



# Effective Communication: *Art of Presentation and Poster-Making*

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May 4, 2006

YI Forum II





# Road Map

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- Accountability
- Communication Strategies
- Presentation Dos and Don'ts
- Poster Tips





# Accountability

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- The obligation to explain or justify conduct, conditions or circumstances





# Accountability

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- Who are you accountable to?
  - Yourself
  - Funders
    - The dollars that allow you to do your work
  - Supervisors
    - Teachers, mentors, laboratories
  - Each other
    - Learning environment and translation of knowledge
  - Public
    - The ultimate accountability





# Accountability

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- How are you accountable?
  - Creating and translating understandable knowledge
    - Publications
    - Presentations
    - Discussions





# Communication Strategies

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- What are you excited or passionate about?
- How can you best communicate your excitement and knowledge to others?
  - No clue = 80%
  - Same = 15%
  - More = 5%





# Communication Strategies

## *Simple Message*

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- Develop a message your Grandma can understand
  - 2 minute message
  - Elevator speech
  - “Stump” speech





# Communication Strategies

## *Simple Message*

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- “Use a quote or a tagline sentence”
  - If you give me the coding sequences of a chimp and the regulatory sequences of a mouse, I’ll give you a mouse.



Make Your Point. *Nature*, Vol 434, March 17, 2005





# Communication Strategies *Knowledge*

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- Know your audience
- Develop a strategy for the particular group and type of presentation





# Communication Strategies

## *Knowledge*

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- What kind of presentation?
  - Talks
    - 10-minute Talk
    - 1 hr Research Seminar
    - Interview Seminar
  - Poster presentation
  - Informal discussions
    - Laboratory meetings
    - Conversations





# Communication Strategies

## *Knowledge*

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- Know your subject matter
- Know yourself!
  - Learn what makes communicating enjoyable to you

HOW you present is as important  
as WHAT you present





# Communication Strategies

## *Solid Simple Structure*

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- Develop the key message (s)
- Keep the message simple
- Integrate the message into existing knowledge
- Repeat the message





# Communication Strategies

## *Simple Structure*

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- A simple outline at the beginning of your talk helps the audience join you on the journey





# Communication Strategies

## *Simple Structure*

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- Introduction / Background
  - Introductory illustration of what is known
- Hypothesis / Objective
- Methods
- Results
- Conclusions
  - Take introductory illustration and put in the new knowledge
- Acknowledgements





# Communication Strategies

## *Simple Structure*

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- Always go out of your way to acknowledge the many contributions of others to your work - say thanks!





