Writing synopses of research articles

As described in the course syllabus,

You may earn up to 5 points extra credit by writing and submitting a brief (2-3 page) abstract or synopsis of a research article chosen from a lists of approved articles or other articles approved in advance. Synopses must be submitted no later than Monday 29 Apr at 5 PM.

Your synopsis should be in your own words, written at a level appropriate for your audience (in this case, assume it is your fellow 2021 students). Work from others should be properly attributed, and plagiarism* will not be tolerated.

* “Plagiarism means the intentional unacknowledged use or incorporation of any other person’s work in, or as a basis for, one’s own work offered for academic consideration or credit or for public presentation. Plagiarism includes, but is not limited to, representing as one’s own, without attribution, any other individual’s words, phrasing, ideas, sequence of ideas, information or any other mode or content of expression.” University Policies and Procedures 6-400, 1B2c.

A good synopsis will include the following components*:

- A brief introduction to the field or subfield;
- A statement of the specific question(s) addressed;
- A brief description of the methodology used (this should not be in detail!);
- A description of the observations/results from the experiments reported;
- A brief statement of the significance of the results to the field, and any new questions posed by the results.
- A list of references cited (not web pages!), including the article being described.

Since you are limited to “2-3 pages” (~500-750 words, see formatting instructions below), you must be succinct! Surprisingly, you may find it harder writing a short synopsis than a longer paper! Good examples of these sorts of synopses can be found in the “News and Views” section of NATURE (Nature Publishing Co), one of the leading weekly science journals.

*Not included in this list is a title. If you look at some of the N&V in NATURE, you will see they typically include some catchy title to grab the readers attention. You may include a title at your discretion.

Instructions for formatting and submission:

Synopses should be ~500-750 words in length, excluding title, references, and figure legends. This corresponds to ~2-3 pages, double-spaced.

You may include no more than two figures, with suitable captions and appropriate attribution. The figures and captions can be inserted in the text where referred to, or appended to the paper following the references, at your convenience.

Synopses should be submitted in 12 point type, double-spaced, with 1” margins all around.

Synopses should be submitted electronically in PDF (preferred) or Word document formats, no later than 5 PM, Monday 29 Apr 2013. Please submit a PDF of the original article being abstracted along with your synopsis.
Optional revisions: Synopses submitted by 5 PM Monday 8 Apr 2013 will be assigned a preliminary score and returned to students with comments on how they might be improved (no later than 18 Apr). Students may then revise their synopses, and submit it for final grading by 5 PM 16 Dec, as described above. In the event that a revised synopsis isn’t submitted, the preliminary score will entered as the final score.

Students may submit one synopsis for credit. Synopses will be assigned a numerical score of 1(lowest) to 5 points (highest) depending on how well they summarize the original article, including the components listed above. This score will then be added to the total points from exams and attendance for determination of the student’s grade.
A few suggested papers:
Following is a list of articles that are approved for extra credit synopses. Some of these may also be assigned as supplementary reading. This list is by no means a comprehensive covering of cell biology. If you are interested in another topic, or would like to choose a different paper, please see me.

Evolution of cells:

Metabolism:

Nuclear envelope:

Protein targeting:

Cytoskeleton:

Cell cycle:

Mitosis: