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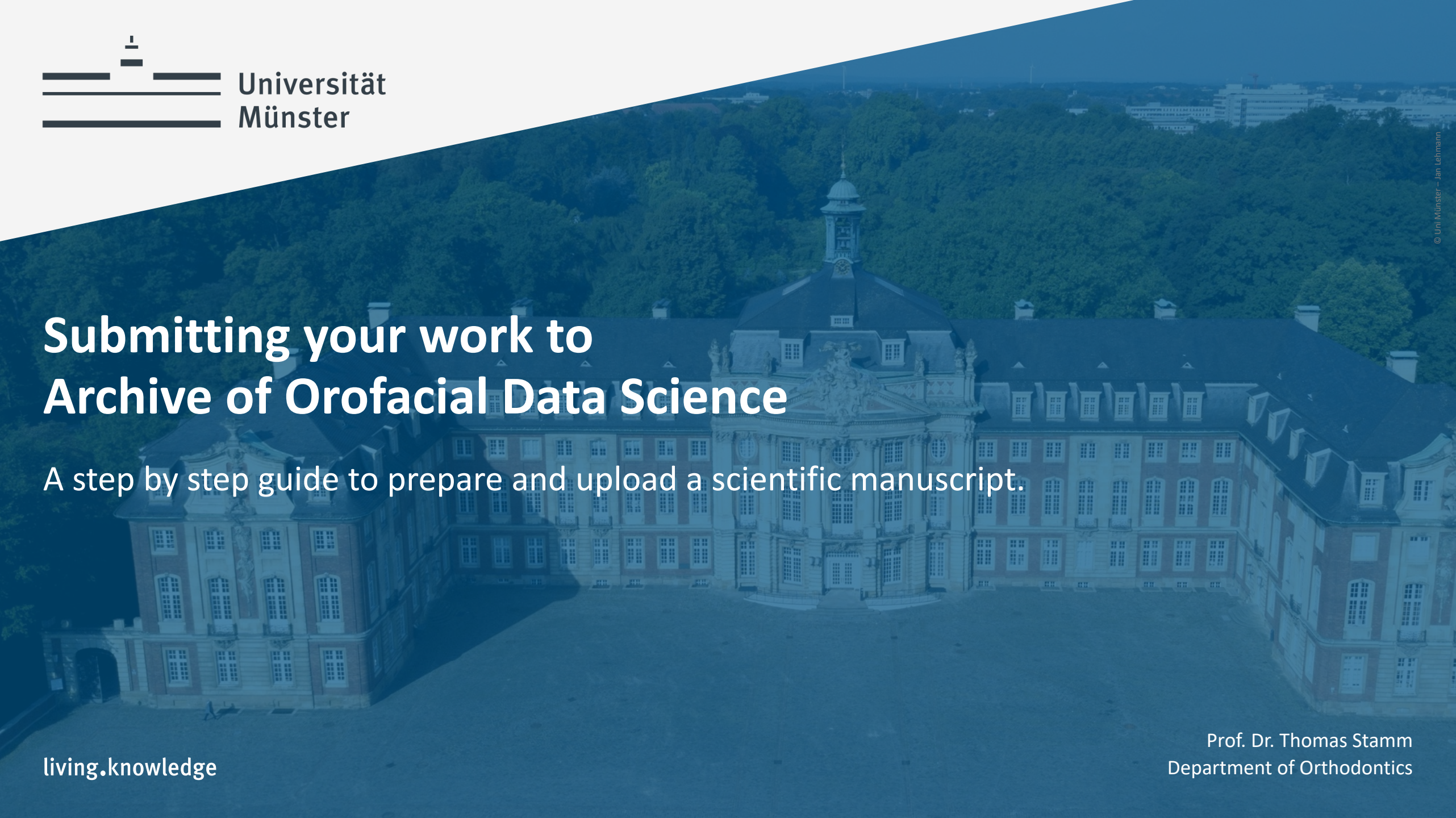

Submitting your work to Archive of Orofacial Data Science

A step by step guide to prepare and upload a scientific manuscript.

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Prof. Dr. Thomas Stamm
Department of Orthodontics