# Presentation Dos and Don'ts

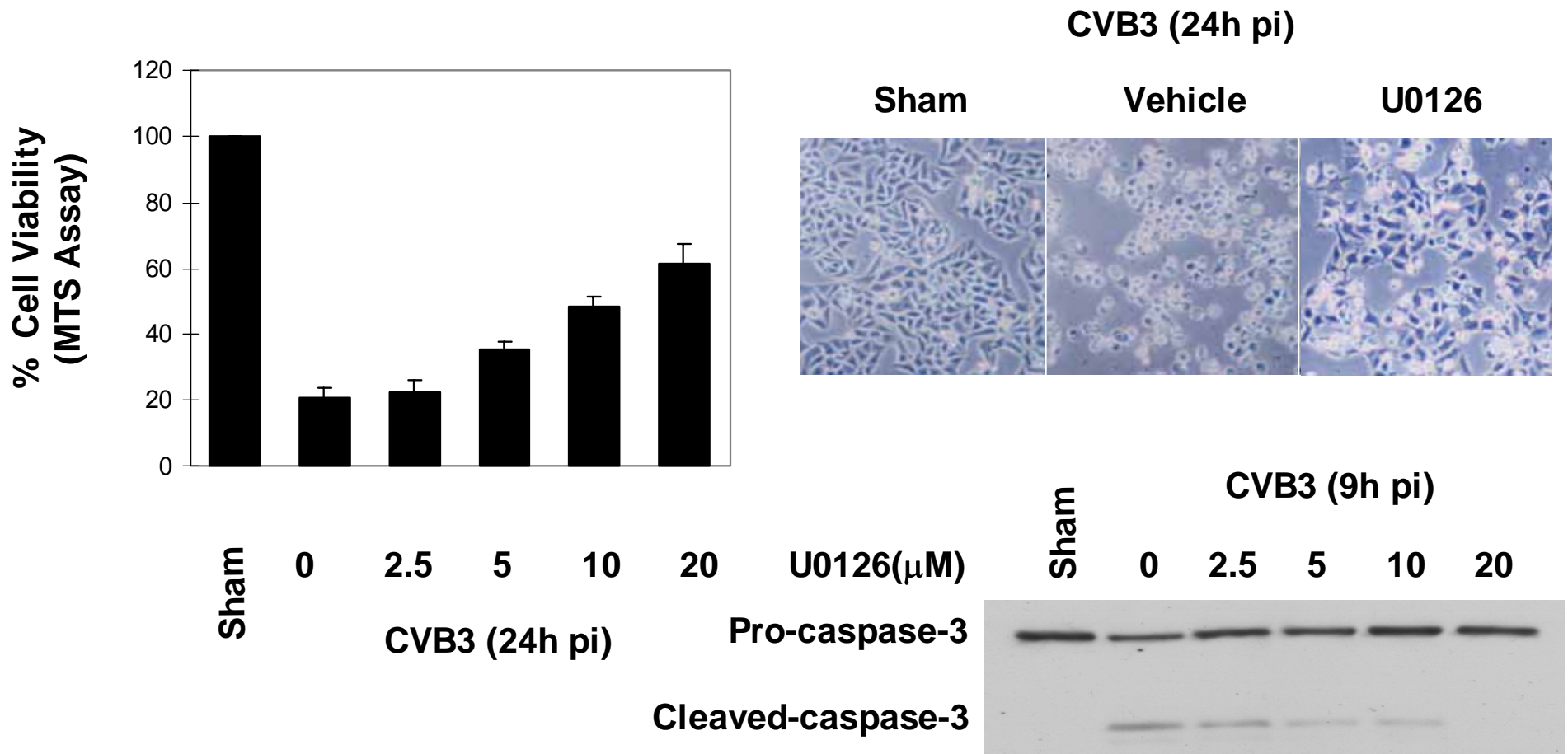
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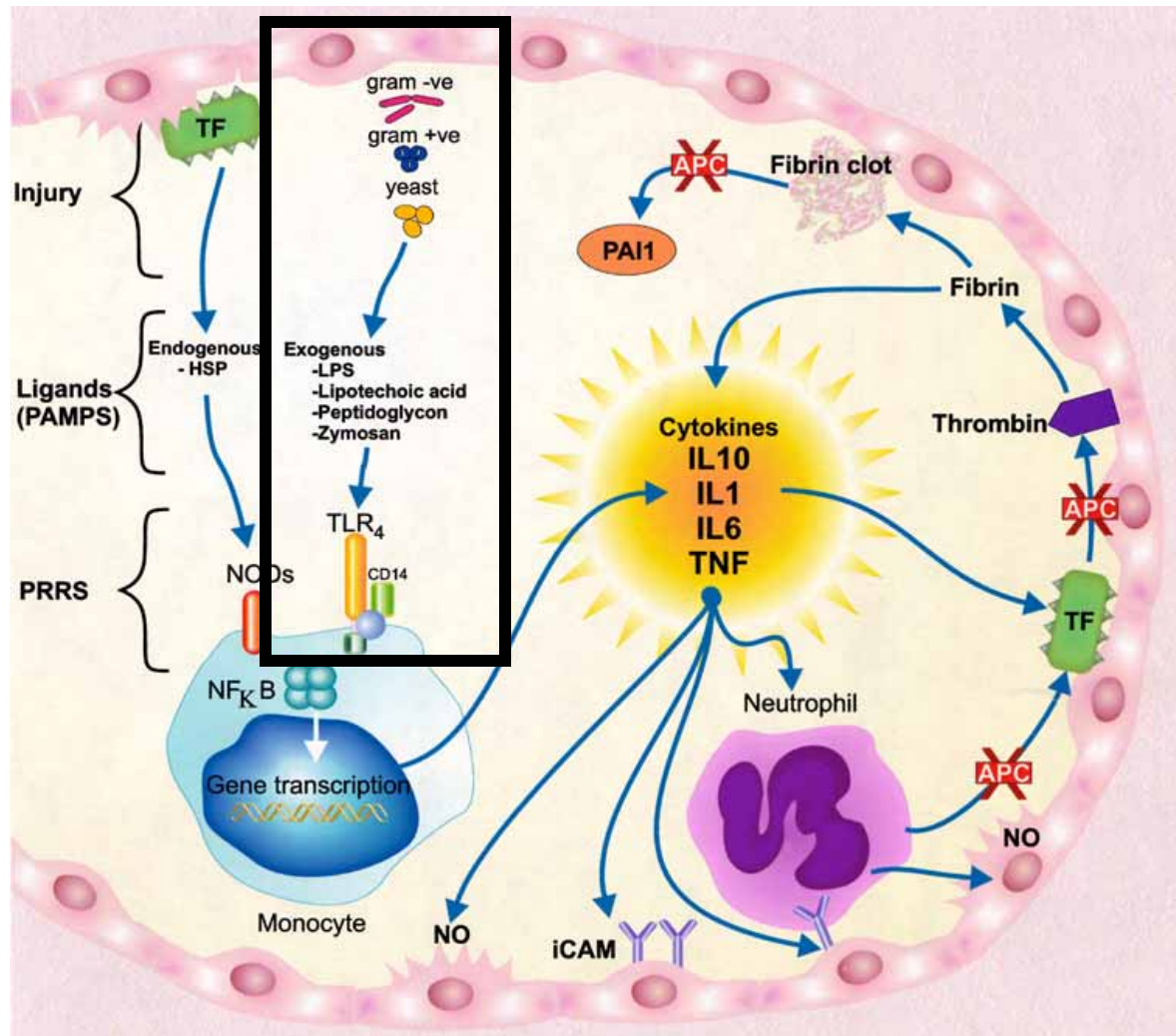
- A distinct point should be made with every slide





