Guidelines for written reports

Bachelor Biosciences

Valid from 6-9-2021

One important aim of our curriculum is to aid you in becoming a scientific researcher. After graduation, you are expected to be able to perform, report on, and discuss your own scientific research. Sharing your results with other scientists in your field is done via articles published in international scientific journals. In these articles, experiments that have led to a publication are described in such detail that other researchers are able to:

- understand why the experiments have been performed
- assess the validity of your conclusions
- repeat the experiments if desired

There is no fundamental difference between writing a report based on experiments performed as part of a laboratory class and writing a scientific paper for an international journal. Both make use of the same structure and layout. The writing of reports during your study is thus an excellent opportunity to prepare yourself for writing a scientific paper during internships.

In some scientific journals or fields of research, the layout of a paper can differ from what is explained in these guidelines.

The following guidelines are, unless explicitly stated otherwise by the teacher, applicable for all written reports handed in during courses within the Bachelor Biology at Radboud University.

Note that compared to the version of September 2019, important information has been added to the following sections:

- Keywords
- Introduction: research question & hypothesis
- Results: text
- Discussion: paragraphs
- Literature - References: four types of references

Prior to writing your report

Structure

The most important prerequisite for writing a well-organized and clear report is having all required data at hand; making sure to analyse and plot all of your results (drawings, graphs, tables) and listing all conclusions that can be drawn from your data. You should be able to find this information in your laboratory notebook.

The building blocks of the report will be paragraphs, each of which ideally focuses on a single topic. Each paragraph should start with a single introductory sentence and end with a concluding one. To maintain a coherent story throughout your report, it is important that the concluding sentence of one paragraph is followed in a natural manner by the introductory sentence of the next paragraph. Paragraphs are made visible by either leaving a blank line between them, or by starting each paragraph with an indent. Always choose one of either methods and consequently use this method.

Language

It should be evident that correct and proper use of language is key to writing a scientific publication. When writing a report, consider the following instructions:

a) Do not write in telegram style, but make use of full sentences. Avoid using street language or slang.
b) Try to avoid using standard abbreviations, for example vs., max. If you do wish to use a specific abbreviation repeatedly in your report, you should write down the word in full the first time you use it and add the abbreviation between brackets behind it. For example: “Herbivore-Induced Plant Volatiles (HIPV’s)”.
c) Make sure to use the correct spelling and be consequent in the use thereof. When writing in English for example, one should pick either British English or American English for the entire report.
d) Limit the use of “I” and “we”. Before, it was not common to use these pronouns (and the active tense) at all. However, nowadays it is accepted more and more. In your report, you could use “I” and “we” for example to formulate your research question and hypothesis. In the sections ‘Material and Methods’ and ‘Results’, personal pronouns should be avoided.
    - As an example: “<u>We</u> added 3 g NaCl to the solution.” (active tense)
    - Better would be: “3 g NaCl was added to the solution.” (passive tense)
e) Aim to write in a professional style and avoid making long sentences (on average 15-20 words per sentence).
f) Do not use emotional statements such as “sadly”, “unfortunately” or “a good result”.
g) Only use numbers (1, 2, 3, etc.) when followed by a unit (mg, mM, etc). In other cases, numbers are written as words (one, two, three). Numbers 20 and higher are always

written numerical. Always leave a space between numbers and units and use decimals (0.5) rather than fractions (½).

h) Scientific names of organisms are always written in italics, for example: *Escherichia coli* (note that the genus name always starts with an upper case letter and the species name with a lower case letter).

Use of verb tenses

An important aspect is the correct and consequent use of verb tenses.

a. When reporting on truths or conclusions, use the present tense (in 'Introduction' and 'Discussion').

- "Cells <u>are</u> the smallest functional units of the human body."

b. When referring to the results or conclusions of other studies ('Introduction' and 'Discussion'), the present tense could be used. The past tense could also be used.

