

The Harvard Science Review is a unique publication because it aims to communicate science to non-scientists—to inform the general public about the scientific discoveries that may greatly impact their lives. Because science is such a complex discipline, it may seem difficult to say something meaningful and accurate about science without using a lot of complicated jargon. It can even seem daunting to get started writing about science in the first place, especially for a topic that you are learning about for the first time.

This workshop, combined with the Writing Handbook and the guidance of your Associate Editor and the Editors-in-Chief, is designed to help you successfully balance scientific accuracy and reading appeal in your HSR articles, reports, commentaries, and news briefs. For writers, this is an introduction. For editors, it's a review and a way to make sure you know how to help your writers.

1. Finding sources

a. The players

- Original research articles in journals for cutting-edge discoveries or recent advances
- Review articles in journals for background information and the current state of the field
- Textbooks for more background information
- Popular press for media perceptions and portrayals, starting ideas
- Interviews with professors or TAs for clarification or as supplemental content

b. Getting started

- PubMed
<http://www.ncbi.nlm.nih.gov/ezp1.harvard.edu>
- Physics Research Library
<http://library.physics.harvard.edu> with links to databases
- Lexis-Nexis (popular press)
<http://nrs.harvard.edu/urn-3:hul.eresource:lexnexau>

c. Timeliness

- No absolute rule, but keep it current
- Consult your AE
- Science Citation Index
<http://nrs.harvard.edu/urn-3:hul.eresource:scicitin>.

2. Using sources

a. Plagiarism

- Definition
- When to cite
- Read what you cite
- Start your reference list when you start writing

b. How to cite

- Consult Writing Handbook
- In-text citations
- Reference list

Ex 1: Citing properly is a must (1).
Ex 2: He found that citations are "important" (2).

References

1. Smith, J. *Citation* 302 (2005): 385-387.
2. Johnson, K. *J Biblio* 54 (2002): 11-17.

3. Know thy audience

a. Who reads HSR?

- b. How to explain
 - Use it or lose it
 - A picture is worth 300 words
 - Other ideas
 - c. The “so what” factor
 - Introduction
 - Conclusion
4. Anatomy of the article
- a. Introduction
 - The hook
 - The thesis
 - The “so what” factor
 - Article type: feature vs. general
 - b. Body
 - Clear, balanced background info
 - Concise sentences in short paragraphs
 - Define or explain everything
 - Section headings as guideposts
 - Direction
 - c. Conclusion
 - Recap, not restate
 - Back to “so what”
 - Future directions
 - d. Images
 - Another hook
 - Find ideas to reproduce; avoid copyrighted images
 - Keep it simple
 - Citation
 - e. Reference list
 - f. Pull quotes
 - Choose one for every two pages
 - 30-40 words long
 - g. Writer bio
 - Consistency, follow format below
 - Example: “John Harvard ’07 is a Biochemical Sciences concentrator in Dunster House.”
5. Length
- a. Article: 3-4 single-spaced pages, about 2000 words
 - b. Report: 1 single-spaced page, about 500 words
 - c. Commentary: 1-2 single-spaced page(s), about 1000 words
 - d. News brief: 1/3 of a single-spaced page, about 200 words

Therapeutic Cloning

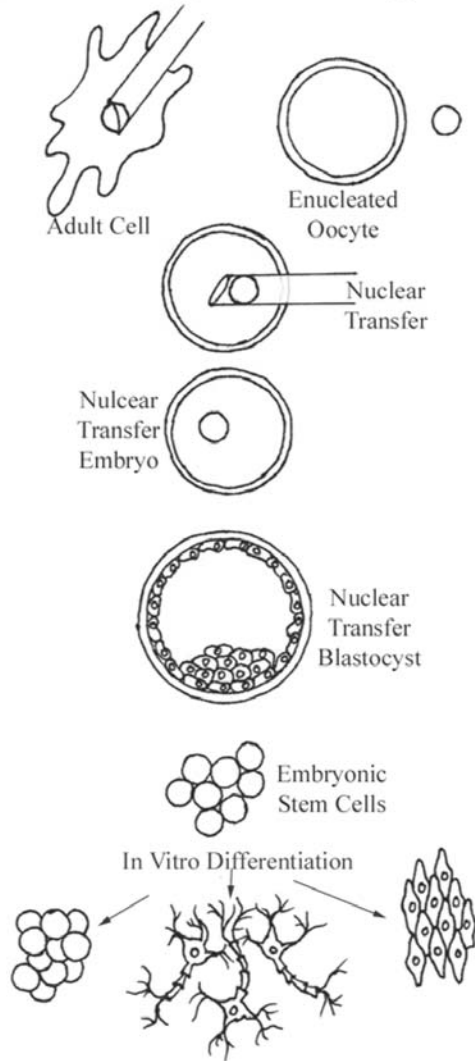


Figure 3. Therapeutic cloning yields embryonic stem cells that can differentiate in vivo into any type of cell to be used for therapeutic purposes.

— *“Stem Cells Reprogrammed,”* Fall 2005

A good HSR figure...

- is visually appealing.
- conveys something important related to the article that is hard to visualize from the text.
- has a caption that communicates what the picture is without any additional information.
- has a citation.

Food as fuel? Of course. A no-brainer. Food as comfort? As a temptation? A social event? All familiar notions. But food as the ultimate soldier? Many would find this a perplexing idea. Yet Norman Borlang, known as the father of the Green Revolution, declared in 1970 that “Food is the cornerstone of national security.” He was right. After all, a nation’s inability to provide sustenance for its people places it at the mercy of its neighbors. Recently, genetic modification, or “GM,” has risen to the forefront as a potential tool for cultivating food surplus. The debate surrounding the suite of techniques that fall under the umbrella of GM takes on a new meaning today as “bioterrorism” becomes a media buzzword. Some argue that creating genetic diversity renders crops heartier and more reliable. Others say that the same technology could be used to engineer an attack by a super-pathogen, making us vulnerable to epidemic, food contamination, and financial loss. The U.S. Food and Drug Administration is working furiously to weigh these arguments and secure our safety in the face of a potential invasion so much subtler - and tastier - than armed infantry or explosives.

— *“New Fields of Battle,”* Fall 2003

A good HSR introduction...

- is catchy, shocking, or unconventional.
- is accessible. There is only one potentially unfamiliar term used here and there is no scientific jargon or technical-speak, just clear and readable writing
- places the topic of the article within a framework of relevance to the scientific community *and* to general experience. This example links the topic to the issues of national security, current issues in the media, everyday experience, and government oversight.
- clearly and persuasively establishes how the article relates to the focus topic (for feature articles).
- creates a sense of where the article might go. In this example, “clues” include the mention of the history of GM foods, the role of the FDA, genetic diversity of crops, and bioterrorism.
- generates a sense of excitement or tension without venturing into science fiction, speculation, or hyperbole.

