

Visual abstract assignment

Purpose: The purpose of the assignment is to help you use course concepts to understand a scientific research article, to select some of the most important information for a particular audience, and to translate that information for your audience in an accessible way.

Skills: You have an opportunity to practice the following skills that are essential for your success in this course and your professional life beyond this course

Course specific skills:

- Applying your knowledge of cellular/molecular mechanisms and organ system aging gained in this course to understand a scientific research article about aging physiology
- Synthesizing the information from scientific research literature and reconstructing this information into a format that is concise and targeted at a lay (non-scientific) audience

Career readiness skills:



Critical Thinking

Analyzing the research article to identify the research question, interpreting the results, and determining the key information to include in your visual abstract



Communication

Clearly expressing information to a lay (non-scientific) audience



Technology

Proficiently using presentation (e.g., PowerPoint) or graphics (e.g., Photoshop) software, and being able to create/find graphics in order to create a visually pleasing abstract

Knowledge: By completing this assignment you will gain the following knowledge:

- How to read and analyze scientific research articles related to aging physiology
- How to differentiate between technical vs. lay (non-scientific) communication

Tasks: For this assignment you will create a visual abstract for your scientific research article of choice (previously selected). This visual abstract is meant to be a visually pleasing summary of the research results. These types of abstracts are posted on social media (e.g., Twitter) for the audience to quickly understand the study. In some ways, this is an "infographic" for the article, but includes much less

information than the typical infographic. The target audience for this visual abstract is someone with limited knowledge of science (i.e., no courses in science beyond high school level).

Requirements:

- Must be created for a general, non-scientific audience
- Must include:
 - Title: provide clear information about the main conclusion(s) of the study
 - Methods: describe only elements of the study design that are needed to understand the conclusions
 - Results: describe 2-3 key results from the study
 - Icons and images to correspond with the results
 - Citation information (first author, journal, year)
- Must be visually pleasing
- Must be concise (ideally <50 words, excluding citation)

Resources:

- Refer to our class discussion on successful/unsuccessful elements of visual abstracts
- Examples of successful visual abstracts from previous students will be provided in class
- The links below provide more information about visual abstracts. NOTE: the information in these links are for abstracts targeted at a scientific “expert” audience, unlike your assignment where the audience will be lay (non-scientific).
 - <https://labblog.uofmhealth.org/health-tech/as-scientists-take-to-twitter-visual-abstracts-help-results-reach-more-people>
 - <https://www.surgeryredesign.com/resources>

Criteria for success:

You will be successful if you create a visual abstract that conveys the important information about the scientific research article to a non-scientific audience in a format suitable for social media.

See rubric on next page.