# MEK1 inhibitor blocks cytopathic effect and apoptosis





Holmes, Russell, & Walley. Genetics of sepsis, Chest, 2003

Biomarkers in Transplantation. A Genome Canada Initiative for Human Health





# Presentation Dos and Don'ts

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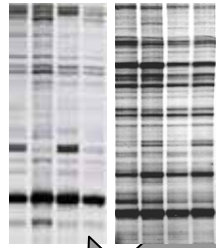
- Tell a story
  - People pay more attention!
  - Allows you to build in knowledge as it comes
  - Listeners are more engaged
  - Particularly important for an hour talk



## Initial Discovery

Differential mRNA Display

Nip21

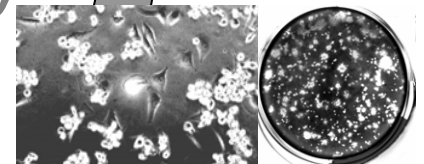


## Functional Role In Vivo

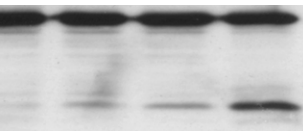
Nip21-Transgenic Mouse Model

Nip21 is a pro-apoptosis gene It inhibits virus replication by inducing host cell apoptosis via a mitochondria-dependent pathway

Inhibits virus replication



## Functional Role in Disease Process



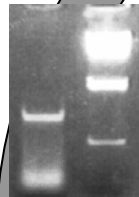
Induces apoptotic cell death

## Functional Analysis

Yang et al, Circ Res, 1997; 84:704; Zhang et al, Circ Res, 2002; 90:1251

## Confirmatory Assay

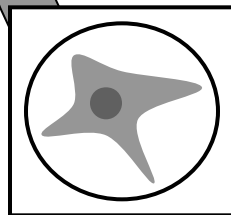
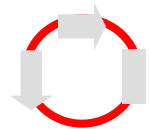
Nip21



