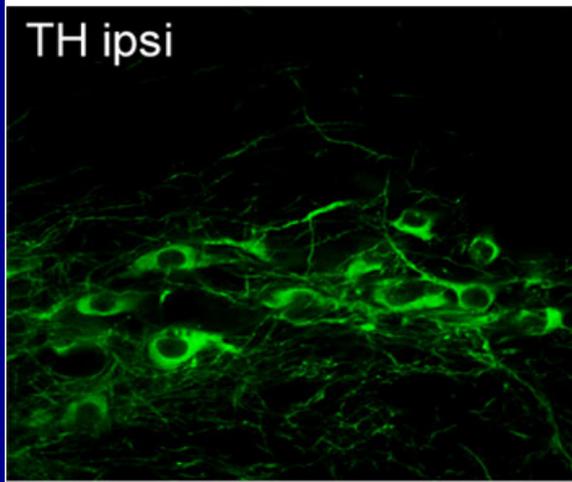
- Precise
- Concise
- Active

# Major areas of concern

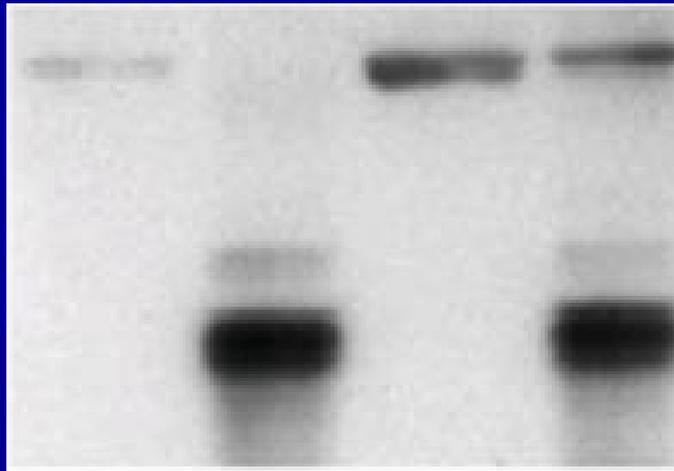
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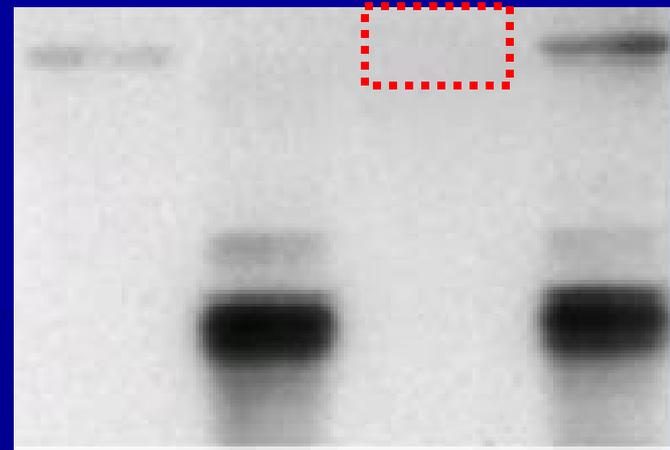
# Immunohistochemistry



