

Major Assessment Task 3: Biomedical News & Views Article

1. Brief

You will investigate a recent biomedical research discovery published by a researcher from the BDI and compose an original and engaging 'News & Views' style article reporting on this discovery. You will evaluate the significance of the discovery and convey how the findings advance the field. Your article should focus on the biomedical aspects of the discovery and its link to disease, evaluating the potential clinical significance of the discovery and how it whether it may have broader impacts on healthcare and society.

2. Learning outcomes and employability skills

- Integrate and apply knowledge from previous core units in the study of the molecular mechanisms and defects that cause human disease.
- Convey an understanding of fundamental principles and techniques in biomedical sciences and apply it to broader contexts.
- Present data and scientific ideas, in oral, written and visual forms using scientific language.



3. Topics

You will need to choose a recent, high-impact discovery published by BDI researchers in the **period 2021-2022**. For the publication you choose, **the first or last author must be from the BDI**. The researcher associated with this discovery can be the same as the lab head you have investigated in MAT2 but you are free to choose a new researcher/area. Examples of discoveries you may choose to look at might include a new therapeutic development, a new understanding of a molecules structure or function, a new biomedical technique or advancement.

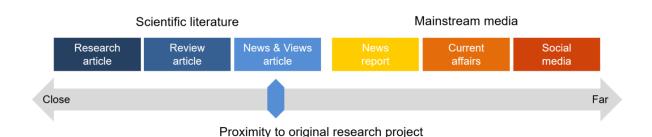


Figure 1. Proximity of News & Views articles to original research, situated among the broader scientific literature and mainstream media.



4. Criteria requirements

The following criteria are required to be address in the article;

Criteria

- 1 An introduction to the particular **research area** and the context surrounding the discovery.
- 2 An explanation and discussion of the **research discovery** and its significance to the field.
- 3 An exploration of how key **methodologies/techniques** aided the discovery.
- 4 An evaluation of the discovery's **clinical relevance** and its potential impact on healthcare and society.

5. Format requirements

Important research discoveries are commonly discussed in the scientific literature by way of News & Views articles. News & Views articles can be found in many scientific journals. They are sometimes referred to as 'Commentaries', 'Perspectives', or 'News and Comment'. News & Views articles often report on exciting new findings, developing trends in the field and the impact of research on broader society. They can provide real-world examples and set research findings in specific contexts. For example, an article might position a new discovery in terms of its social, historical or economic relevance. A News & Views article could explore how a discovery might revolutionise an approach to treating disease or the ability to make new discoveries. News & Views articles typically make connections between new findings and existing knowledge, and explore the implications of these new findings.

News & Views articles are not peer-reviewed (unlike review and research articles) but maintain principles of scientific writing, such as citations and references, and can be written by experts (scientists from the field) or non-experts (editorial staff of journals). They differ from primary (original) articles and secondary (review) articles in that they include interpretation and opinion of research significance, impact and issues. News & Views articles are *not* review articles - they do not plainly summarise research conducted by others, rather, they *discuss and explain* how a piece of research fits into the broader field and *evaluate and interpret* its possible applications. Unlike review or research articles, they can include direct quotes or views from experts in the field.

Your report of a recent biomedical discovery from the BDI should be presented in the style of a 'News & Views' article. News & Views articles sit between mainstream news reports and review articles in the scientific literature (see **Figure 1**). The target audience of News & Views articles are generally non-expert scientists (scientists that are not experts in the particular area, but have a broader understanding of the science). Keep in mind that you are attempting to paint a picture of the significance of a discovery, whilst maintaining the scientific accuracy. Your views may come across in the writing, however you should not directly state your own opinions or ideas, subtlety is key.

While the broad design of the article should be in the style of a News & Views article, the specific layout and design is open to your interpretation. You will be provided with a recommended template and examples of News and Views articles on Moodle. It is *expected* that your article will read and look similar to this article. Think carefully about the typography and structure of the writing. You should print out the article before submission to check it is legible and clear. You are encouraged to use artistic flair (e.g. cover art, photos and colour) to capture the reader's



attention. Recommended programs for editing, formatting and creating figures include MS Word, PowerPoint, Keynote or Adobe Illustrator. It is expected that the following requirements will be adhered to:

- Following the style of a Nature News & Views article (see Kocak & Gersbach 2018 example)
- Strictly no more than 1,440 words excluding reference list, text within figures
- Word limit includes title, by-line, summary sentence, in-text citations, figure legends
- No more than 3 A4 pages in length (1 2 pages is ideal)
- Text set in two or three columns
- Title (≤10 words) that catches the reader's attention and conveys the substance of the article
- Summary sentence (≤20 words) below the title that captures the main message of the article
- By-line with the MAT3 author's name
- Page number in the lower right-hand corner
- Mention of the main investigator and their affiliation in the text of the article
- A clear citation linking to the original publication
- Subheadings are strongly encouraged (even though they are less common in Nature N&V articles)
- Legible size font for A4 page (e.g. 11-point for main text; 10-point for figure legends)
- Serif style font throughout (except for text within the figure which should be sans-serif)
- Drop cap in the first paragraph
- One original figure (e.g. models, diagrams, illustrations) that summarises or contextualises the discovery
- Figure set on a pastel yellow colour background (in the style of a *Nature* News & Views figure):

Code	RGB	Swatch
#fdf9ee	253,249,238	

- Other colours chosen at your discretion (tip: contrast pastels with vivid colour for emphasis)
- A figure legend describing the figure (≤100 words) and referred in-text
- References and citations in the same style as the format in Kocak & Gersbach 2018
- Logical structure and consistent formatting throughout
- Submitted as a high-quality PDF (.pdf) file

6. Preparation

The majority of this individual task will need to be prepared outside of class. There will be opportunity to discuss and review your work with peers and your TA in Week 10. You will have three weeks to complete it.