- "Jansen et al. (2011) <u>have shown</u> that some bacteria grow better at 65°C than at 37°C."
- "Jansen et al. (2011) <u>showed</u> that some bacteria grow better at 65°C than at 37°C."

c. When the subject of the study is described, the past tense is used ('Introduction' and 'Discussion'.

- "In this study the growth of bacteria at different temperatures <u>was observed</u>."

d. When describing experiments, ('Material and Methods') and when describing results ('Results' and 'Discussion'), the past tense is used.

- "Bacteria <u>were grown</u> at 37°C."
- "Bacteria <u>grew</u> exponentially at 37°C."

e. For the interpretation of results, the present tense is used ('Results' and 'Discussion').

- "The results <u>show</u> that bacteria grow better at 37°C than at 65°C".

Describing results, interpretation of results and referring to other studies, could in this way lead to the use of several verb tenses in one paragraph ('Discussion'). For example: "On average, A was higher than B, which means that A has a greater part in the ecosystem. This is consistent with the results of Pietersen et al. (2012), who found that A is the dominant species."

(from: Malmfors B., Garnsworthy P. and Grossman M. (2004) Writing and Presenting Scientific Papers, 2nd ed. Nottingham University Press, Sheffield)

Layout

Make sure your report has a good layout. A report in which proper attention was given to layout is a good calling card, which can add to your portfolio. Choose a common font type, like Calibri, Arial or Times New Roman with a size of 12 pt.

No cover

A scientific report does not require a cover page. A title, directly followed by an abstract is preferred.

Headers

Use headers to separate different topics in your report. The introduction rarely contains headers, but the section 'Materials and Methods' often does. When a practical consist of more than one experiment, it is advised to provide each with a unique header (the names given to such headers do not need to be the same as the ones provided in the course manual, which are often labelled "Experiment 2A", etc.)

When different experiments have been labelled with headers, try using the same headers in the 'Results' section for the results obtained by the individual experiments. This makes it easier for readers to locate the experimental conditions and setup that led to the presented results.

The 'Discussion' can sometimes contain headers, but this is not always necessary. For instance, headers can be used if your 'Discussion' has more than one "theme" or "topic". An example would be a 'Discussion' in which *Behaviour*, *Gene expression* and *The limitations of the study* are discussed. Based on your results and conclusions, decide if splitting the discussion into different themes/topics makes it clearer and more pleasant to read.

Supplemental data

It is best not to add supplemental data. Relevant results should be included in the report itself. However, supplemental data are sometimes used to provide figures and/or data that do not directly contribute to the whole of the report (for example data of parameters that did not differ between treatments). By offering such information as supplemental data, they will not distract from the main message of your report, but are still available. This is often done when writing a manuscript or report with a limited amount of space.

Some scientific journals use supplemental data to include raw data from which the figures in the 'Results' section are derived. However, unless explicitly stated, lists of statistical calculations, pipetting schedules, and/or all raw data should **not** be added as supplemental data in your report. Such information should be written down in your **laboratory notebook**, so they can be presented upon request.

Plagiarism

Presenting conclusions and/or results from the work of others, without proper citation, is considered plagiarism. In addition, copying complete sentences from literature or digital sources is also considered plagiarism, even when adding a reference! The correct way to cite the work of others is to write down – **in your own words** – the main findings of a study and to **include a reference**. Plagiarism will always be reported to the Examination Board, after which they decide what penalty will follow.

Keep in mind that it is impossible to write an introduction and discussion without using references. The introduction informs the reader about existing knowledge on which your experiments are based. This information must have come from other scientific sources. Often this will be your practical handout. However, try not to limit your references to this source only, as this is not publically accessible by others and is not considered to be scientific literature. Instead, check the references used in the practical handout and read the information in those cited papers for your own report. Search engines such as Web of Science, Google Scholar or PubMed are often used to find published scientific literature.

Suggested literature

More tips on how to write your report, such as preparations for writing a report, choosing effective graphs, spelling and grammar, or suggestions for the correct usage of language, can be found in the following books:

- Knisely, K. 2002. A student handbook for writing in biology. 5th ed. Sunderland of publication. W.H. Freeman & Co Ltd. ISBN 9781319121815
- Matthews, JR & Matthews, RW. 2007. Successful scientific writing: A step-by-step guide for the biological and medical sciences. 3rd ed. Cambridge. Cambridge University Press. ISBN 9780521699273.