## Western Blot analysis

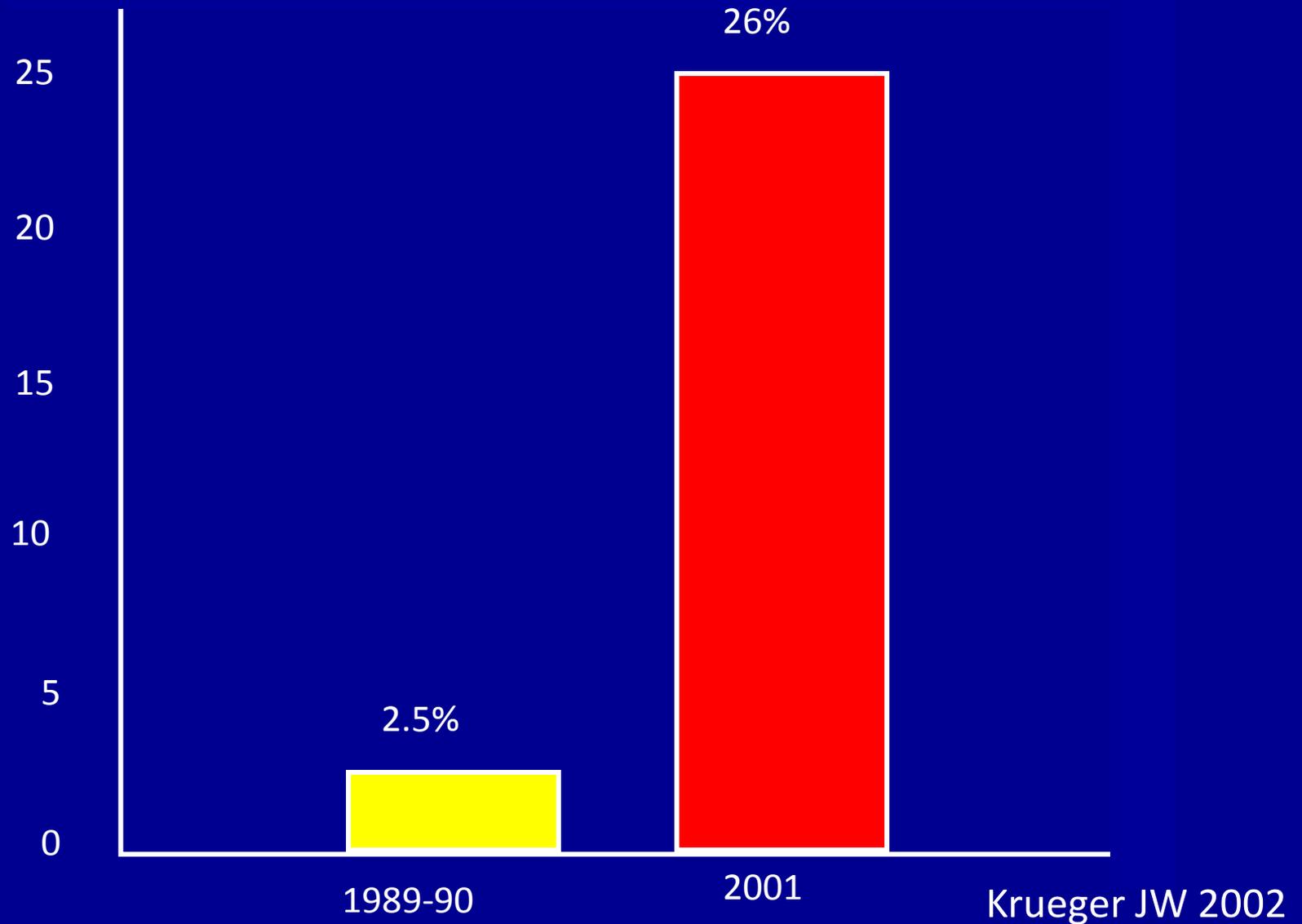


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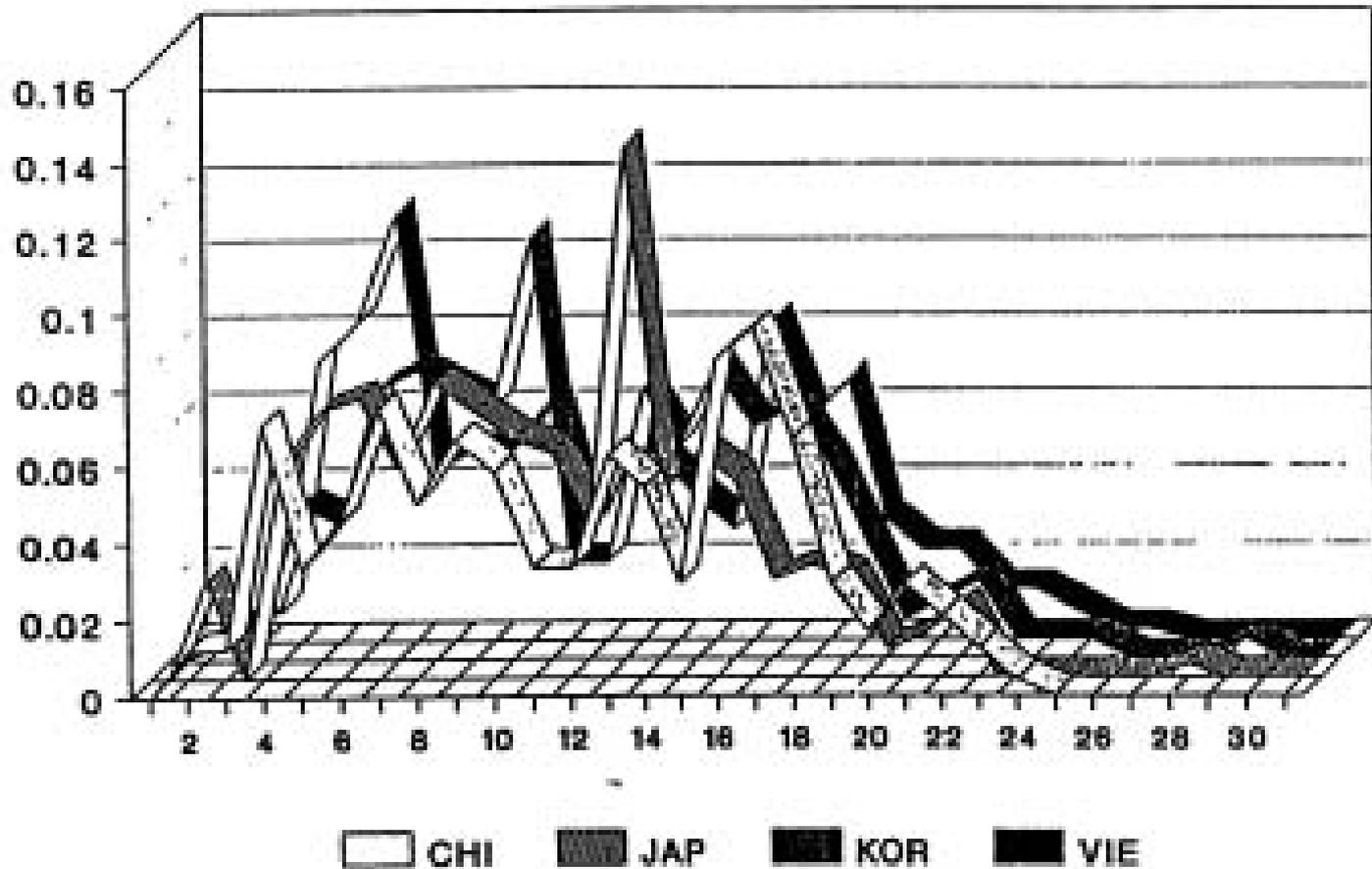