Universität Münster

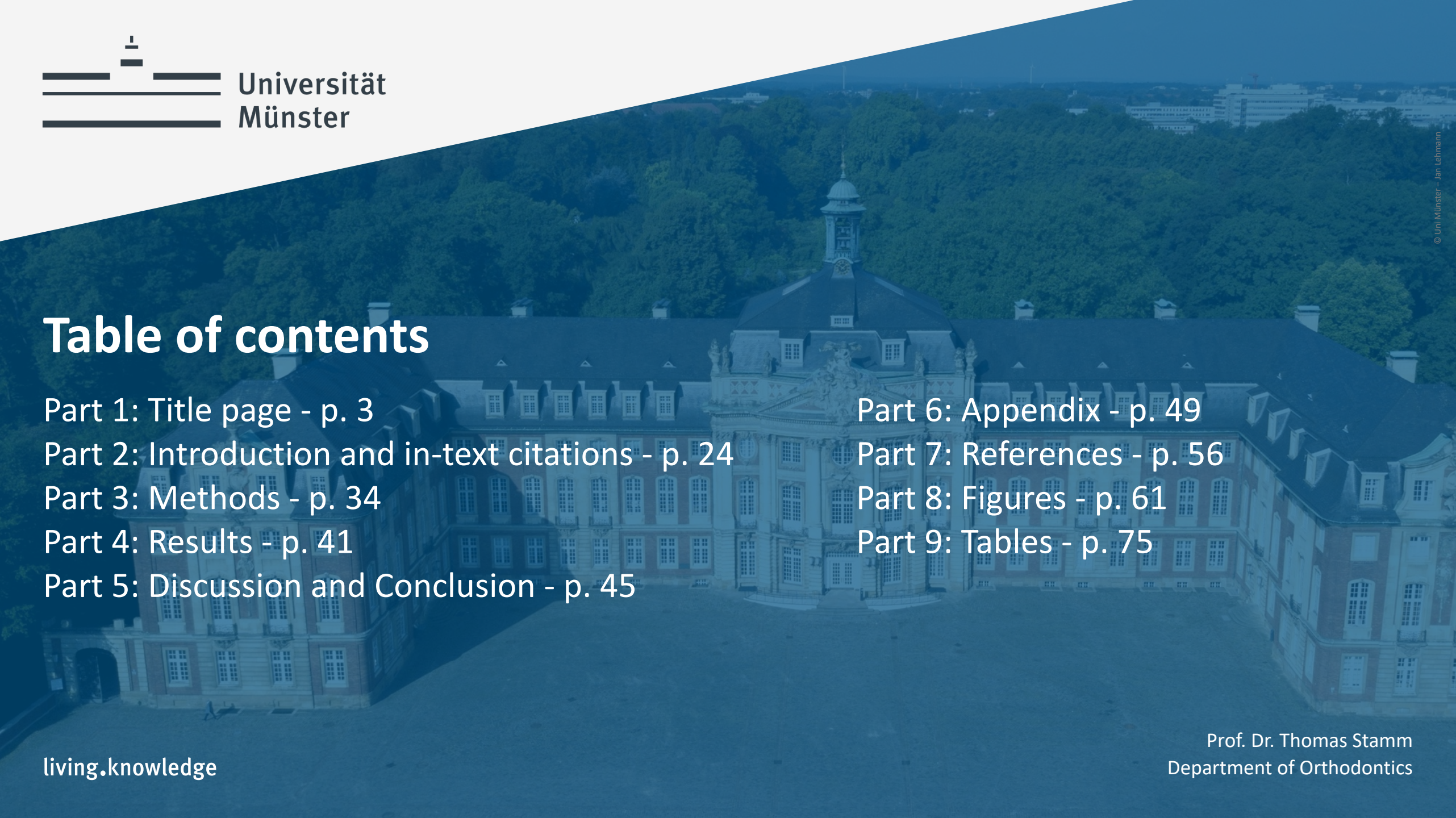

Table of contents

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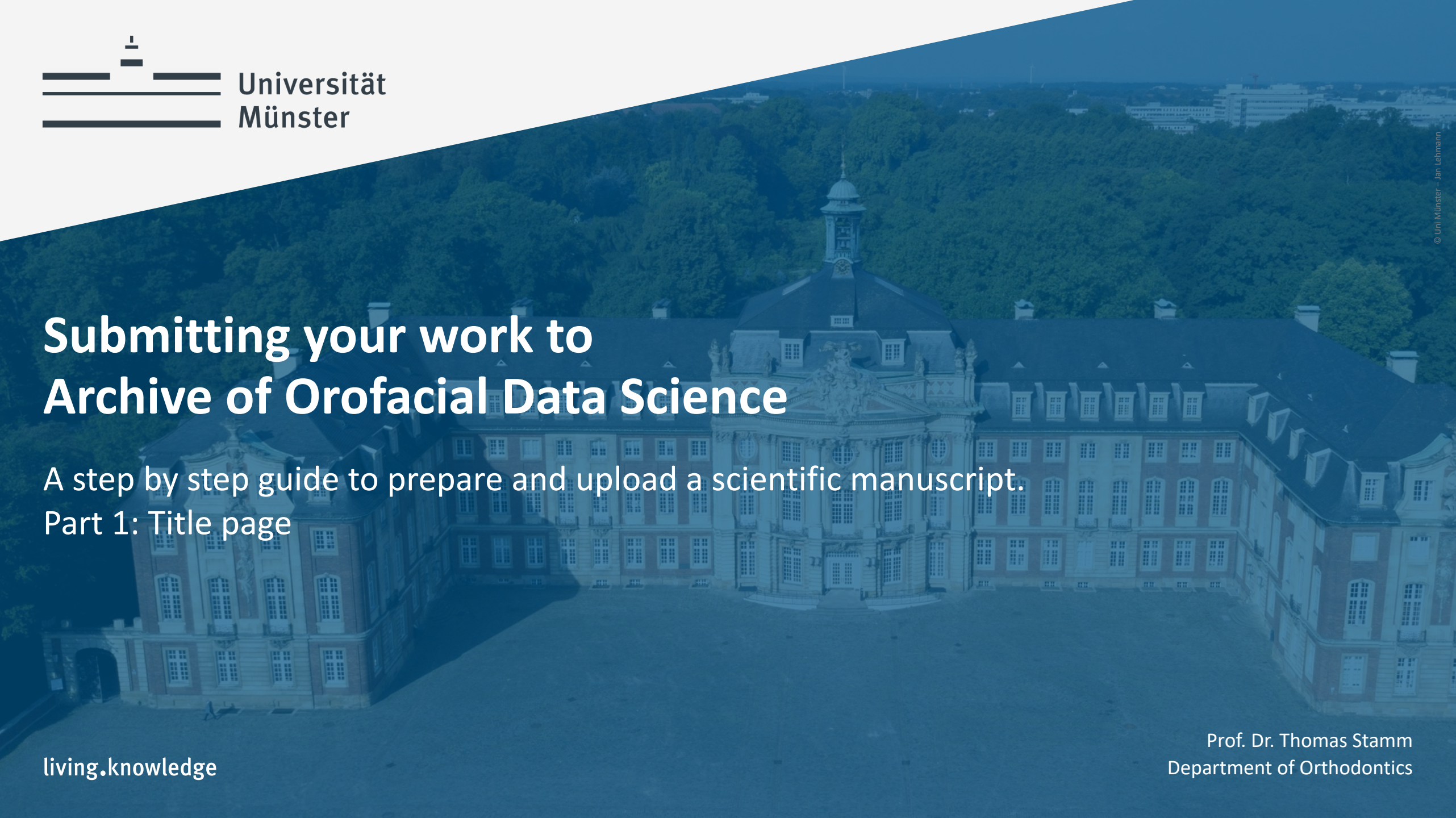

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Submitting your work to Archive of Orofacial Data Science

A step by step guide to prepare and upload a scientific manuscript.
Part 1: Title page

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LaTeX - our preferred typesetting system for manuscript preparation

Publishing in **Arch Orofac Data Sci (AODS)** is free, so the journal uses a robust typesetting system that minimizes the manual effort of the layout process.

You do not have LaTeX expertise? - No problem!

We understand that not all authors are familiar with LaTeX, and that's perfectly fine!

- You do not need to be a LaTeX expert to submit your work to **Arch Orofac Data Sci**.
- We have provided a LaTeX template that is simple to use, even for those with no prior LaTeX experience.
- The template is designed to be user-friendly, with clear instructions and placeholders for your content.

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How to work with our LaTeX template?

You have prepared your manuscript with a word processor like MS Word? - That's perfect!

- You can use your MS Word file to copy text and paste it into the template.
- **What is the template?**
  - The template is a folder with simple text files which can be opened and edited with any simple text editor like Notepad, WordPad (Windows), TextEdit (Mac OS) or Gedit (Linux) and also with MS Word.
    - But we **do not** recommend to edit the template with MS Word, because of the different underlying formatting codes used in MS Word and LaTeX.
      - We therefore recommend the LaTeX editor **Overleaf** (see next slide).

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Overleaf - the recommended LaTeX editor for Arch Orofac Data Sci

Overleaf is an online platform that lets you create documents using LaTeX, a typesetting system commonly used for academic and technical writing. It automatically takes care of the behind-the-scenes processing to create a nicely formatted document.

- Overleaf is **free of charge!**
- Overleaf is platform independent.
- Overleaf is working in your browser, you do not need to download and install software.
- Overleaf is the best tool to work with the template of **Arch Orofac Data Sci**.

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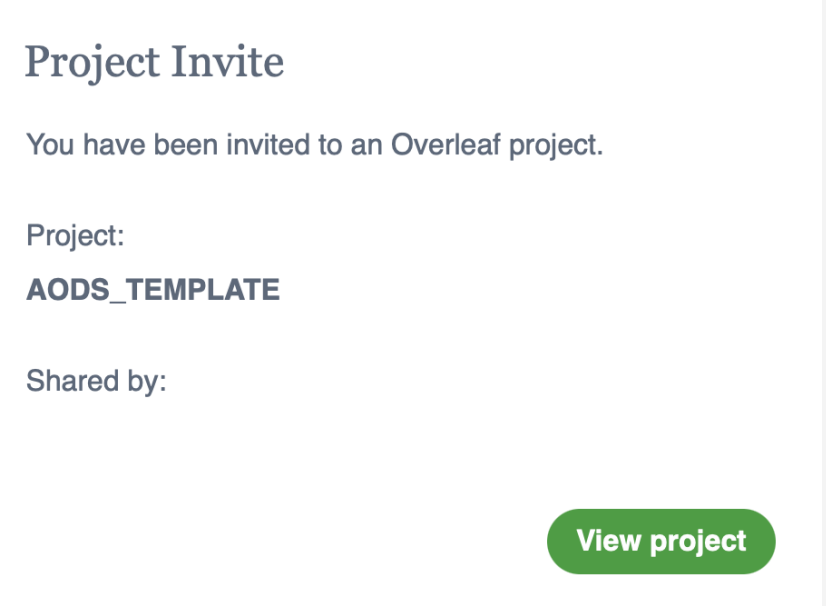
There are two options to work on your publication with Overleaf

Overleaf enables the authors and the editorial team to work together on a manuscript via the Internet.