Writing assistance

Next to the assistance/tips from the instructor(s) of a specific course, you can also visit the "Radboud Writing Lab". A list of the services they offer can be found on their website http://www.ru.nl/writinglab/english and are free of charge for students in Nijmegen.

Layout and content of your report

A report has the following structure:

- Title
- Abstract
- Keywords
- Introduction
- Materials and Methods
- Results
- Discussion
- Literature - References

In general, all courses in the Bachelor Biology will adhere to the above listed contents. However, the importance of each of these contents will be different between courses. So pay attention to the instructions given in each course, so you know which part of the report requires extra attention.

Title

The title of a scientific report should be chosen with care, since it will be the first thing other scientists read and should entice them to read your work. A good title is short, clear, informs on the contents of your reported study, and invites to read by an active way of writing. In other words, the best title is the shortest line possible that still covers the contents of the report.

Directly below the title, give the author names, student numbers and if applicable your group/team number.

Abstract

The abstract is a short – yet complete – summary of your report, usually with the length of a single paragraph. An abstract is written after the report is finished and all results and conclusions are known. An abstract is an independent entity: it is written without references to other parts of the report or to other existing literature. A good abstract entices readers to read the full report. The word limit of an abstract is often around 200 words.

The build-up of an abstract is as follows:

- Background. In one or two sentences, give information on the existing background that resulted in the current study.
- Research question and hypothesis. In one sentence, convey the aim towards which this study was performed and your prediction of the outcome.
- Experimental design. State briefly how the research was performed.
- Results. Report the most important findings of your study.

- Conclusion. End the abstract with a concluding sentence that answers your research question or hypothesis.

Keywords

Below the abstract 3 to 6 keywords must be mentioned. Keywords can consist of one or a few words. In using these keywords and the title, one should be able to find the report in a database. The keywords have to be specific enough and should cover the content of the report. For example, the words 'brain' and 'neuron' might be words that you use in your report, but they are too generic to be used as a keyword (i.e. these words are present in almost all papers concerning neurobiology). A good way to come up with keywords is to think of what words you would use in a search engine (e.g. Google Scholar) to find your paper. Often one of the keywords is the model organism you work with. To make optimum use of the limited amount of words preferred in the title and keywords, the keywords are terms that have not already been used in the title.

Introduction

The introduction should provide the relevant background information on your study. The content will be funnel shaped: start by placing your study in a broader context, and use each new paragraph to narrow down the focus to your own study. Make sure you limit the information you provide to only that which is relevant for the current study. Extensive theoretical background information not directly related to your study should not be included. At the end of your introduction, include a research question and hypothesis.

It is important to keep your target audience in mind. You have to provide them with all necessary information to understand the rest of your report. This is partially done by referring to other publications, so the readers can delve into additional information on their own. When writing a report, you can assume the target audience to be your fellow students, with the same level of knowledge you have. So you do not need to explain what DNA, cells or proteins are, but you do need to provide background information that was not known to you before you started with the experiment.

Your research question addresses the question you are trying to answer during your research. Therefore it should be specific. On the other hand, you want to refrain from putting details in your research question that do not influence your final conclusions. For instance, if you are looking at the reproduction of *Drosophila* under two different conditions, it probably does not matter for your conclusions if you started with 10 or 20 individuals or how frequently the population numbers were counted.

Your hypothesis is the predicted answer on your research question. Your hypothesis is not the same as a guess, but it is an informed prediction. Therefore, your hypothesis is supported by the literature in your introduction.

Materials and Methods

This section describes the way the experiments were conducted. After reading, other researchers should be able to perform the same experiments. The reader should also be given enough information to be able to judge if your experimental approach is correct. Therefore you should address the research goal of the experiment, before you go into detail on the experiment itself. That way your reader can judge if your experimental set-up is valid by just reading the Materials and Methods.