7. Feedback & Assessment

MAT3 is weighted 12% of the unit grade. The marking guide for MAT3 is available below. You should expect to receive feedback within about 10 working days of the final submission due date. Late submissions will attract a penalty of 10% of the total marks, per day.





Due May 29, 11:55 pm



Submission PDF (.pdf file)



MAT3 – News & Views Article								
Criterion	N (<50%)	P (50-59%)	C (60-69%)	D (70-79%)	HD (>80%)			
				Well-articulated, relevant title	Well-articulated, relevant title			
Title & Summary sentence 10%	Unsuitable or misleading title Summary statement that fails to capture the main message of the article	Suitable title Summary statement mostly captures the main message(s) of the article	Suitable title Summary statement that concisely captures the main message(s) of the article	Well-articulated summary statement that mostly captures the main message(s) of the article Mostly suitable title and summary statement for target audience of non-expert scientists	Well-articulated summary statement that concisely captures the main message(s) of the article Suitable title and summary statement for target audience of non-expert scientists			
An introduction to the particular research area and the context surrounding the discovery 15%	Incomplete description of the research area Description of gaps in the research and rationale of the study was not fully outlined	Description of the research area providing context for the article was provided but was unclear or incomplete Description of gaps in the research and/or rationale of the study was not fully outlined	Clear communication of the research area providing context for the article Description of gaps in the research and rationale of the study were mostly clear	Clear communication of the research area providing context for the article Indication of gaps in the research and rationale of the study Description included detailed, accurate and relevant content presented to a good standard	Exceptionally clear communication of the research area providing context for the article for target audience of non-expert scientists Clear description of relevant gaps in the research and rationale of the study Description included detailed, accurate and relevant content presented to a very high standard			
An explanation and discussion of the research discovery and its significance	Incomplete description of the research findings and discussion of their significance Description was not presented in a News & Views article style	Description of the research findings and brief discussion of their significance yet some key points omitted	Clear explanation of the key research findings and brief discussion of their significance Description included accurate and relevant content presented to a good standard appropriate for a News & Views style article	Clear explanation of the most important research findings and their significance Description included detailed, accurate and relevant content presented to a good standard appropriate for a News & Views style article	Exceptionally clear explanation of the most important research findings and their significance Description included detailed, accurate and relevant content presented to a very high standard, appropriate for a News & Views style article			
An exploration of how key methodologies / techniques aided the discovery	Incomplete description of the methodologies / techniques Description was not presented in a News & Views article style	Clear description of the methodologies / techniques mostly relevant to the results discussed	Clear description of the methodologies / techniques mostly relevant to the results discussed Description included accurate and relevant content presented to a good standard appropriate for a News & Views style article	Brief description of the approach/experimental design Clear description of the methodologies / techniques relevant to the results discussed Description included detailed, accurate and relevant content presented to a good standard appropriate for a News & Views style article	Clear description of the experimental design Clear description of the methodologies / techniques relevant to the results discussed Description included detailed, accurate and relevant content presented to a very high standard, appropriate for a News & Views style article			



An evaluation of the discovery's clinical relevance and its potential impact on healthcare and society	Evaluation of the contribution and significance of this research not provided to a suitable standard Little to no discussion of future perspectives such as impact, further areas for investigation or suggestions	Incomplete evaluation of the contribution and significance of this research Some discussion of future perspectives such as impact, further areas for investigation or suggestions	Evaluation of the contribution and significance of this research Some discussion of future perspectives such as impact, further areas for investigation or suggestions	Evaluation of the contribution and significance of this research Some evidence of original ideas regarding future perspectives such as impact, further areas for investigation or suggestions	Articulate evaluation of the contribution and significance of this research for target audience of non-expert scientists Evidence of insightful original ideas regarding future perspectives such as impact, further areas for investigation or suggestions
Relevant and effective original figure and legend	Figure depicts irrelevant information in relation to the search findings and design, demonstrates a shallow understanding paper	Figure relevant to the research findings and design The figure is of satisfactory quality with annotations and labels present, though with errors/omissions Key take away message of figure requires substantial explanation in the text/legend	Accurate figure, relevant to the research findings and design The figure is of satisfactory quality with annotations and labels present, though with minor errors/omissions Key take away message of figure requires additional explanation in the text/legend	Accurate figure, representative of the research findings and design, demonstrating comprehensive understanding of the paper The figure is of professional quality with most key annotations and labels Key take away message of the figure requires only minor explanation in the text/legend Relevant figure legend provided (<100 words) and referenced in the text	Accurate and detailed figure, representative of the research findings and design, demonstrating comprehensive understanding of the paper The figure is of professional quality with effective annotations and/or labels Key take away messages of the figure are skilfully communicated without verbal explanation Concise and relevant figure legend provided (<100 words) and referenced in the text
Composed in the style of a News & Views article as per formatting requirements 10%	Insufficient adherence to the formatting requirements including author information, subheadings and structure, font size & style with many inconsistencies	Adherence to the formatting requirements including author information, subheadings and structure, font size & style however some inconsistencies	Acceptable adherence to the formatting requirements including author information, subheadings and structure, font size & style with some inconsistencies	Reasonable adherence to the formatting requirements including author information, subheadings and structure, font size & style, some minor inconsistencies	Strict adherence to the formatting requirements including but author information, subheadings and structure, font size & style
Referencing & Citations Provided in the same style as Kocak & Gersbach 2018 5%	Information present was not referenced or cited to an acceptable standard		Most information was referenced and cited in the designated format		All information was appropriately and consistently referenced and cited in the designated format