RT-PCR

# Nip21: Part of a Life & Death Story

## Isolation-In Vitro



Nip21-Transfected Cell Line



# Presentation Dos and Don'ts

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- Every talk is a new experience and requires its own preparation and rehearsal
- Strategy based on the audience and the key message
- Create simple illustrations





# Presentation Dos and Don'ts

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- Take TIME to prepare for each presentation





# Presentation Dos and Don'ts

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- Practice
  - By yourself
  - In front of your supervisor
  - In front of your peers
- Revise
- Practice, revise, practice.....





# Presentation Dos and Don'ts

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- Brainstorm questions that could be asked
- Create backup slides for each predictable question





# Presentation Dos and Don'ts

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- Get to know the room
  - Lights
  - Audiovisual
  - Pointer
  - Microphone
- Talk within your time limits





# Presentation Dos and Don'ts

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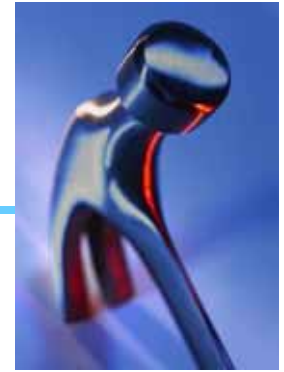
- In answering questions
  - Keep focused on the questioner's words
  - Take five seconds to organize your answer
  - At times, repeat the question or paraphrase it
    - Good strategy to collect your thoughts





# Presentation Dos and Don'ts

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- Tools for a good presentation



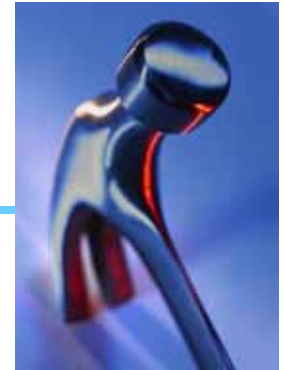


Although they restricted ourselves to one drink at lunch time, Bruce and Dave still found that their afternoons weren't very productive.



# Presentation Dos and Don'ts

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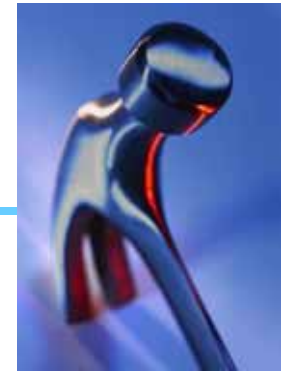
- Humor
  - Use it early in the talk to create a bond between you and your audience
  - Use respectful humor
  - If you do not have a funny bone, don't use humor