When describing the experiment it is important that you write down *what* you have done, and not exactly *how* you have done it. For example, you do not need to state that you transferred liquids using a pipette. However, you do need to write down what the solutions and media you used contain. Additionally, do not refer to student-handouts, but use your own words to convey what you have done. Also include information on statistical analyses used to assess differences between your experimental groups. This is often included as a final paragraph.

In the 'Materials and methods' section, you should use the past tense when possible (see the heading 'use of verb tenses' for examples). Avoid making a bulleted list as you would in a work protocol, but create a coherent text which conveys what you have done.

- Incorrect: Transfer the cells to an agar plate. Incubate for 48 hours at 37˚C. Wash the cells with isotone saline solution.
- Incorrect: Culture cells for two days in serum rich medium and wash them two times with an isotone saline solution.
- Correct: Cells were cultured at 37˚C for two days in serum rich medium and were subsequently washed twice with an isotone saline solution.

It is uncommon to include (chemical) calculations or pipetting tables in your 'Material and methods' section (these should be included in your laboratory notebook). In most cases, it is unimportant how many microliters stock solution was diluted with how many microliters of water. Instead, write down the used volume and its concentration. The used concentration (if possible) is written down in Molar, for example: 10 mM or 10 mmol/l

- Incorrect: 80 microliters of a NaCl stock solution (100 mM) was added to 720 microliters of demi-water. Next, 200 microliter of the diluted NaCl solution was added to the samples.
- Correct: 200 microliter 10 mM NaCl was added to each sample.

Statistics

As stated above, in the 'Material and methods' section one paragraph should be devoted to the statistics used. Here, you describe what statistical tests you chose to analyse your sets of

data. If you used multiple approaches for your data, explain which approach was used for each data set. An example:

- "Gene expression data were checked for normal distribution by a D'Agostino-Pearson omnibus normality test. Normally distributed data were compared using a Student's t-test (using a Welch's correction in case of unequal variances). Not-normally distributed data were compared using a Mann-Whitney U test. In all cases, tests were two-tailed with significance level α=0.05."

Results

Start your 'Results' section with an introductory sentence in which you briefly repeat the research question. In the rest of the 'Results' section you present your results using figures (graphs or drawings) and tables, interspersed with short paragraphs of text that guide readers from one experiment to the next. Provide each figure and table with a number, making it easier to refer to them.

When presenting your data, chose either a table or graph – never present your data in both formats. The most common choice is a graph as this clearly and directly shows your results. Yet, when the data cannot be easily presented in a graph, you can decide to present them in a table.

Text

A figure or table that is not referred to in the text, should not be included in your report. A reference could be part of the sentence: "Figure 1 shows that… ". But the reference could also be placed between brackets within or at the end of the sentence: "A is higher than B (Fig. 1)." Do not use phrases as "see figure below" or "the figure on the next page".

In general, one paragraph is written per figure or table. Start these paragraphs with an introducing sentence in which you state what was studied. Continue with a description of the results presented in that figure or table. Do not explain every detail in the figure or table, stick to the main findings. These main findings are conclusions that you can directly derive from the table/graph (e.g. the relation between 'X' and 'Y' in the graph or the significant difference between 'A' and 'B'). However, the 'Results' section does not include biological interpretations (e.g. 'A' is higher than 'B', because …). The biological interpretations of your results are restricted to the 'Discussion' section.

End each paragraph, when possible, with a concluding sentence. Avoid including results from other figures or tables, this is done in the 'Discussion' section. When you have a series of experiments that are linked or closely related, you can start each paragraph with a sentence that links these experiments. This way, your story becomes a coherent and single entity.

