

# Science Communication 101

Identifying your Message

Knowing your Audience

Avoiding Jargon



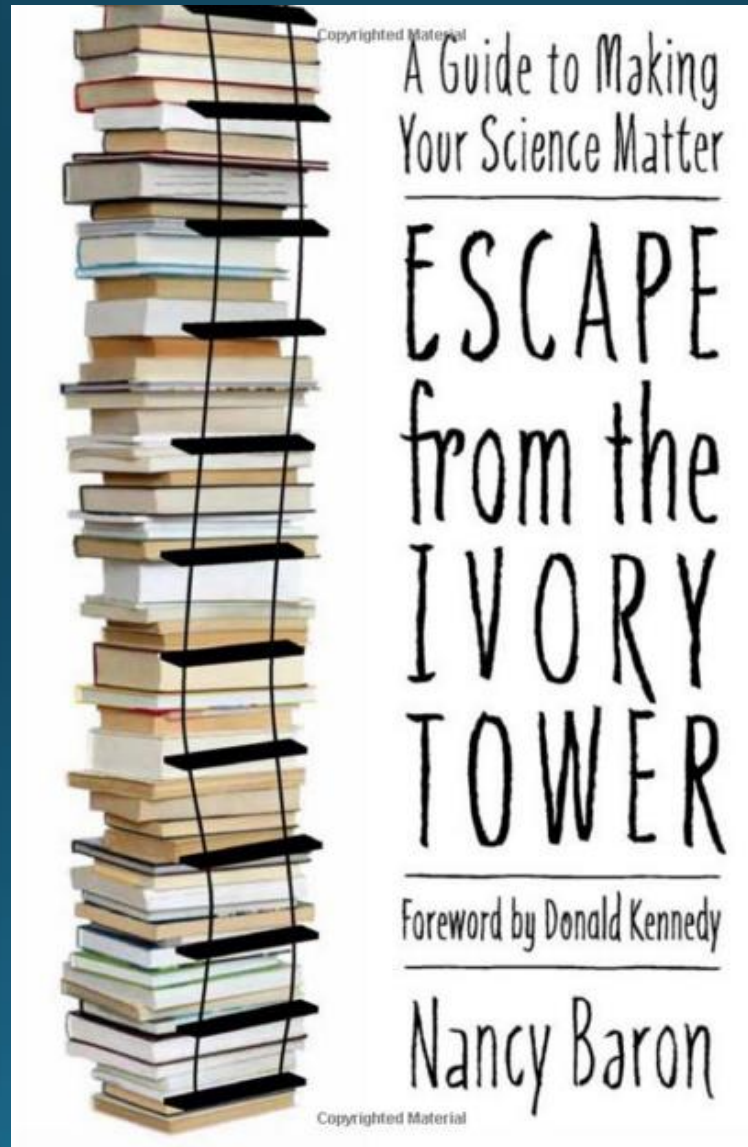