- First create an account in Overleaf. See next slides for details.
  Then there are 2 options:

  1. Invitation from the **AODS** editorial team. You will receive an invitation by e-mail (see image on the right).
     Click on "View project" and the project containing the **AODS** template will open in Overleaf.

  2. The **AODS** editorial team will send you the **AODS** template by e-mail and you upload the project by yourself.



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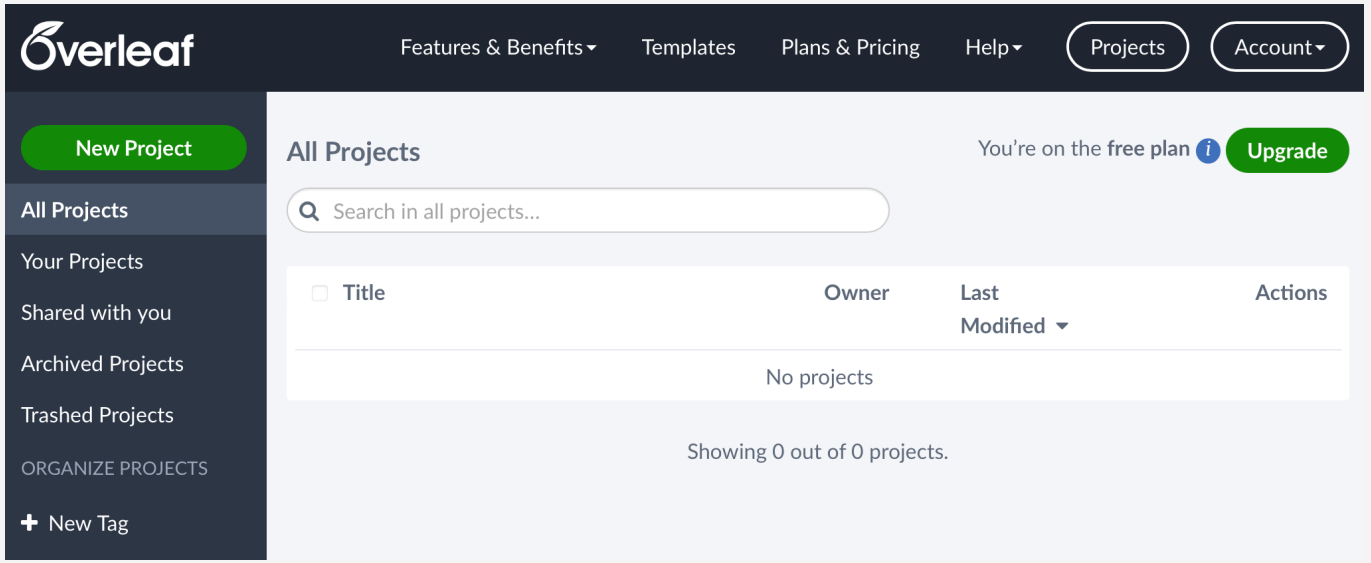
Here's how to create an account in Overleaf

Go to the Overleaf website (https://www.overleaf.com)

- Click on "Register" or "Sign Up" to create a new account.
- After creating your account, log in to Overleaf using your username and password.
- You will see your empty project dashboard as shown in the picture on the right.



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Option 2: How to upload the LaTeX template to Overleaf

You will receive the **Arch Orofac Data Sci** LaTeX template via download from the journal's website or via e-mail from the editorial team.

- The template comes as a zip compressed file.
- **What is a zip file?** A ZIP file is like a digital backpack that helps you bundle and compress multiple files or folders into a single, smaller package. It's like putting things in a virtual bag to make them easier to carry or share. When you "zip" files, it reduces their size, making it faster to send them over the internet or save space on your computer.
- Don't think about decompressing or compressing your files. Overleaf does all the work.

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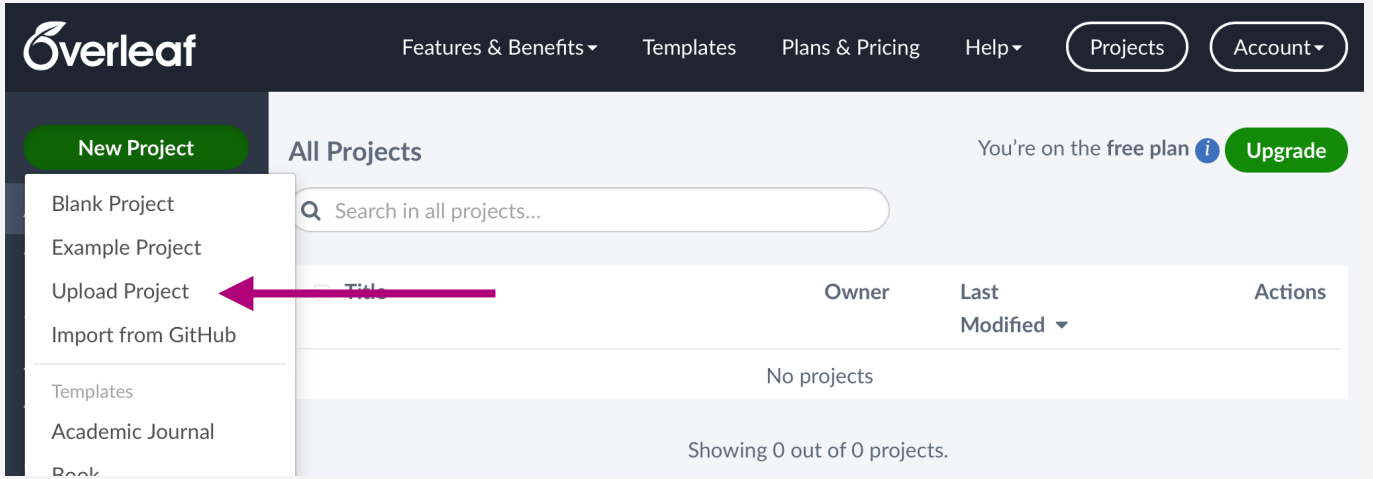
Option 2: How to upload the LaTeX template to Overleaf

Go to the Overleaf website (https://www.overleaf.com)

- Click on "**New Project**" then on "Upload Project".
- A window appears where you can upload the LaTeX template in one of the following ways:
  - **Select .zip file:** Select the Template.zip file from your computer.
  - **Drag:** Simply drag the .zip file from your computer and drop it into the window.