Figures

Place the independent variable – known as the treatment (such as concentration, time, and temperature) – on the x-axis. This means that the dependent variable – known as your readout (such as absorbance, oxygen concentration, number of germinated seeds) – is placed on the y-axis. Figures should be comprehensible without reading the main text.

a) Include the parameter and its unit along the axis.
    - For example: Oxygen concentration (mg/l), Time (seconds) or Germinated seeds (percentage of total).

b) Plot the labels of the axis with a constant interval and the correct spacing (not: 1-2-5-6-8-27). Avoid using too many numbers on an axis.

c) Provide, if applicable, each figure with a key explaining the symbols used. The key can be included in the legend of the figure or added separately in the figure itself.

d) Provide each figure with a legend that is situated <u>below</u> the figure. Start the legend with the figure number, followed by a title explaining the experiment and data presented. A figure therefore <u>never</u> has a title above it. The reader should be able to understand the legend and the figure without having to read the main text. Therefore, include information on how your data is presented (mean values, median values), what error bars were used (standard deviation (s) or standard error of the mean (SEM)), what P-values are represented by the asterisk (* $P<0.05$) and the number of replicates per group (N) and the number of individuals per group (n).
    - For example, in a single experiment three groups were used per treatment (N=3) and each group included 6 individuals (n=6). Keep in mind, that ‘n’ is NOT used to indicate a duplo or triplo measurement. Duplo/triplo measurements are of a single sample and are used to reduce any measuring errors that may exist. The mean value of a duplo/triplo is used as a single data point in your analysis (n=1).

An example of a correct graph (Figure 1) and an incorrect graph is given (Figure 2).

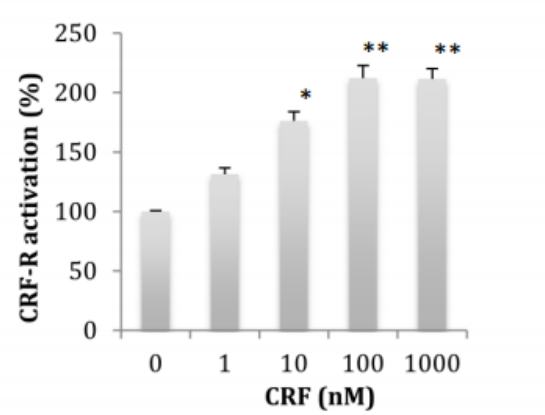

Figure 1 | Activation of the CRF-receptor (CRF-R) by corticotropin-releasing factor (CRF). Values are plotted as mean plus standard deviation. Significance was tested against basal only (0 nM CRF) and accepted at **P*<0.05; ***P*<0.01. *n*=4 per concentration.

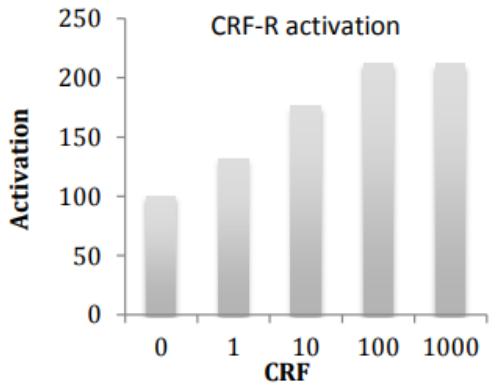

Figure 2 | Activation by CRF

Tables

When adding your data, make sure you properly round down/up, and use the correct number of significant figures. Similar to graphs, tables should be comprehensible without reading the main text.

a) Include the parameter and unit for each column.

b) Provide each table with a number (tables and figures are numbered separately) and a legend that starts with a title sentence and position this above the table.

c) Information on items included in the table (significance, number of individuals) are written below the table via footnotes (so not in the legend like with figures).

An example of a correct table (Table 1) and an incorrect table (Table 2) is given.

Table 1 | Average growth (± standard deviation.) in cm for plant A and plant B after treatment with growth hormone (GH).

	Growth (cm)	
GH (mM)	**Plant A**	**Plant B**
0	3.4 (0.2) [a]	1.4 (0.1) [a #]
1	4.1 (0.3) [b]	1.5 (0.3) [a #]
10	5.4 (0.2) [c]	2.5 (0.2) [b #]
100	6.7 (0.1) [d]	3.0 (0.3) [b #]

[a-d] values not sharing the same letter are significantly different (P<0.05). Assessed over concentrations within a single plant. n= 6 per concentration.