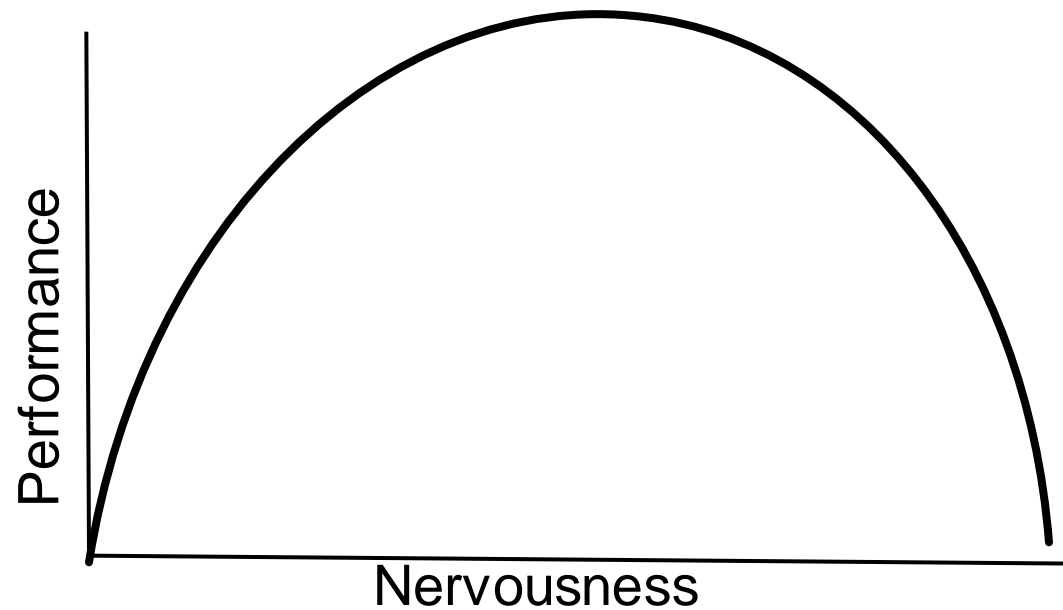


# Presentation Dos and Don'ts

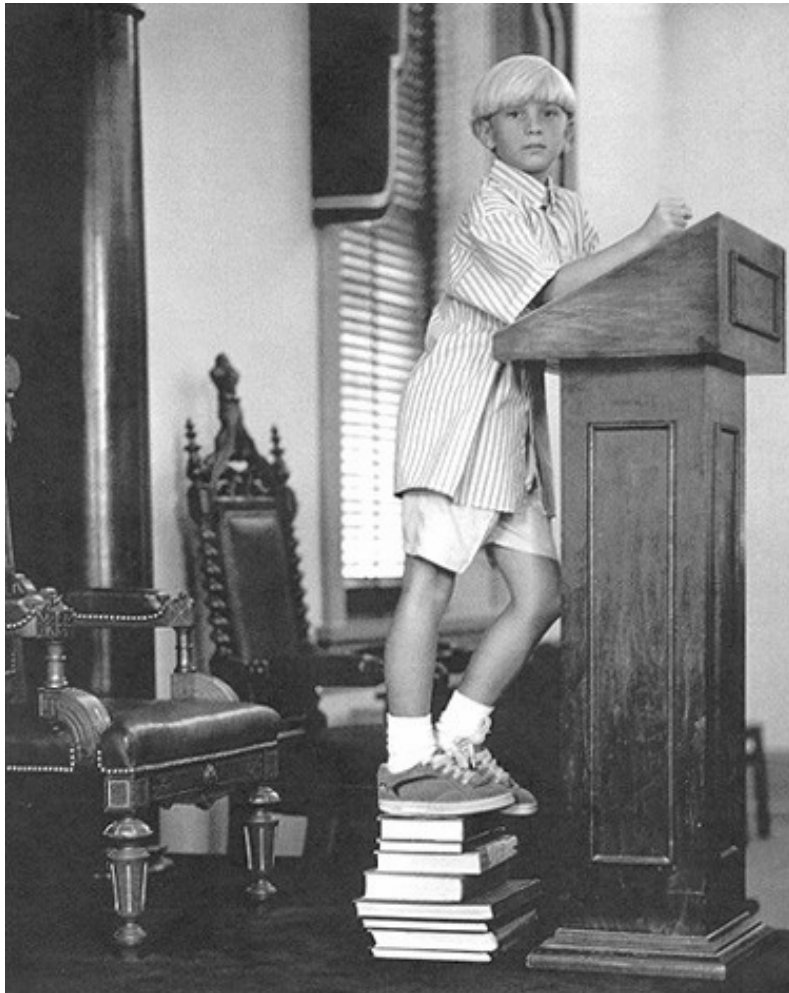
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- Nervousness



# Presentation Dos and Don'ts



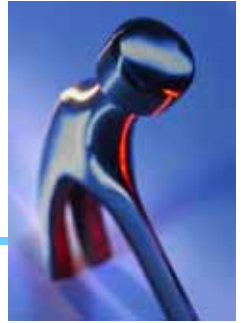
- Nervousness
  - Use the podium
  - Put a plant in the audience and maintain eye contact
  - Everyone wants you to get an “A”
  - Practice, practice, practice





# Presentation Dos and Don'ts

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- Voice
  - Optimise pronunciation
  - Enunciate key messages
  - Pace





Talk slow and don't say  
too much.