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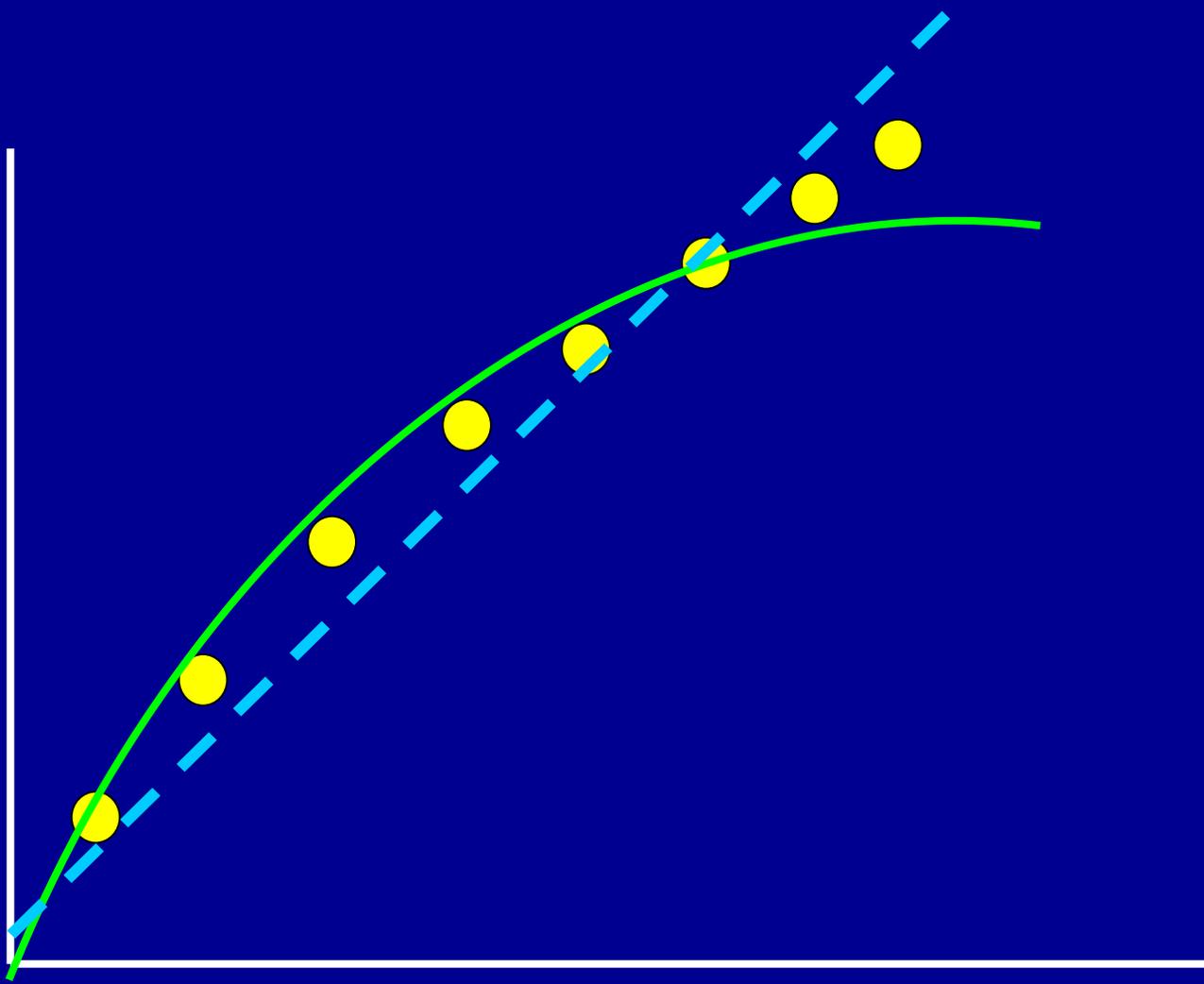
# Percent of allegations involving contested images