Jory Weintraub, PhD

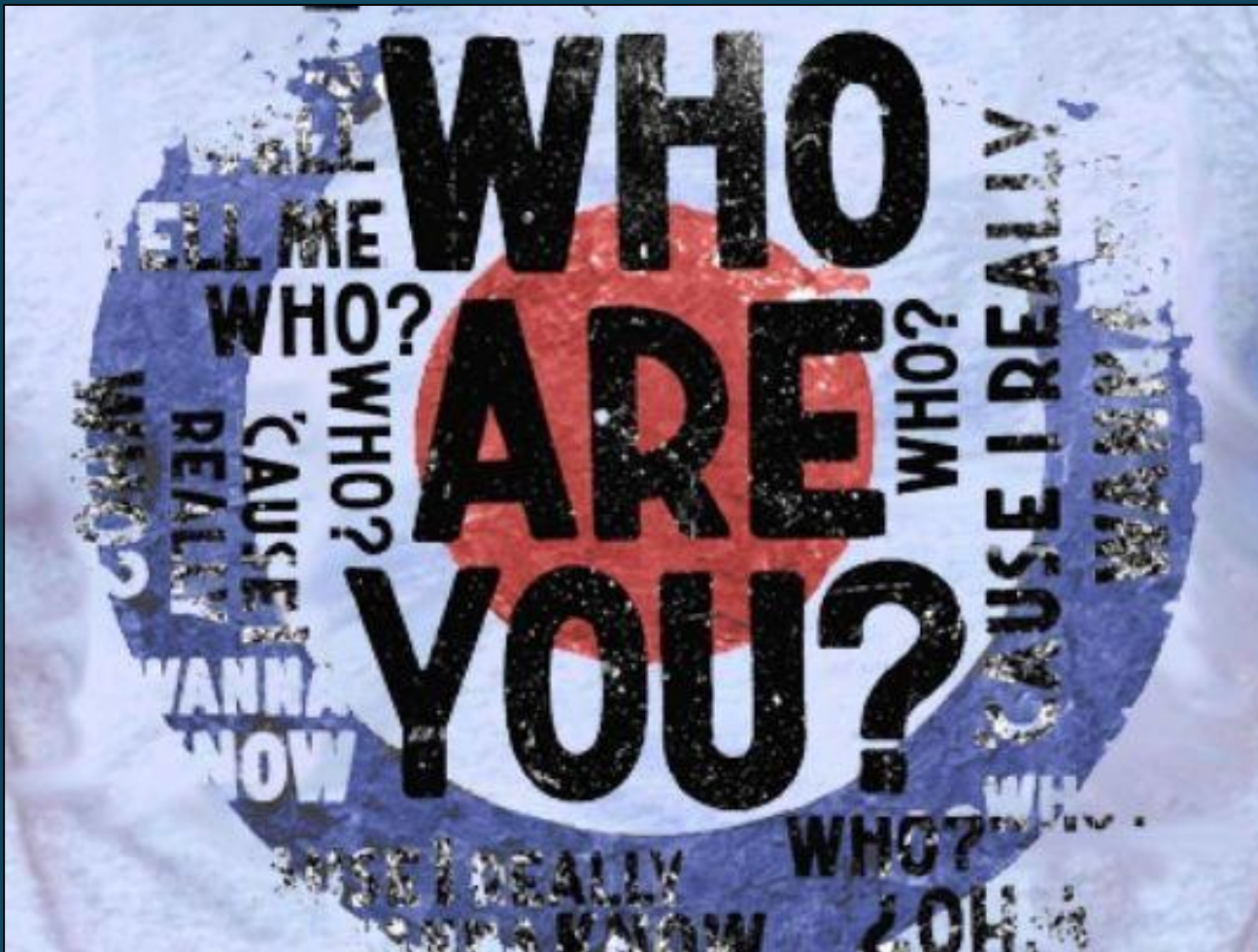
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# For more information:





**WHAT ARE YOUR CONCERNS WITH RESPECT TO  
COMMUNICATING ABOUT YOUR WORK?**

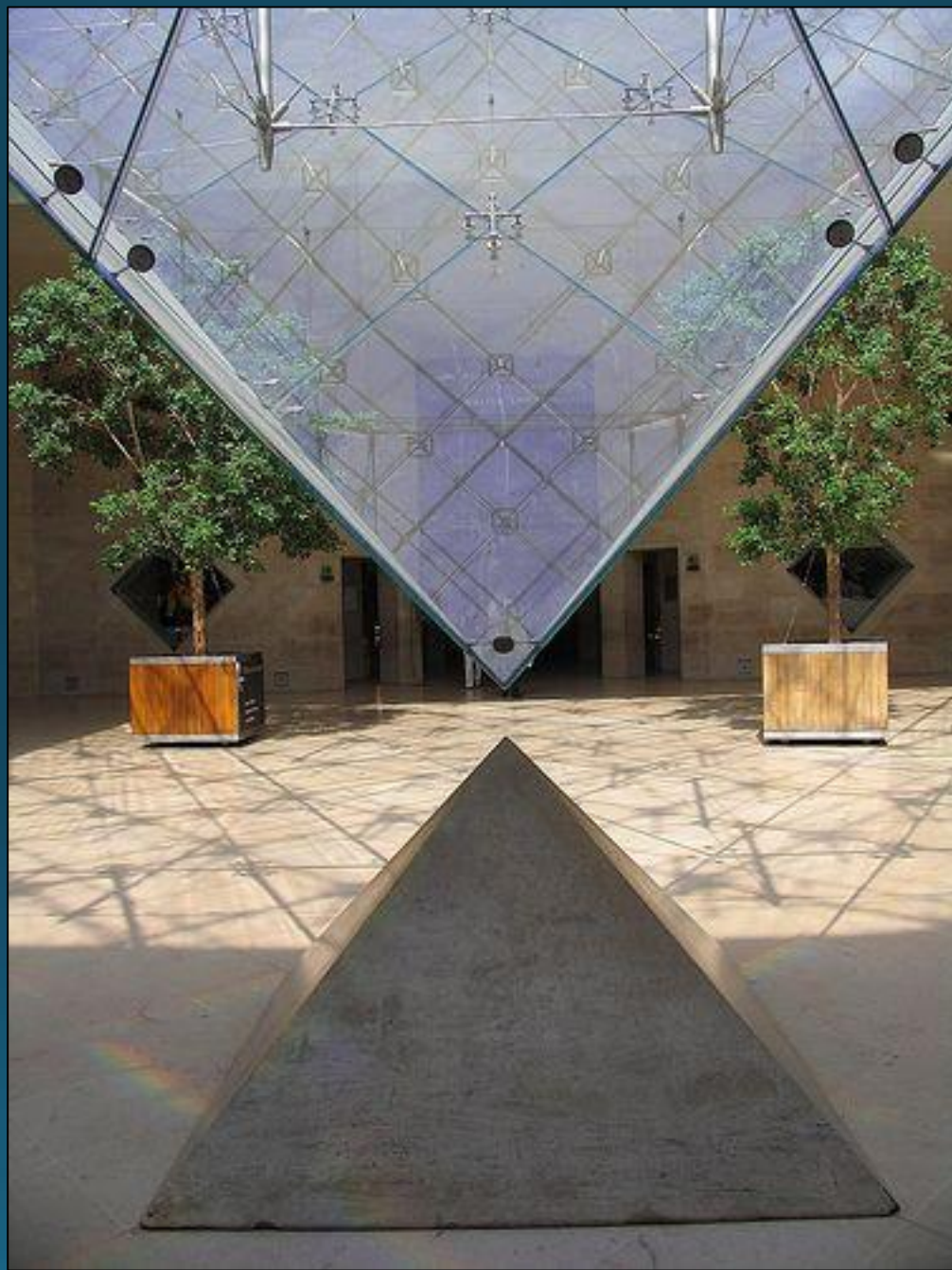
**WHAT DO YOU HOPE TO GET FROM THIS SESSION?**

What this is not...



What this is...







# Identify Your Message

It should be...