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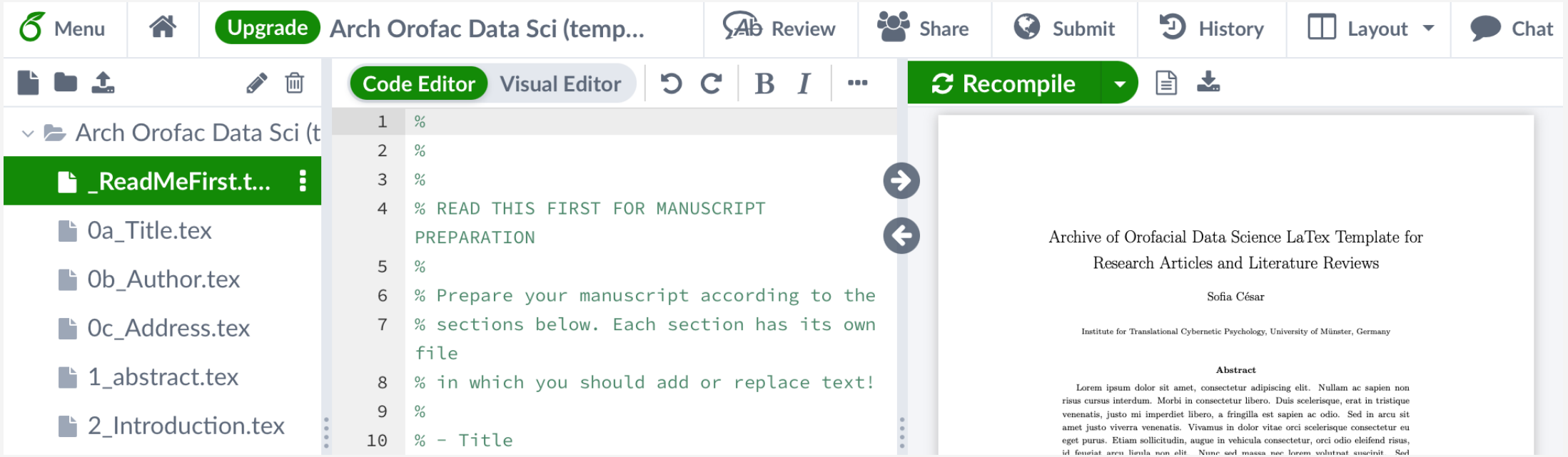
Congratulation! You have successfully created your first LaTeX project

You are now in the Project dashboard and normally three columns are displayed:

1. The template folder **2. The Editor** **3. The compiled PDF**



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Overleaf Project dashboard

Before we fill the template, here are a few words about the Project tools (menu buttons). You do not need the tools in the top of the dashboard like "Review", "Share*", "Submit", History", "Layout" or "Chat". The only useful tool could be "Layout" to switch between Editor, PDF or both. Important are:

- **The template folder.** Here are all necessary files for typesetting your manuscript. Please click on "**_ReadMeFirst.tex**". This is our starting point. As you may see the individual sections of the manuscript are divided into separate files. The content of the files is displayed in:
- **The Editor.** Here we paste our prepared text (e.g. from a MS Word file) by replacing the placeholders. As you can see **The Editor** has coloured text to distinguish between "code" and "text". Before we start entering our title page, next are a few words about color coding.

*In the final stage of manuscript submission you may share your project with the editorial team, but more on that later.

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Overleaf Editor - Color coding

Color coding in a LaTeX editor is like giving different colours to different parts of your writing to make it easier to understand and edit. It's a bit like using highlighters when you study. For the sake of simplicity, the template files of **Arch Orofac Data Sci** are structured in such a way that you only have to enter text, but no code. Nevertheless, it is useful to know a few commands.

- The **%** (percent) sign is used to add comments in the Editor. Anything following a **%** on a line is treated as a comment and is ignored by the LaTeX compiler. This means that the text after **%** won't appear in the final document. The **%** (percent) sign is used to give you additional information in the different files without appearing in your final manuscript PDF.
- What if you need the percent sign in your text? For this purpose, a **\ (backslash)** is placed in front of **%**, like **\%**. So much for that at this point. We'll talk more about special characters later.

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Overleaf Editor - Color coding

- The **backslash ** is a special character used to introduce commands. Commands tell the system how to format and display text (like **\%**). When you see a **backslash** followed by one or more letters or symbols, it usually represents a command. The syntax is normally **\command**{options}.
- Please **DO NOT edit or delete LaTeX commands** in the template files. The template LaTeX files are structured in such a way that you do not have to enter any LaTeX code. Tables are an exception, but more on this later.

Let's go ahead and generate your first title page.

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Generating the Title page for Arch Orofac Data Sci - 1 - Title

In your Overleaf Project click on the left side "**0a-Title.tex**".

- In the editor the content of the file is displayed. At first glance, you will see many explanatory **comments** (starting with a **% sign**) in **green**.
- Replace the **black text** placeholder with your own title by manual typing or by copy and paste from your MS Word document.
    - **IMPORTANT:** If you copy text from MS Word please ensure that you paste **PLAIN TEXT**. **PLAIN TEXT** refers to text that consists only of basic, unformatted characters without any special formatting such as bold, italics, colours, or font changes. **PLAIN TEXT** is the simplest form of text representation.

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Generating the Title page for Arch Orofac Data Sci - 2 - Author name(s)

- After editing your title you do not need to save anything. Overleaf does all the work.
- Now, go to the right side of the dashboard to the PDF column and click on "**Recompile**" ...
  - Voila, your title has been compiled! OK, that was easy, wasn't it?
  - Now comes your name or the names of the authors.
    - Go to the the Template folder on the left and click on "**0b_Author.tex**" and type in your name. As you can see, the procedure is identical to the title. Non-English names can be complicated due to **special characters**. Try writing in **PLAIN TEXT** first. This has advantages for English-language databases such as Pubmed, WOS or Google Scholar.

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Generating the Title page for Arch Orofac Data Sci - 3 - Affiliation(s)

Let's continue with your affiliation. Go to the left Overleaf column and click on "**0c_Affiliation.tex**".

- 0c_Affiliation.tex contains affiliation examples. The normal structure is "institution or company, city, country" (e.g. Doe Dental Clinic, New York, USA). Do not insert street names or Zip code here. Details of your address for correspondence (including e-mail) will be mentioned at the end of your manuscript under "Author notes".
- **IMPORTANT:** The address is enclosed by **comments (%)**, i.e. there must **not be a blank line** above and below the address (as with the name or title, for example).
- If you are the only author, you can skip the next 2 slides.

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Generating the Title page for Arch Orofac Data Sci - 4 - Affiliation cont.

- **IMPORTANT:** The address is enclosed by **comments (%)**, i.e. there must **not be a blank line** above and below the address (as with the name or title, for example).
    - If there are **different authors with different affiliations or addresses** please proceed as explained in the comments:
        - In **0b_Author.tex** separate the names with a comma and a space: Sofia Miles, Edwin Yen, Li-Hui Lacey.
            - To identify different addresses, use the following code ({^number}) after the names:
                - Sofia Miles{^{1}}, Edwin Yen{^{2}}, Li-Hui Lacey{^{3}}
                - {^number} is the LaTeX code for superscript.

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Generating the Title page for Arch Orofac Data Sci - 5 - Affiliation cont.