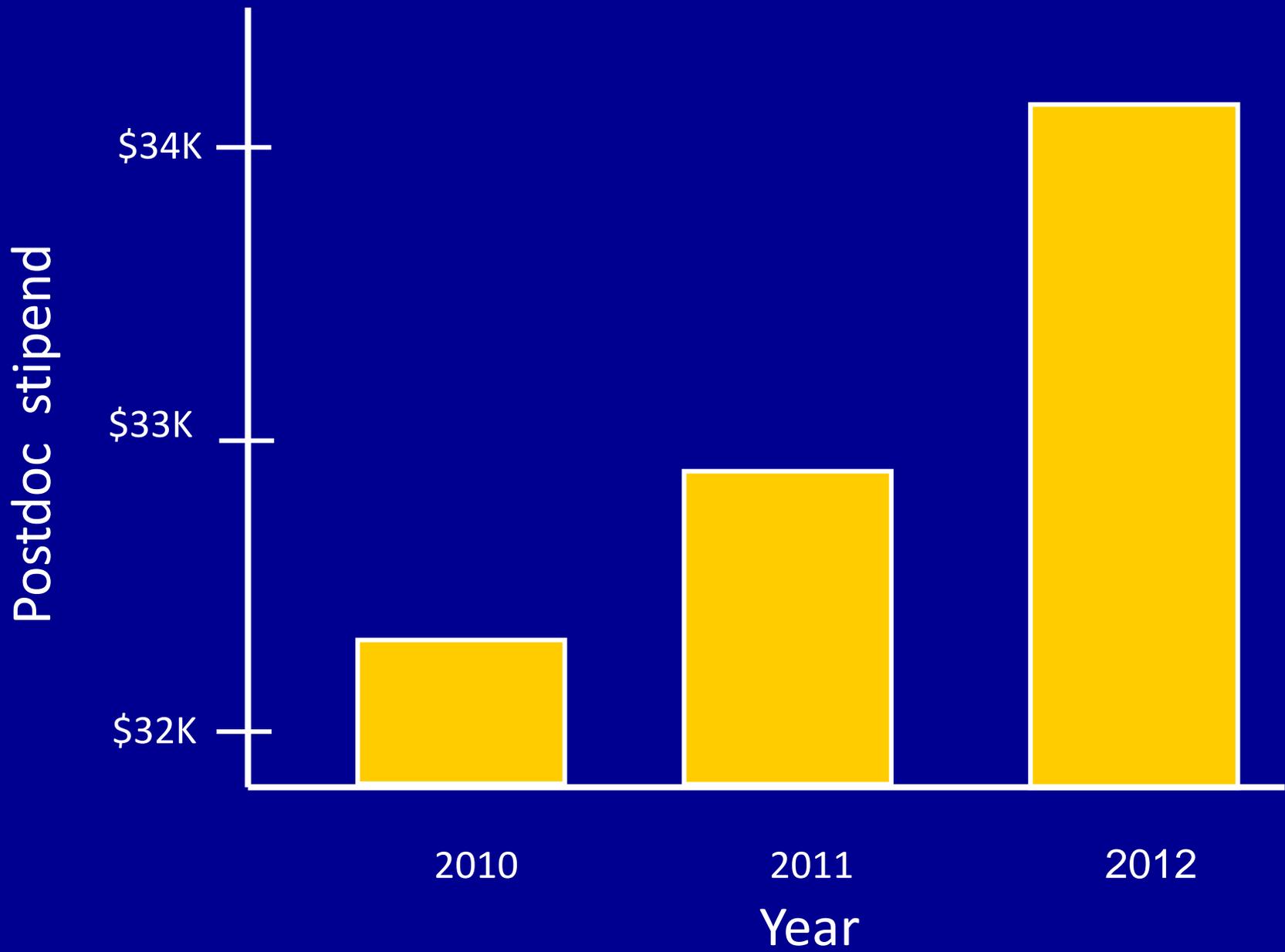


**B**

**BINNED FREQUENCY DATA - D10S28  
CHINESE, JAPANESE, KOREAN, VIETNAMESE**













"Behind one door is tenure - behind the other  
is flipping burgers at McDonald's."

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