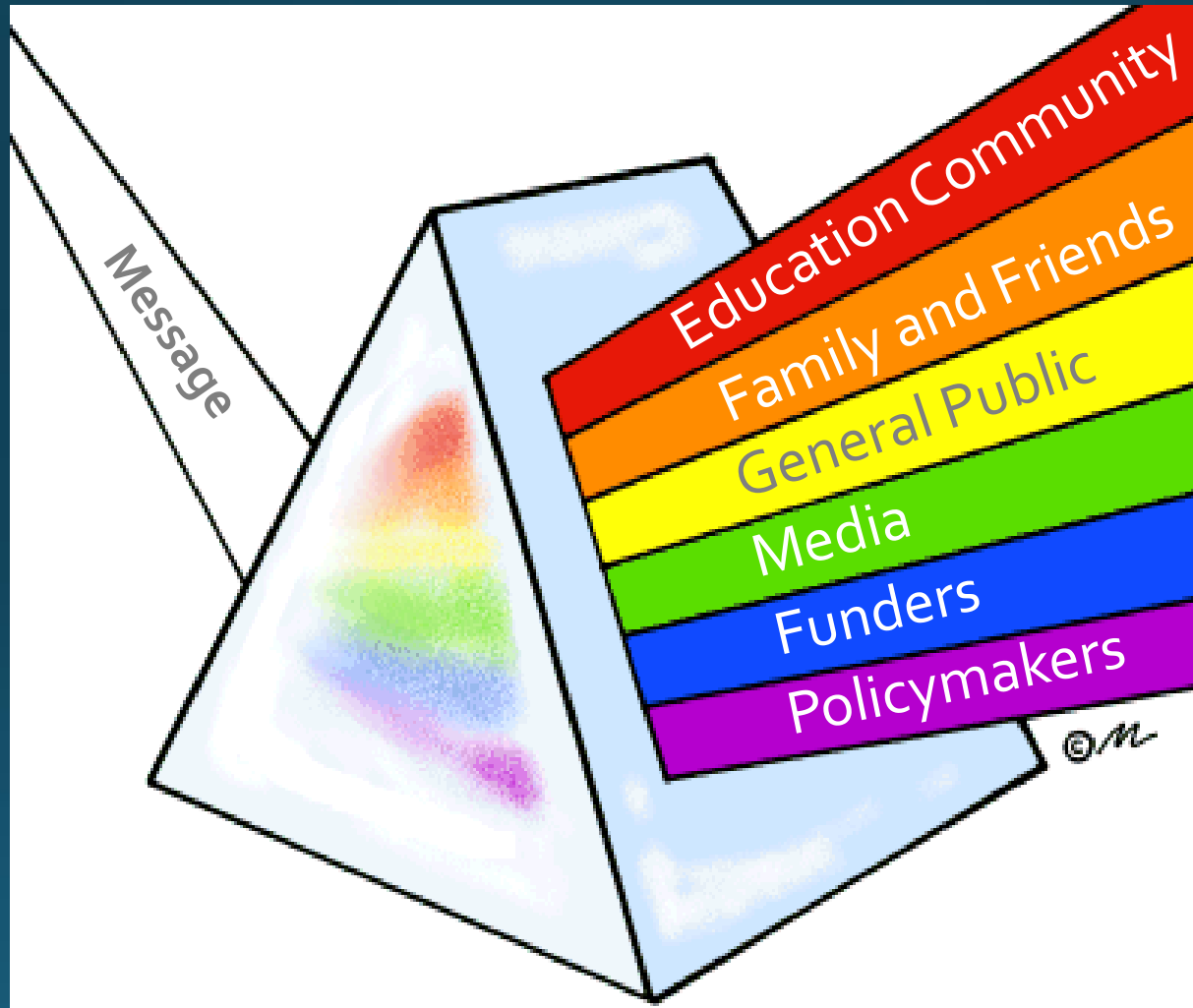
Easily understood

Memorable

Focused

Framed to be relevant to your audience

# AUDIENCE - AUDIENCE - AUDIENCE !



Avoiding Jargon  
(i.e. talking like a real person)

**Control**

**Significant**

**Theory**



# Avoiding Jargon (i.e. talking like a real person)

"It was the best of times,  
it was the worst of times."  
-A Tale of Two Cities

"The times were high-variance."  
-An Analysis of Cities ( $n=2$ )

# Avoiding Jargon (i.e. talking like a real person)

To conduct a  
study that will  
help determine

Elucidated the  
mechanisms by  
which...

Foster  
interdisciplinary  
collaborations...



To study

Showed how

Build teams

# Avoiding Jargon (i.e. talking like a real person)

Central nervous  
system  
interactions  
between  
gustatory  
afferent  
activities  
and the quality  
and quantity of  
saliva



Why  
we  
drool

# Simplify “Number Jargon”

47.65% ( $p < .0532$ ) = About half

32 million Americans = 1-in-10 Americans

“The largest  
dinosaurs had  
brains about 8 cm  
in diameter”

=

“The largest  
dinosaurs had brains  
about the size of a  
baseball”