- If there are **different authors with different affiliations or addresses** please proceed as explained in the comments:
    - In "**0c_Address.tex**" separate the affiliations or addresses with a semicolon and a space:.
    - To assign the authors to the correct institutions, place {^number} as used for the author names in front of the affiliation name (without spaces).
        - **Example:** {^{1}}Institute for Translational Cybernetic Psychology, University of Münster, Germany; {^{2}}Caltech, 1200 E California Blvd, Pasadena, CA, USA; {^{3}}Meditech Hospital, 456 Tech Boulevard, Bangalore, Karnataka, India

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Generating the Title page for Arch Orofac Data Sci - 6 - Abstract

OK, the title page is almost done. Now let's turn to the abstract.

- In your Overleaf Project click on the left side "**1_Abstract.tex**".
- Generating the abstract is relatively simple. The only difficulty is to reduce the content to a **maximum of 250 words**. Why 250 words? Here are some thoughts:

Abstracts are often used for indexing and searching in databases. Word-limited abstracts help in creating a standardised and efficient system for cataloging research. Researchers, especially those pressed for time, can quickly identify relevant articles within a vast pool of literature, streamlining the literature review process. Therefore, try to distill the essence of your research into a compact form, prioritise information and ensure that only the most essential details are included. It is scientifically acceptable to use tools like ChatGPT for rephrasing as long as the content is not changed.

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Generating the Title page for Arch Orofac Data Sci - 7 - Abstract cont.

Special characters such as < or ± or ≥ or % are particularly important for word limitation. In this case, LaTeX is disadvantageous because the encoding of the special characters disrupts the flow of writing. However, certain rules must be followed for these characters. Here are a few examples but don't despair, there is a simple solution.

Text	LaTeX code
5 < 10	$5 < 10$
5 ≤ 10	$5 \leq 10$
4.5 mm ± 2.2 mm	$4.5 \, \text{mm} \, \pm \, 2.2 \, \text{mm}$
p ≤ 0.001	$p \leq 0.001$

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Generating the Title page for Arch Orofac Data Sci - 8 - Abstract cont.

Special characters and mathematical expressions - the simple solution

If you have a sentence like this: *A study was conducted on 20 patients divided into the miniplate/FM group (nine patients aged 9.5 ± 1.4 years) and the RME/FM group (11 patients aged 9.2 ± 1.4 years).*

- **ChatGPT prompt: Convert the following sentence to Latex code:** A study was conducted on ...
- **Answer:** Certainly! Here is the LaTeX code for the given sentence:
  - A study was conducted on 20 patients divided into the miniplate/FM group (nine patients aged 9.5 ± 1.4 years) and the RME/FM group (11 patients aged 9.2 ± 1.4 years).
  - Copy the produced code and paste it into your text.

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Generating the Title page for Arch Orofac Data Sci - 9 - Abstract cont.

If you use Lage Language Models (LLMs) like ChatGPT or Google Bard for LaTeX mathematical expression conversion, please use it sentence by sentence. LLMs can make mistakes. Paste your text in fractions. Replace individual sentences with the generated LaTeX code and check the PDF. Only then paste further text.

- Divide the abstract into **AIM**:, **METHODS**:, **RESULTS**: and **CONCLUSION**: and put the words in **CAPITAL** letters. Do not make paragraphs! The only possible structure is (if enough vertical space):
  - to start METHODS (not AIM), RESULTS and CONCLUSION with a new line. To do this put 2 **backslashs** in front of the words: \ \METHODS, \ \RESULTS and \ \CONCLUSION
- The lower third of the title page cannot be changed and is edited only by the editorial team.

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Summary - Title page

The most important and meaningful page of the manuscript, namely the title page, has now been composed. Serving as a figurehead, it imparts paramount details regarding the scientific work, encompassing the title, authorship, and condensed content. This critical information is destined to become an integral component of searchable medical databases, affording fellow scientists a foundational resource for their own research pursuits.

What have you learned so far?

- To work with Overleaf, a free online LaTeX editor
- Typesetting a scientific text using LaTeX
- Your first LaTeX commands (if you have become curious about LaTeX, visit Overleaf's Help)

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Submitting your work to Archive of Orofacial Data Science

A step by step guide to prepare and upload a scientific manuscript.
Part 2: Introduction and in-text citations.

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Prof. Dr. Thomas Stamm
Department of Orthodontics

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Arch Orofac Data Sci - Introduction section - 1 - Citations

When we write the introduction, we also have to talk about **citations**.

Citing sources in scientific writing is important because it shows where you got your information and ideas.

- It's like giving credit to the people who did the research before you.
- By doing this, you let others know what work has already been done and how your work fits into the bigger picture of scientific knowledge.
- It also helps readers check the sources to understand and trust the information you're presenting. So, citing sources is a way of being fair, honest, and clear in your writing.

Arch Orofac Data Sci recommends to use the APA style referencing system.

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Arch Orofac Data Sci - Introduction section - 2

In your Overleaf Project click on the left side "**2_Introduction.tex**".

- As in the previous files, you will first see some informal **comments**. Among other things, that the introduction should first be inserted in **PLAIN TEXT**.
- Here, too, we recommend inserting paragraph by paragraph first and then (if necessary) using special LaTeX characters afterwards.
- We also recommend that you do not divide the introduction into subheadings, but separate new thoughts or lines of argumentation by paragraphs. Scientific articles should be written simply and focused and not prosaically. It is sufficient if the introduction briefly describes what is necessary to understand the study.

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Arch Orofac Data Sci - Introduction section - 3

If it is unavoidable to subdivide the introduction further, then here comes your next **LaTeX command**.

- To generate a subheading for the introduction use the following command:
- \subsection{write your subheading between these curly braces}
    - You don't have to worry about numbering, LaTeX takes care of everything.
- A good introduction ends with a paragraph that begins as follows: "The aim of this paper is ... " where you formulate the objective of your work.
- Figures? Tables? - Yes, you can use both in the introduction but more on this later.

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Arch Orofac Data Sci - Introduction section - 4 - Citations

Let us now return to the **citations** and the **bibliography** or **references**. Please use the below mentioned in-text citations in Harvard style. If you have found an interesting source for your article, this reference should be copied directly into a list. Maintain this list outside Overleaf, we create the bibliography at the end.

in-text citation	in-text citation
Author's Name: (Smith, 2020).	Direct Quotations: (Smith, 2020, p. 45).
Two Authors: (Smith and Brown, 2019).	Three or More Authors: (Smith et al., 2021).
Smith et al. (2021) argue that ...	No Author: ("Study on Climate Change," 2018).
Multiple Authors: (Smith, Johnson, and Brown, 2019).	Multiple Sources: (Smith, 2020; Johnson, 2019)

