

## What goes where?

Coordinating Your Figures and Tables  
with Results, Figure Legends, and  
Materials and Methods

## Truth vs. Result vs. Fact

What's the difference?

## How to read a paper

The Botstein suggestions

## Figures, Tables, and Abstracts: They should stand alone

## Results and Tables

- Don't read the table into the text
  - Literally
  - Functionally
  - When to just say it in the text
    - "data not shown?"
- How to refer to a table
- What if one table makes more than one point?

## Differing roles of Legends and M&M

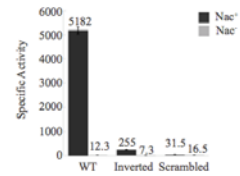
One is to understand and evaluate  
One is to allow reproducibility

## What should a figure legend say?

- The Title
- The footnotes
- What about a *nifA-lacZ* fusion?
  - $\beta$ -galactosidase?
  - NifA?
  - *nifA*?
  - *ntrC*?
  - NtrC~P?

## Bar graph or Table

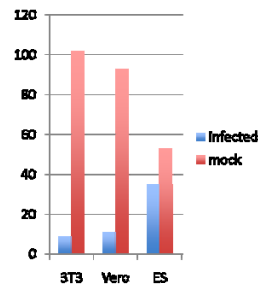
- Log or linear scale
- Fold vs. absolute
  - Normalization
  - Ratio of ratios
  - Honesty
- What do you want to emphasize?



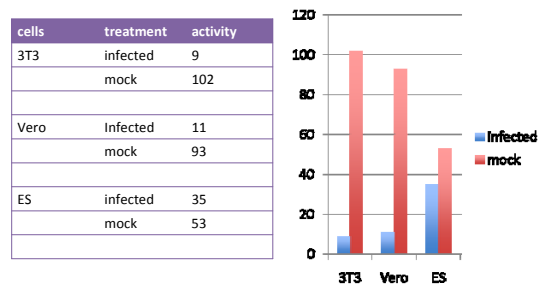
## An example

cells	treatment	activity
3T3	infected	9
	mock	102
Vero	Infected	11
	mock	93
ES	infected	35
	mock	53

## Another example



## The same example



## An even worse example

cells	treatment	activity	cells	treatment	Fold increase
3T3	infected	7.1	3T3	infected	35.5
	mock	0.2			
Vero	infected	150	Vero	infected	5
	mock	30			
ES	infected	150	ES	infected	34.9
	mock	4.3			

## Three different stories

Infected

Mock

Fold

## Different styles

- Traditional papers
- Notes
- Big reviews
- Little reviews
- *Science and Nature*
- Grant applications
- Press Releases

## Different roles for different parts

- Title
- Abstract
- Introduction
- Methods
- Results
- Discussion
- Tables (and footnotes)
- Figures (and legends)
- Supplementary data
- Attract me
- Inform me
- Convince me
- Prove it to me
- Let me reinterpret
- Make me care
- Let me repeat it
- Give me new tools