# **Bringing Mammoths Back from Extinction:** Developing Scientific and Information Literacies

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## Part I – Analysis

Read the following news article and the original scientific study it covers. For the scientific article, focus on pages 1–6; the remaining pages provide a detailed description of the methods. Then answer the questions below and compare the two articles.

#### News article:

Ciaccia, C. (2019, March 12). Woolly mammoth cells brought back to life in shocking scientific achievement. *Fox News.* <a href="https://www.foxnews.com/science/woolly-mammoth-cells-brought-back-to-life-in-shocking-scientific-achievement">https://www.foxnews.com/science/woolly-mammoth-cells-brought-back-to-life-in-shocking-scientific-achievement</a>>

#### Science article:

Yamagata, K., *et al.* (2019). Signs of biological activities of 28,000-year-old mammoth nuclei in mouse oocytes visualized by live-cell imaging. *Scientific Reports* 9(4050). <a href="https://doi.org/10.1038/s41598-019-40546-1">https://doi.org/10.1038/s41598-019-40546-1</a>

### Questions

#### Comparing the Authors

1. Describe the author(s). Do not just list them unless the name has value to you. What information can you find about them from looking at the article or searching online (e.g., their credentials, what they do for a living, history of publishing, etc.)?

News article:

Science article:

2. What do you think the author(s) were trying to accomplish by writing and publishing this article? What was their possible purpose?

News article:

Science article:

Case copyright held by the National Center for Case Study Teaching in Science, University at Buffalo, State University of New York. Originally published December 20, 2021. Please see our **usage guidelines**, which outline our policy concerning permissible reproduction of this work. *Credit:* Licensed image © Planetfelicity | Dreamstime.com, ID 139059499. 3. What do you think motivated the author(s) to write this article? Why do you think they find the topic worth writing about? Is the original research question or purpose of the study indicated?

News article:

Science article:

#### Comparing the Articles

4. How does the language used in the headlines or the article itself contribute to the overall tone of the information presented?

News article:

Science article:

5. Is there anything in the article that lends authority or credibility to its content? If so, what?

News article:

Science article:

#### Comparing the Publications

6. In what type of publication does the story appear? Is it found on a news website, in a scientific journal, a magazine, etc.?

News article:

Science article:

7. Do you think that this publication has an interest in providing a certain perspective on this study? Why or why not? How can you tell?

News article:

Science article:

8. Can you think of anything that might be missing from this information source (e.g., a perspective, a consideration, or additional information)?

News article:

Science article:

## Part II – Reflection

Answer the following questions, using specific information from the analysis you performed in Part I.

#### Questions

1. Do the scientific researchers come to the same conclusions as the author of the news source? If not, how are the conclusions different? What is the motivation in describing the conclusions in this way?

2. How is evidence used and presented differently across the two articles?

3. In what situation(s) would each type of article be helpful or useful to you? What might be an appropriate use for each source? How would these sources play into your decision-making process about scientific claims?