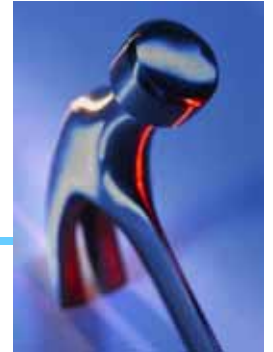
John Wayne





# Presentation Dos and Don'ts

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- Knowledge or Lack There Of
  - Remember that you don't need to know the answer to every question
  - Being well-read will help you theorize in a logical fashion based on current knowledge
  - Use a thank you to gracefully acknowledge your new information



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*"If HP knew what HP knows,  
we'd be three times more  
profitable."*

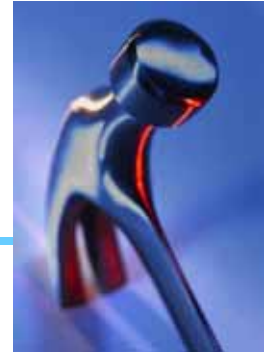
~Lew Platt, former CEO of  
Hewlett-Packard Company





# Presentation Dos and Don'ts

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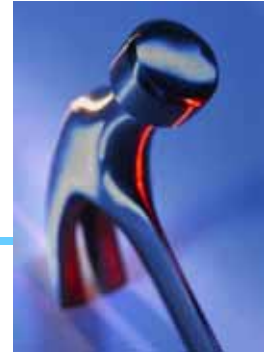


- Simple and clear
- Vary the type of slide used
- Distractions
  - Color
  - Builds
  - Business
  - Too much text [7 words, 7 lines]
- Use builds to make a point
- Use diagrams to illustrate the key message



# Presentation Dos and Don'ts

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- “Housekeeping” must be in order
  - Spelling
  - Syntax
  - Coherence
  - Size





# Presentation Dos and Don'ts



- Colors & Visibility

- Yellow on blue can help emphasis
- Red on blue is hard to see
- Dark green is even harder to see!

- Remember that many men are color blind to red and green





# Top 5 Worst Speaker Sins

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- 1) Exceeding the time limit
- 2) An out of control laser pointer
- 3) The rising intonation? Okay? See what I mean?
- 4) Speaking too quietly, too fast or incoherently
- 5) Being ambushed by an overeager poster presenter



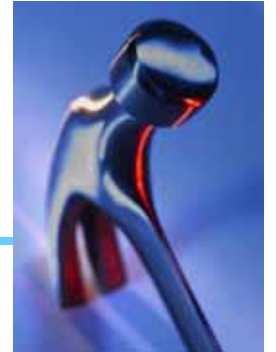
Make Your Point. *Nature*, Vol 434, March 17, 2005





# Presentation Dos and Don'ts

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- Key message
- Take time
- “Devil is in the details”
- Simple





# HOOKING A NEW SPIELBERG: AVID TECHNOLOGY HOPES TO CEMENT ITS REPUTATION WITH SAVVY FILMMAKERS

**David Bloom**

The James Hogg iCAPTURE Centre for Cardiovascular and Pulmonary Research, Department of Pathology and Laboratory Medicine  
St. Paul's Hospital / Providence Health Care-University of British Columbia, Vancouver, BC, Canada

## Abstract

NEW YORK (CNNfn) - The Nasdaq composite index is celebrating the one-year anniversary of its record high Saturday. But nobody is throwing a party. Since peaking, the Nasdaq has tumbled 59 percent, deflating a technology stock bubble that, while it lasted, turned the market into a money machine and national pastime. What a difference a year makes. Twelve months ago, the Nasdaq closed at 5,048.62. Its 16th record high of the year came on top of an 86 percent gain in 1999.

Now the Nasdaq, after sliding 39.2 percent last year, is down 16 percent in 2001 and hovers at levels not seen since late 1998. Investors who once fixated on their portfolios would rather not look. A lot has changed in twelve fast months. A once hard-charging economy slowed while investor sentiment darkened. Optimism about the growth prospects for technology companies has given way to fears about the risks of those very same firms. Earnings and interest rates, once deemed of scant importance, now matter. For stock market bears, who once were accused of misunderstanding the new rules of a "new economy," there's vindication.