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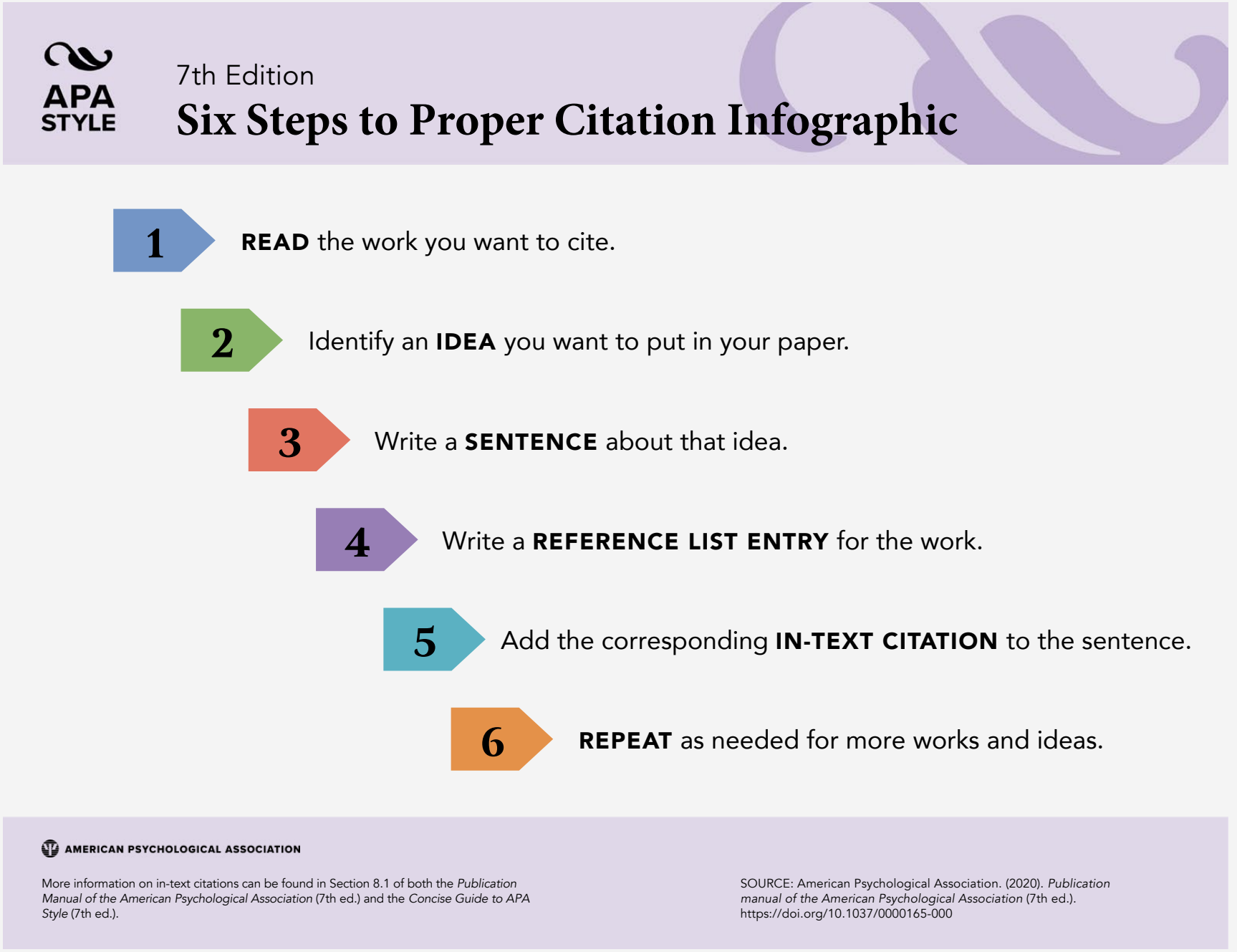
Here is an excellent infographic from the American Psychological Association on proper citation.



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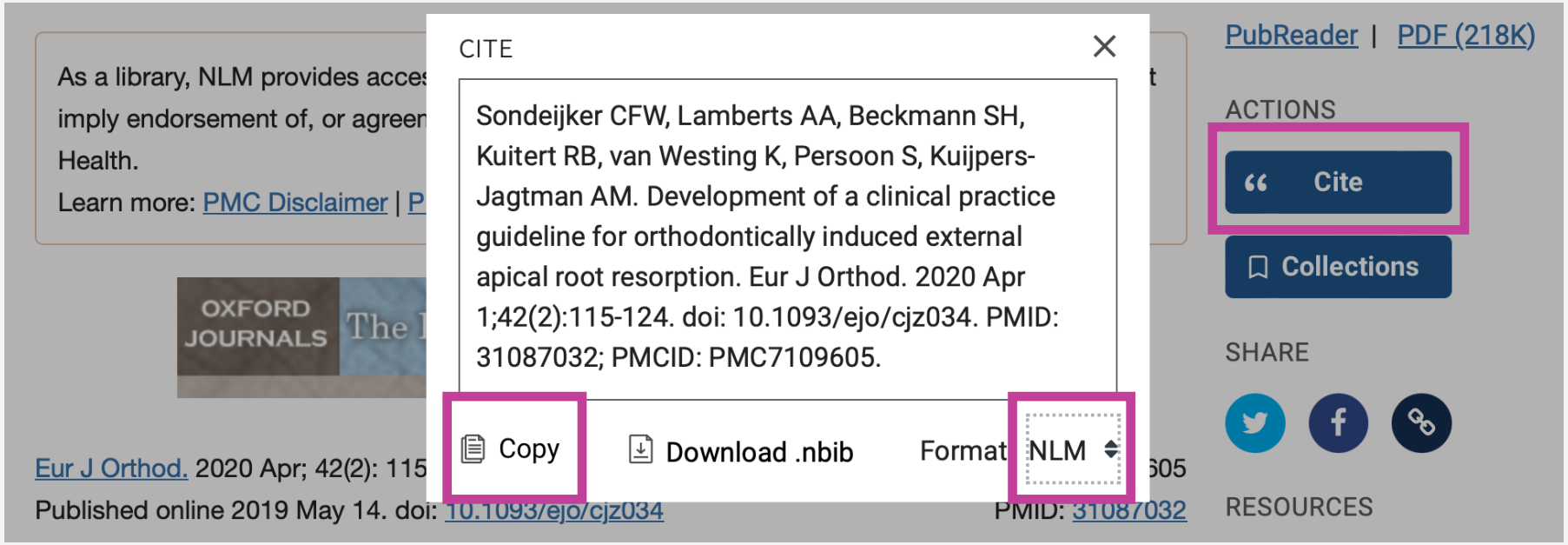
Arch Orofac Data Sci - Introduction section - 5 - Reference list

You will probably take all the sources for your work from **Pubmed**. This is perfect, because you can copy the citation directly from Pubmed. In Pubmed click on the title of an article, then "Cite" under ACTIONS. Choose the format NLM and click "Copy".



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Arch Orofac Data Sci - Introduction section - 6 - Reference list

- **Paste this reference to your list:**
  - Sondeijker CFW, Lamberts AA, Beckmann SH, Kuitert RB, van Westing K, Persoon S, Kuijpers-Jagtman AM. Development of a clinical practice guideline for orthodontically induced external apical root resorption. Eur J Orthod. 2020 Apr 1;42(2):115-124. doi: 10.1093/ejo/cjz034. PMID: 31087032; PMCID: PMC7109605.
    - **then delete doi, PMID and PMCID:**
      - Sondeijker CFW, Lamberts AA, Beckmann SH, Kuitert RB, van Westing K, Persoon S, Kuijpers-Jagtman AM. Development of a clinical practice guideline for orthodontically induced external apical root resorption. Eur J Orthod. 2020 Apr 1;42(2):115-124.
      - This is a perfect list entry. The in-text citation would be: (Sondeijker et al., 2020) or Sondeijker et al. (2020) found that ...