# “Number Jargon” – An Exception



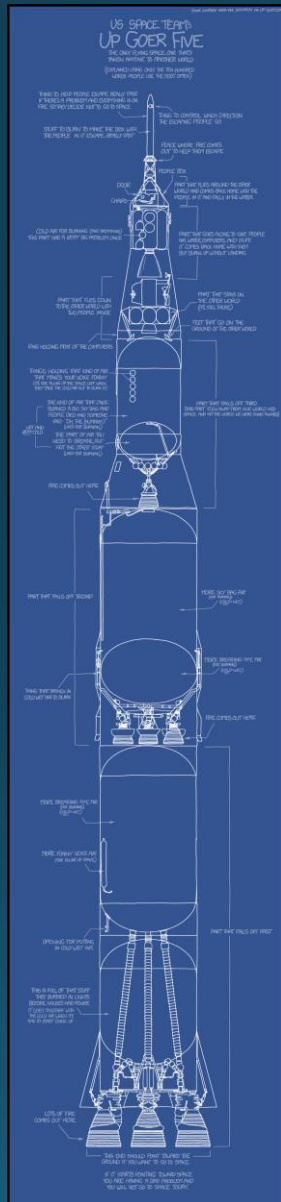
# If you MUST use jargon...

- Keep it to a minimum
- Define it first, and then introduce the term
- Make sure the definition is provided the first time you use the term

But, mostly.....

**TRY TO AVOID JARGON!**

# Need help avoiding jargon?





## THE UP-GOER FIVE TEXT EDITOR

CAN YOU EXPLAIN A HARD IDEA USING ONLY THE [TEN HUNDRED](#) MOST USED WORDS? IT'S NOT VERY EASY. TYPE IN THE BOX TO TRY IT OUT.

I investigate the lpr mutation in mice, which results in spontaneous autoantibody production due to premature termination of transcription of the gene encoding the apoptosis-signaling receptor Fas in autoreactive lymphocytes.

I study a change in small animals which makes them get sick because some bad cells in their body don't die when they should.

|

**UH OH! YOU HAVE USED NON-PERMITTED WORDS (INVESTIGATE, LPR, MUTATION, MICE, RESULTS, SPONTANEOUS, AUTOANTIBODY, PRODUCTION, DUE, PREMATURE, TERMINATION, TRANSCRIPTION, GENE, ENCODING, APOPTOSIS, SIGNALING, RECEPTOR, FAS, AUTOREACTIVE, LYMPHOCYTES)**



# “The De-Jargonizer”

## <http://scienceandpublic.com>

### De-Jargonizer

#### Article

[Choose Files](#) no files selected

You also can insert the text manually:

The *lpr* mutation in mice results in premature termination of transcription of the gene encoding the apoptosis-signaling receptor Fas. As a result, *lpr* mice develop severe lymphoproliferation and lupus-like autoantibodies. Growing evidence suggests that the *lpr* mutation is “leaky” and that low levels of Fas are expressed in *lpr* mice. To determine if Fas expressed in *lpr* mice is contributing to apoptosis we generated a novel strain of mice (B6/*lpr*gld) which is homozygous for both the *lpr* mutation and the *gld* mutation which encodes nonfunctional Fas ligand (FasL) protein. If low levels of Fas in B6/*lpr* mice contribute to apoptosis and lessen the severity of disease, the B6/*lpr*gld mice, which also lack functional FasL, would be expected to develop a more severe form of disease than B6/*lpr* mice. Our results revealed no significant increase in either lymphoproliferation or autoimmunity in B6/*lpr*gld mice compared to B6/*lpr* or B6/*gld* mice. Additionally, no increase in surface expression of Fas was detected by flow cytometry on B6/*lpr*gld lymphocytes compared to B6/*lpr* lymphocytes. However, histological examination of B6/*lpr*gld liver revealed a marked increase in lymphocytic infiltration,

Start

#### Result

Common:

Mid-Frequency:

Rare:

Score:

Number Of Words:

# “The De-Jargonizer”

## http://scienceandpublic.com

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### De-Jargonizer

#### Article

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You also can insert the text manually:

Start

#### Result

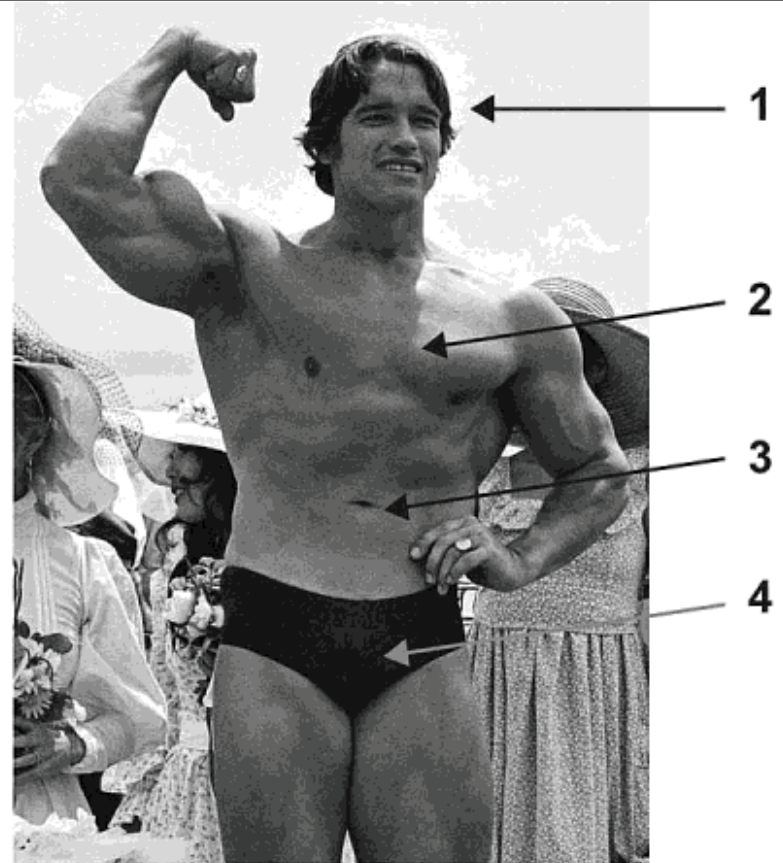
The **lpr** mutation in mice results in premature termination of transcription of the gene encoding the apoptosis-signaling receptor **Fas**. As a result, **lpr** mice develop severe lymphoproliferation and lupus-like autoantibodies. Growing evidence suggests that the **lpr** mutation is “leaky” and that low levels of **Fas** are expressed in **lpr** mice. To determine if **Fas** expressed in **lpr** mice is contributing to apoptosis we generated a novel strain of mice (**B6/lprgld**) which is homozygous for both the **lpr** mutation and the **gld** mutation which encodes nonfunctional Fas ligand (**FasL**) protein. If low levels of **Fas** in **B6/lpr** mice contribute to apoptosis and lessen the severity of disease, the **B6/lprgld** mice, which also lack functional **FasL**, would be expected to develop a more severe form of disease than **B6/lpr** mice. Our results revealed no significant increase in either lymphoproliferation or autoimmunity in **B6/lprgld** mice compared to **B6/lpr** or **B6/gld** mice. Additionally, no increase in surface expression of **Fas** was detected by flow cytometry on **B6/lprgld** lymphocytes compared to **B6/lpr** lymphocytes. However, histological examination of **B6/lprgld** liver revealed a marked increase in lymphocytic infiltration, compared to livers of **B6/lpr** and **B6/gld** mice. Our results suggest that, while low levels of **Fas** in **lpr** mice may not be contributing to amelioration of lymphoproliferation or autoimmunity, they may be partially protecting the liver from abnormalities which arise in the absence of **Fas**-mediated apoptosis.

Common:	64%, 155
Mid-Frequency:	14%, 34
Rare:	22%, 54
Score:	71
Number Of Words:	243

Download

# Tell A Story

- Make it personal
- Use analogies and metaphors
- Use humor and/or drama
- Provide statistics
- Hook them with something surprising or counterintuitive



**Figure 1-1.** The four organs of mass communication. To reach the broadest audience, you need to move the process out of the *head* (1) and into the *heart* (2) with sincerity, into the *gut* (3) with humor and intuition, and, ideally, if you're sexy enough, into the *lower organs* (4) with sex appeal. Photo courtesy of © Mirkine/Sygma/Corbis.

# Be Definitive!





**IT'S UP TO US...**

**...TO DO A BETTER JOB!**

**THANK YOU**

**ANY QUESTIONS?**