## **Honours Scientific Literature Coursework Task:**

To write a *Science – Perspectives* style article on a paper published in 2003 (that did not have a Perspectives at the time).

Instructions that the students were given – that is, the *Science Perspectives* instructions (with task specific changes in red):

- Perspectives in SCIENCE are short overviews of current research findings, intended for a very broad audience of scientists.
- Your task is to tell other readers, especially those outside of your field, about exciting research developments within your area of expertise.
- Perspectives may accompany either a paper in SCIENCE, discuss work published elsewhere, or describe results presented at a workshop or conference. In each case, the goal should be interdisciplinary communication.
- Perspectives are not intended to be hypotheses or unsupported speculation, nor should they be presentations of your own original research. Perspectives commenting on papers in Science should add a fresh dimension to the research and not merely summarize the experiments reported in the paper.
- Perspectives should be no more than 2500 words (including figure captions and reference list) and two figures
- Figures should be publication quality placed appropriately within the text.
- Citations to unpublished work and personal communications should not be used to support the main points of the commentary.
- The references should be as condensed as possible (maximum of 30 items), while still citing the essential literature. Perspectives are not comprehensive reviews, so the reference list cannot be an exhaustive bibliography. Avoid lengthy notes, details, or asides that interrupt the flow of the text.
- Because we want this section of the journal to be visually engaging as well as informative, each Perspective should include one figure.
- You should begin with an introductory paragraph that captures the reader's interest and immediately gets to the point. If you are discussing a specific scientific paper, be sure to refer to the paper somewhere in the first paragraph. Your introduction should be general enough to orient the reader not familiar with the specifics of your field. Here, and throughout the text, you should avoid jargon and the special terms of your field. If the language of specialists is necessary, please briefly define it for the general reader. Please keep the use of acronyms to a minimum.
- The final paragraph should draw the piece to a concise conclusion, without simply restating the text. Tell the reader about future prospects and implications. What are the unanswered questions? Where is the field going?
- Include how the science of your chosen article has developed over the intervening 10 years: what is its impact? did the science move in the directions initially anticipated?

I have included a suggested marking scheme on the next page, feel free to modify it if you wish.

## **Article Structure:**

Word length appropriate (<2500 words total)

Reference List appropriate (<25 references total)

**Engaging Title** 

Introductory sentence and paragraph engages the reader,

Introductory paragraph refers to the key paper

Introductory paragraph provides general orientation to the field and immediately gets to the point of the key paper

Use of jargon/acronyms is minimized. If field specific specialist terms are required they are defined

The motivation and context of the key paper is described

The key experiment or result is described

The other groups working on this problem are mentioned

The consequences and subsequent impact of the key paper are discussed

The final paragraph draws the article to a natural conclusion

The final paragraph mentions the future prospects of the field and their implications (if appropriate, any unanswered questions)

The final paragraph should end positively

The figure or figures are visually engaging

The figure or figures serve a useful purpose

Figure captions are appropriate, allowing the figure to be viewed in isolation and do not containing any discussion

There is a figure callout in the text before each figure

## **Writing Style**

Correct sentence structure and no grammatical mistakes

Sentences are relatively short and sentence structure is simple (ie not too many clauses/ideas in a single sentence)

Subject and verb are relatively close together and not separated by too many words

Language is concise, did not overuse qualifiers (very, often, hopefully, practically, basically, really, mostly, extremely...)

Language is concise, did not overuse prepositions or prepositional phrases (words such as in, over, of, for, at...)

Language is concise, did not overuse "stock" phrases (eg replaced "considering the fact that" with "because" or "since"...)

Language is concise, did not write in a florid or ostentatious style

Language is concise, did not use redundant phrases or descriptions

Did not contradict themselves

Avoided inappropriate clichés

Used active sentence construction (I suggested avoiding the passive voice for this task as a way to engage the reader)

Consistent tense