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Arch Orofac Data Sci - Introduction section - 7

- The placeholder text in **2_Introduction.tex** is a short summary of the Harvard citation style.
- Delete the text and code as mentioned in the comments and replace it with your introduction.
- Edit your introduction until you are satisfied.
- If you need figures or tables in your introduction (which is rather rare in scientific articles) we will insert them into the text afterwards. Figures and tables in LaTeX require some LaTeX code, so we will work on these separately. Inserting them afterwards, on the other hand, is very simple.

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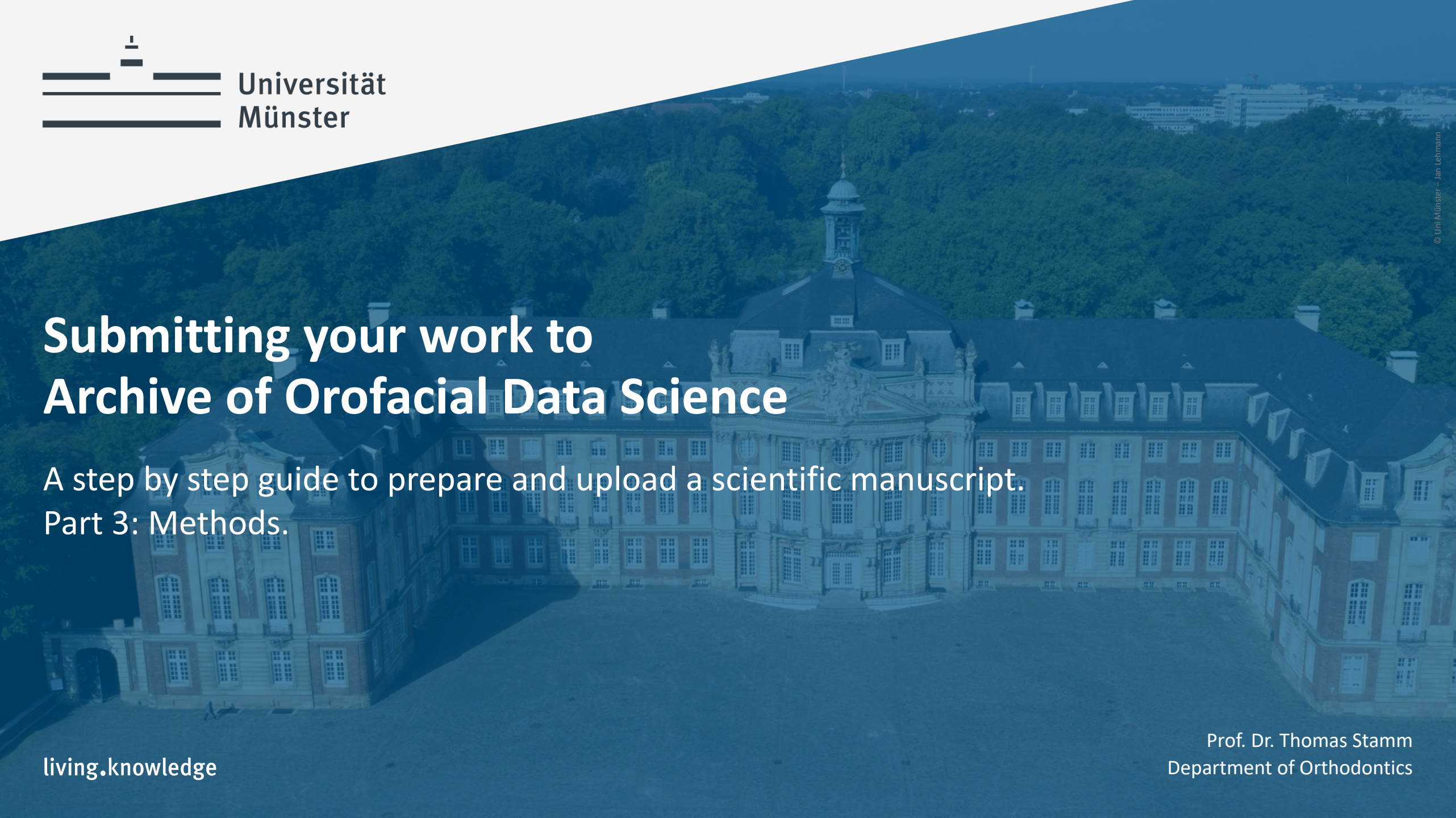
Summary - Introduction

- End your introduction with a new paragraph in which you formulate the aim of your work. This should be short and comprehensible, as in the abstract.
- Avoid long introductions. Scientists who are interested in your work have prior knowledge and do not necessarily want to read what is generally known.
- Do not repeat facts. Focus on controversies or knowledge gaps in the literature so that the reader can understand the aim of your work.



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Submitting your work to Archive of Orofacial Data Science

A step by step guide to prepare and upload a scientific manuscript.
Part 3: Methods.

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Department of Orthodontics

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Arch Orofac Data Sci - Method section - 1

In your Overleaf Project click on the left side "**3_Methods.tex**".

- As in the previous files, you will first see some informal **comments**.
- **IMPORTANT**: Do not make subsections in the method section, because there already is one, namely "Statistics". But more on this later.
- **STRUCTURE**: Other scientists must be able to repeat your method, therefore it is important to provide a clear and systematic description of the approach you used to gather and analyze the relevant data.
- **GENERAL** recommendation: Avoid lists* and tables in the method, stay with the text-based description. Flowcharts are the exception, but more on this later in the Figure-Tutorial.

*use lettered lists if necessary. See examples here: https://apastyle.apa.org/style-grammar-guidelines/lists/lettered

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Arch Orofac Data Sci - Method section - 2 - Literature review

If you have conducted a literature review please recapitulate the following points and complete them.

- **Search Strategy**: Begin by detailing the search strategy you employed to identify relevant literature. Specify the databases, search engines, and any other sources you utilized. Provide information on the keywords, search terms, and Boolean operators you used during the search process.
- **Selection Criteria**: Clearly outline the criteria used for the inclusion or exclusion of studies. This could include publication date, study design, geographic location, or any other relevant factors.
- **Data Extraction**: Specify the data points you extracted, such as author names, publication year, research methods, key findings, and any other relevant details.

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Arch Orofac Data Sci - Method section - 3 - Literature review

- **Quality Assessment**: If applicable, discuss the criteria and methods used to assess the quality of the included studies. This could involve evaluating the study design, sample size, methodology, and the validity of the findings.
- **Synthesis**: Explain how you synthesized the information from the selected studies. This could involve thematic analysis, narrative synthesis, or other methods.

Remember to be explicit, transparent, and systematic in your description of the methods used for your literature review. This will enhance the credibility and reproducibility of your work.

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Arch Orofac Data Sci - Method section - 4 - Literature review

FLOWCHART: A flowchart can be a valuable visual aid to represent the methodological process of a literature review. A well-designed flowchart can help readers understand the systematic steps you took in identifying, selecting, and analyzing the literature for your review.