[#] shows significance (P<0.05) between plants at each concentration. n=6 per plant

GH	Plant A	Plant B
0	3.4	1.4
1	4.1	1.5
10	5.4	2.5
100	6.7	3.0

Table 2 | growth of plant A and plant B

Statistics

Where applicable, statistical differences are included in the figures and tables. This can be done using an asterisk (*). The common rule is to represent higher significance with more asterisks (* $P < 0.05$, ** $P < 0.01$ and *** $P < 0.001$). When comparing three or more groups, another approach could be to use letters. In this case, groups sharing the same letter are not significantly different (see for an example Table 1). Include the chosen level of significance (e.g. α=0.05) associated with these letters in your figure legend or table footnotes.

Additional statistical information is mentioned in the text of the 'Results' section. To make the information complete, you mention the statistical methods used. This is not obligatory though, because you showed this before in the 'Material and Methods' section. It is however required to list the values of the used distribution (e.g. the F-value, t-value, U-value, etc.), the degrees of freedom (d.f.) and the P-value. The degrees of freedom could be shown in combination with the value of the used distribution (e.g. F(2,24)=6.789), or separately (e.g. d.f.=3). Given are two possibilities of getting the same statistical message across:

- "A Tukey *post-hoc* analysis (α=0.05) following an ANOVA ($F(2,24)=6.789$; $P=0.003$) showed that an increased salt concentration in the substrate negatively affected the growth of crop B (P<0.05) and crop C (P<0.005) compared to crop A (control)."
- "Increasing the salt concentration in the substrate significantly affected the growth of the tested crops (ANOVA; $F(2,24)=6.789$; $P=0.003$). Compared to crop A (control), growth of the crops B (P<0.05) and C (P<0.005) was significantly reduced (Tukey's test, α=0.05)."

Discussion

The 'Discussion' is perhaps the most important part of a report because this is the section where everything comes together (the different experiments, their results and their implications). In the 'Discussion', results and conclusions reported in your own report ('Results' section) will be explained and placed in a broader context by linking them to each other and to literature

Paragraphs

The first paragraph of the 'Discussion' section is used to repeat the research question and hypothesis, followed by a summary of the most important results. Avoid repeating all your results in detail. An easy way to do this, is to use the concluding sentences at the end of the paragraphs in your 'Results' section as a basis. In the following paragraphs, you discuss your results. It is important to place your results in a broader context: what do your results mean for the (scientific) world and to what future experiments do your results lead? **In general, placing your results in a broader context should take up most of your 'Discussion' section.** Do this by:

- Giving biological interpretations to your results. For instance: What could it mean that 'A' is significantly higher than 'B'? What could cause it? Use theory found in literature to explain your findings.
- Explaining the relation between the results within and between different graphs and tables. This is relevant when you conducted a series of experiments and/or analyses. Do your results support or contradict each other? Could you use the results from one figure to explain the results in another?
- Explaining the relation of your results to findings in literature. Does other literature support or contradict your findings?
- What are the implications of your results and conclusions on the scientific field and/or society?
- What new questions arise due to your results and conclusions?

In your discussion, you should not repeat statistics from the result section (e.g. the P-values). You can just state the conclusions from your statistical tests (e.g. 'A' is higher than 'B') when relevant.

Unexpected results

- **Don'ts**: The 'Discussion' is not meant to discuss negative results that have a practical reason (an 'error discussion'). Such discussion should be included in your laboratory notebook (to avoid future mistakes). When in doubt about the proper practical handling, experiments are normally repeated. However, during a practical course, this is (often) not possible. Instead, pooling data from multiple groups is used to counter possible practical errors. Therefore, statements such as: "the experiment should be repeated before we can draw a conclusion" should not be used.

- **Do's**: Often results do not (fully) meet your hypotheses, but there is no doubt about proper practical handling. If this is the case, you should use the 'Discussion' to formulate new hypotheses and you should always use existing literature that may explain your observed results.