"Euphoria can only go on for a certain amount of time," said Marc Klee, who manages the John Hancock Global Technology Fund. "Eventually reality wins out." Recent months have brought plenty of reality. Microsoft (MSFT: Research, Estimates), Sun Microsystems (SUNW: Research, Estimates), Oracle (ORCL: Research, Estimates) and Intel (INTC: Research, Estimates), once among the most dependable of companies, all have warned that profits or sales will miss forecasts. When the Nasdaq peaked, the U.S. economy was growing at a 5.4 percent clip. Economists now expect little if any growth for this quarter. When the Nasdaq peaked, the Federal Reserve was raising interest rates to keep the economy from overheating. Now, the central bank is cutting rates to avoid a recession.

## Introduction

NEW YORK (CNNfn) - The Nasdaq composite index is celebrating the one-year anniversary of its record high Saturday. But nobody is throwing a party.

Since peaking, the Nasdaq has tumbled 59 percent, deflating a technology stock bubble that, while it lasted, turned the market into a money machine and national pastime.

What a difference a year makes. Twelve months ago, the Nasdaq closed at 5,048.62. Its 16th record high of the year came on top of an 86 percent gain in 1999.

## Specific Aim

Now the Nasdaq, after sliding 39.2 percent last year, is down 16 percent in 2001 and hovers at levels not seen since late 1998. Investors who once fixated on their portfolios would rather not look. A lot has changed in twelve fast months. A once hard-charging economy slowed while investor sentiment darkened. Optimism about the growth prospects for technology companies has given way to fears about the risks of those very same firms. Earnings and interest rates, once deemed of scant importance, now matter. For stock market bears, who once were accused of misunderstanding the new rules of a "new economy," there's vindication.

## Methods & Materials

A year ago today, many analysts thought that technology stocks were impervious to higher interest rates. They were wrong. Technology spending, some said, would continue even if the economy cooled.

Oracle (ORCL: Research, Estimates) proved otherwise. The company last week joined hundreds of firms saying that a slowdown in business orders for its software would cause the company to miss profit expectations.

But the Nasdaq's deflation was hardly monolithic. The Internet stocks were among the first to go, with Amazon.com (AMZN: Research, Estimates) peaking above \$105 in late 1999; it now trades at \$13.

Then came the infrastructure stocks. Cisco Systems (CSCO: Research, Estimates), which makes routers and switches for the Internet, saw its shares top in April last year.

| Nasdaq's most-valuable firms |              |
|------------------------------|--------------|
| COMPANY                      | MARKET VALUE |
| Microsoft                    | \$317B       |
| Intel                        | \$211B       |
| Cisco Systems                | \$172B       |
| Oracle                       | \$98B        |
| Amgen                        | \$76B        |
| Ericsson                     | \$73B        |
| Sun Microsystems             | \$72B        |
| Dell Computer                | \$67B        |

|                                     | Control      | Severe COPD   | Asthma Deaths |
|-------------------------------------|--------------|---------------|---------------|
| No. of Airway Walls                 | 42           | 23            | 50            |
| BM Perimeter (mm)                   | 2.71 ± 0.24  | 1.66 ± 0.19** | 2.95 ± 0.27   |
| Epithelial area (mm <sup>2</sup> )  | 0.04 ± 0.016 | 0.04 ± 0.01   | 0.10 ± 0.01   |
| Submucosal area (mm <sup>2</sup> )  | 0.11 ± 0.02  | 0.07 ± 0.01   | 0.32 ± 0.06*  |
| Adventitial Area (mm <sup>2</sup> ) | 0.13 ± 0.02  | 0.09 ± 0.02   | 0.63 ± 0.14   |
| Total wall area (mm <sup>2</sup> )  | 0.25 ± 0.04  | 0.16 ± 0.03   | 0.95 ± 0.19   |

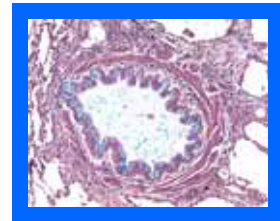
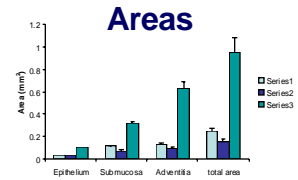
## Results

A year ago today, many analysts thought that technology stocks were impervious to higher interest rates. They were wrong. Technology spending, some said, would continue even if the economy cooled.

