Today, we’ll talk about science writing for a non-expert audience in general and writing press releases in particular.

While many of the principles are the same (tailor your message for your audience, use persuasion), writing for a general audience—the people who read print or electronic news—has particular challenges. We’ll talk about them today.

We’ll also talk about the journalistic writing style, which is quite different from standard scientific or journal-article style, but which is also a useful tool to have in your writing arsenal. In the course of your career, you will need to use this style when interacting with the news media, with the general public, and with funding agencies.
The first step—in writing anything—is to think about who will read it. Put yourself in your audience’s shoes. What would your reader find interesting? What would she like to know more about? What words or concepts is he not going to understand?
What is the actual news that you are trying to communicate?
For your homework assignment, the news is the exciting research that is being done by your interviewee, right here in the cornfields of central Illinois.
Stories that interest people (think “sell newspapers”) incorporate one or more of the following elements:

**Impact**—will this discovery affect people’s lives? other work?

**Timeliness**—is the work new?

**Prominence**—does the story involve a well-known person or field?

**Proximity**—will local people care?

**Conflict**—are the results controversial? do they upset previous beliefs?

**Weirdness**—are the results unexpected or strange?

**Currency**—is the report related to some general topic that people are already talking about?

Use *one* of these elements to set the overall direction of your story.
Organize information in an inverted pyramid—frontload the “news”

Most newsworthy info

Present the most important and engaging information (the “lead”) in the first sentence of the first paragraph.

Add additional details in subsequent (short) paragraphs.

The inverted pyramid style comes from newspaper reporting, where an editor might have to chop off the last paragraphs of a story to get it to fit on the page.

Assume not everyone (anyone?) will read every word, down to the last period. Can the reader get the basics of your story from the first three paragraphs?

One of the biggest differences between journalistic writing and academic writing is the treatment of “introductory” material. In newspaper writing, you grab the reader’s attention first, give him or her the basic facts, and then provide the “background” information. In conventional scientific writing, you provide the background information (including what a whole lot of other people have already done) first, and then tell the reader what you did.
Start your story with a strong “lead”—an interesting fact that will grab the reader’s attention—in the first sentence. Expand on the lead in the next one or two sentences.

**More examples of strong leads:**


“Two scientists believe they’ve solved a mystery that’s defied explanation for more than 400 years. The phenomenon known as milky seas, once thought to be folklore, may be real.” *ScienceDaily*, July 2, 2006; http://www.sciencedaily.com/videos/2006/0707-uncovering_the_mysteries_of_the_seas.htm. (Also has a very cool video...)


Another place where you’ll use a strong lead is in your statement of purpose for graduate school applications. So get some practice in writing them.

Use very short paragraphs—one or two sentences per paragraph.

Use direct quotations. (N.B. Direct quotations are *never* used in journal articles.)

Explain your terms; use minimal jargon. (Think about your audience—of undergraduate physics majors.)
Next, write an attention-grabbing headline

Keep your headline very short—<8 words; if necessary for explanation or context, provide a longer subhead
Capture the key point of the story
A 7th-grader should understand the words
Capitalize the first word and proper nouns; everything else is lower case
Omit “a,” “an,” and “the”

Engage the reader from the first word—make him or her want to keep reading.
 NOT an attention-getting* headline:

Deglaciation data opens door for earlier first Americans migration

Most press releases are text only; you have to paint an engaging, meaningful picture using only words

*Not even the author’s mother is going to read this story, although she may lie and say she did.

Here’s an example of an awful headline (not even the author’s mother is going to read this article, and nobody’s going to parse out what it means on the first reading):

Deglaciation data opens door for earlier first Americans migration

The missing apostrophe, punctuation’s #1 endangered mark, is a rant for another day.
Another good headline:

**Researchers use nanotechnology to harness power of fireflies**
(http://news.science360.gov/obj/story/1948bcc1-6434-49e8-aa9b-b11da4a3b801/researchers-use-nanotechnology-harness-power-fireflies)

I personally think the title could be shortened: “Fireflies power nanotechnology”

My version puts the most interesting word [*fireflies*] first as well.
Seven rules for good headlines:

1. Keep it short
2. Frontload keywords
3. Use active verbs
4. Make it a complete thought
5. Accurately reflect the content of the story
6. “Clear” trumps “clever”; avoid ambiguity, insinuations, and double entendres
7. No jargon
You must include two figures in your article for this homework assignment. Make sure they are visually interesting and understandable to the person reading the article.

Crop out unnecessary detail in images, and point out important features.

Photos that include people are inherently more interesting than photos of equipment.

If you use a photo taken from somebody else (i.e., it is not your own original photograph or artwork), you must provide a photo “credit,” i.e., who the image belongs to and where you got it.
People want to find information in news reports *immediately*. If they cannot find something interesting and meaningful in <15 s, they’ll move on to the next story.

Limit text to one “main idea” per paragraph, and make it the first sentence.

Keep paragraphs short (at most, three sentences). Restrict to half the word count (or less) compared with conventional academic writing.

For news articles that will go on the Web:

Break up the text with call-out boxes and content-rich (not cute) subheadings—make it scannable.

Use typeface variations, columns, and short paragraphs to break up text into scannable chunks.

Highlight key words to make them visible (bold, italic), but *don’t* underline text to highlight it. Readers expect underlined words to be hyperlinks..

Underline hypertext links. Don’t indicate links with color alone (not accessible).
Factual, precise writing—avoid bragging and “marketese.” Users detest promotional writing style with boastful, subjective claims; users want the straight facts, no exaggeration. (“Urbana mom earns $7784/wk in her spare time” = clickbait)
Writing a press release in 8 steps

1. Analyze your audience—who’s the reader?
2. Use a standard press-release template
3. Write the “lead”—make the reader want to keep reading (learn more)
4. Answer the five W’s and the H (who, what, where, when, why, and how)
5. Acknowledge the funder
6. Write the headline—brief, clear, engaging

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7. Identify the writer and add contact information and additional sources
8. Get your interviewee’s permission

Your assignment should be no longer than three single-spaced pages max.

Put your suggested headline at the top of the page in bold. Capitalize the first word and any proper nouns; make everything else lower case. Omit “a,” “an,” and “the”; frontload the interesting words.

Indicate the end of the “story” by ### centered on a separate, following line. That’s the universal signal to reporters and editors to “stop printing here.”

Add names or websites where a news reporter or editor can get additional information if she thinks it’s a really interesting story (or it’s a slow news day.) The contact details must be complete, detailed, and specific to this particular news release.
Always acknowledge the funder

For scientists supported by the NSF, use this language:

*This project was funded by the National Science Foundation grant number xxxxxxx. The opinions, results, and conclusions presented are those of the researchers and may not represent those of the National Science Foundation.*

Get the grant number from the interviewee

Use similar funding acknowledgments for DOE, NIH, NASA, and other federal funders

If your project has been funded by a federal grant, you are required *by statute* to acknowledge the agency any time you talk or write about the work.

Thus, you must reference our NSF REU grant (No. 1359126) in your press release, in your mid-term and final talks, in your final paper, or in any other medium (e.g., websites) that you use to publicize the work or disseminate your results.