Future studies

Future studies are proposed in the 'Discussion'. This mainly occurs when your results bring forth more questions and new hypotheses. When proposing new studies, it is not sufficient to state "new studies are necessary". Be specific and mention what type of studies you propose (which aspect, which mechanism, how could they be performed and what answers they might supply). At times, a separate paragraph is used to list "Future studies", but it is more common to mention future studies throughout the 'Discussion' section.

Concluding paragraph

The final paragraph of the 'Discussion' is often a concluding one, which describes to what extend the results have answered the research question. Discuss if the hypotheses that you formulated in the 'Introduction' section turned out to be correct and if all results can be explained. Never end your final paragraph with "more research is necessary", instead end positive and with something your results have shown.

Literature – References

All literature you refer to in your report needs to be included in the reference list. Likewise, all literature in your reference list, needs to be included in your report in the form of a citation/reference. Strict and detailed rules exist on how to properly cite literature and those rules may differ between scientific journals and publishers. These differences are mostly minor and involve the use of **bold**, *italics*, positioning of the publication year, etc.

As an easy tool, you can make use of EndNote, which is installed on all the computers within the Faculty of Science. With EndNote it is easy to insert citations into your text and the programme will automatically format and provide a reference list at the end of your document.

For reports written in the courses for the Bachelor Biology we use the reference and citation style (CSE N-Y in Endnote) as described hereafter.

For in-text citations in the report, you use the first author name and year of publication. Note that, when only two authors exist on a publication, both names are given in the citation. When a reference has three or more authors, we use only the first author name followed by "*et al*."

- "A large breakthrough in unravelling the DNA structure was achieved by Watson and Crick (1953)"
  "Phosphodiesterase catalyses the breakdown of cAMP (Randall *et al*. 2002)".

Four types of references

a) *Journal article*: Authors surname and initial(s). Publication year. Title. Name of the journal (complete or abbreviation but keep it consistent throughout your reference list). issue/volume: first and last page number

- Reference list: Watson JD, Crick FH. 1953. Molecular structure of nucleic acids; a structure for deoxyribose nucleic acid. Nature. 171: 737-738.
- In text citation: (Watson and Crick 1953)

b) *Book*: Authors surname and initial(s). Publication year. Title of the book. Edition. City of publishing. Publisher.

- Reference list: Randall D, Burggren W, French K. 2002. Eckert Animal Physiology. 5th ed. New York. W.H. Freeman & Company.
- In text citation: (Randall et al. 2002)

c) *Chapter from a book*: Authors and initial(s) of the chapter. Publication year. Title of the chapter. In: Authors and initial(s). Title of the book. Edition. City of publishing. Publisher name.

- Reference list: Shears SB, Hughes PJ. 1989. The synthesis of inositol polyphosphates in rat liver by 5- and 6-kinase activities. In: Roberts J, Kirk C, Venis M. Hormone Perception and Signal Transduction in Animals and Plants. Cambridge. The Company of Biologists Ltd.
- In text citation: (Shears and Hughes 1989)

d) *Website*: authors surname and initial(s) or website. Publication year or copyright. Title of the text. Title of the home page [online]. Place of publication: Publisher; [date cited]. Available from: http://Website URL [accessed date].

- Reference list: Salerno F. 2018. How memory T cells stay silent when their help is not needed. Sanquin [online]. Amsterdam: Sanquin; [16 Feb 2021]. Available from: https://www.sanquin.org/news/2018/jul/how-memory-t-cells-stay-silent-when-their-help-is-not-needed?index=0.
- In text citation: (sanquin.org 2018)

Note that you should always try to read and cite the original source of the information (the primary source). However, you should never cite a source that you did not read. If you cannot read the primary source (e.g. because you have no access to the paper or if the paper is in a foreign language) you can cite the secondary source. If you do so, it should be clear from the in text citation that it was based on another source, for instance:

- (Darwin 1871, as cited in de Waal 2007)
- As de Waal (2007) describes the results from Darwin (1871)

In your literature list you can then cite the secondary source (in this case; de Waal 2007).