Oracle (ORCL: Research, Estimates) proved otherwise. The company last week joined hundreds of firms saying that a slowdown in business orders for its software would cause the company to miss profit expectations.

But the Nasdaq's deflation was hardly monolithic. The Internet stocks were among the first to go, with Amazon.com (AMZN: Research, Estimates) peaking above \$105 in late 1999; it now trades at \$13.

Then came the infrastructure stocks. Cisco Systems (CSCO: Research, Estimates), which makes routers and switches for the Internet, saw its shares top in April last year.



## Conclusions

LOS ANGELES (Red Herring) - With all the fanfare of a Hollywood premiere, the Zemeckis Center for Digital Arts debuted last week at the University of Southern California. Flacks touted support from entertainment's biggest names, including George Lucas, Steven Spielberg, and David Geffen. Inside, California Governor Gray Davis told party-goers the center is a pivotal merger of two of the state's biggest industries: film and technology.

It also brings a potential for riches for the companies -- big and small -- who equip them. Technology companies Apple Computer (AAPL: Research, Estimates), Adobe Systems (ADBE: Research, Estimates), and SGI (SGI: Research, Estimates), as well as Sony (SNE: Research, Estimates) and smaller players Vicon and Quantel, joined the evening's star, Avid Technology (AVID: Research, Estimates), in making a \$4.7 million equipment donation in the hopes of getting film students hooked on their product.

## References

- Woodruff JF. 1980. Viral myocarditis. A review. Am J Pathol 101:425-484.
- Chow LH, KW Beisel, and BM McManus. 1992. Enteroviral infection of mice with severe combined immunodeficiency. Evidence for direct viral pathogenesis of myocardial injury. Lab Invest. 66:24-31.
- McManus BM, LH Chow, JE Wilson, DR Anderson, JM Gulizia, CJ Gaunt, KE Klingel, KW Beisel, and R Kandolf. 1993. Direct myocardial injury by enterovirus: a central role in the evolution of murine myocarditis. Clin Immunol Immunopathol. 68:159-69.
- Carthy, CM, DJ Granville, KA Watson, DR Anderson, JE Wilson, D Yang, DWC Hunt, and BM McManus. 1998. Caspase activation and specific cleavage of substrates after coxsackievirus B3-induced cytopathic effect in HeLa cells. J Virol. 72:7669-75.



Figure 1. Freshly isolated mouse cardiac myocyte are phenotyped by immunocytochemical staining for cytoskeletal desmin (right). Control cells are counterstained with hematoxylin in the absence of specific antibody (left).





# Poster Tips

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- Font size large enough to read from 6 feet away
- Simplicity
- Ensure the messages are clear
  - You won't stand by your poster all the time





# Poster Tips

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- Poster Presentations
  - Maximum of 3-4 minutes
  - Highlight the key messages
    - main purpose
    - primary approach
    - key result and key conclusion
  - Allow audience time for questions and discussion
  - Have handouts and include your contact information





# Useful Websites

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- <http://www.research.ucla.edu/era/presentation/sld001.htm>
- <http://web.cba.neu.edu/~ewertheim/skills/oral.htm>
- <http://www.the-eggman.com/writings/keystep1.html>
- <http://info.med.yale.edu/library/education/effective.pdf>
- [www.survival.pitt.edu](http://www.survival.pitt.edu)
- [www.mrl.ubc.ca/posters/index.html](http://www.mrl.ubc.ca/posters/index.html)





# THANKS!!!

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- Bruce McManus
- Stuart Greene and Dean English
- Websites
- All of the trainees I have encountered