- Arch Orofac Data Sci recommends to use the following website to create your flowchart:
  - https://estech.shinyapps.io/prisma_flowdiagram/
  - The site is self-explanatory. Click on "Create flowchart" at the top of the menu bar and enter your data. Download the flowchart as PDF and store it on your computer. We will add the flowchart later.
  - Don't forget to cite this website:

Haddaway, N. R., Page, M. J., Pritchard, C. C., & McGuinness, L. A. (2022). PRISMA2020: An R package and Shiny app for producing PRISMA 2020-compliant flow diagrams, with interactivity for optimised digital transparency and Open Synthesis Campbell Systematic Reviews, 18, e1230.

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Arch Orofac Data Sci - Method section - 5 - Statistics

As mentioned before Arch Orofac Data Sci has by default a Statistic subsection.

- In your Overleaf Project click on the left side "**4_Statistics.tex**".
- Every scientific paper contains more or less complicated statistical procedures. Even in the case of a simple narrative review, frequencies counts (quantifies the occurrence of specific themes or categories in textual data), coding schemes (systematic categorization of qualitative data for analysis) and qualitative methods are used that should be named.
    - The file **4_Statistics.tex** contains a sample text that can be used as a basis.

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Summary - Methods

- Use a clear and concise text-based description of your method.
- You can use good descriptions from other articles as a basis.
    - A method section is not usually subject to an accusation of plagiarism, as a particular method cannot be explained by an infinite number of different descriptions. Repetitions are often unavoidable.
- Prepare possible figures ore table data outside Overleaf at this moment. As mentioned before, figures and tables need some **LaTex coding** which we address later in separate tutorial sections.
- Your method ends with the statistics section.

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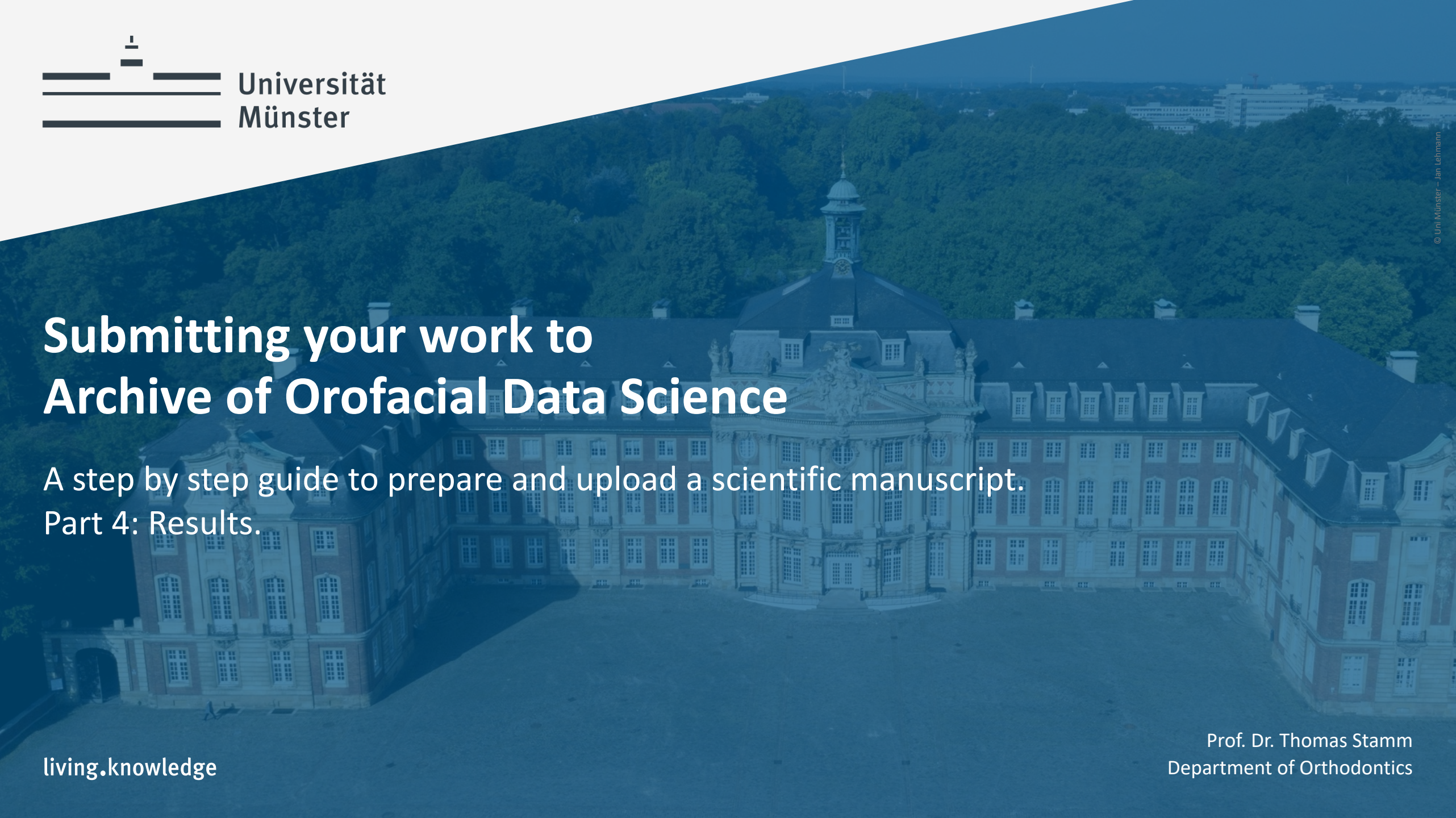

Submitting your work to Archive of Orofacial Data Science

A step by step guide to prepare and upload a scientific manuscript.
Part 4: Results.

Prof. Dr. Thomas Stamm
Department of Orthodontics

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Arch Orofac Data Sci - Result section - 1

In your Overleaf Project click on the left side "**5_Results.tex**".

- We recommend as much text-based content as possible in the results section.
    - Tables and illustrations are not THE results section, but only provide additional information that is difficult to present in text form. The primary objective of incorporating tables or figures is to facilitate readers' understanding of your research. Ideally, well-crafted tables and figures should not only be visually appealing but also easily accessible to a diverse audience. Tables and illustrations should therefore be used sparingly.
- Draft your results in text form as far as possible and think about where in the text a figure or table would make sense. We will add them later after the figure and table tutorial.

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Arch Orofac Data Sci - Result section - 2

In the file "**5_Results.tex**" of your Overleaf Project you find placeholder text from Immanuel Kant with a **LaTeX code** for inserting a table and a figure:

```
It is the supreme principle of morality, demanding rational beings to act in such a way that they could consistently will
their actions to become a universal law of nature.

\input{Table_1}

Kant's concept of autonomy lies at the heart of his moral philosophy ...

\input{Tikz_1}
```

As you can see, inserting into the written text is very simple. We will therefore only insert figures and tables once the text has been finalized. Please delete the placeholder (including the \input codes) and insert your text.

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Summary - Results

- Even if your paper looks naked at first due to pure text, stay patient, the hard work is yet to come.
- As mentioned in the previous chapters, we recommend avoiding lists* and sub-sections.
  - Lists are good for tutorials (like this one), but are not suitable for scientific contexts. It takes up more space on the page than necessary.
  - Therefore, describe your results in complete sentences and if necessary use lettered lists*.
  - Do not discuss or conclude in the result section. Simply describe.

*use lettered lists if necessary. See examples here: https://apastyle.apa.org/style-grammar-guidelines/lists/lettered

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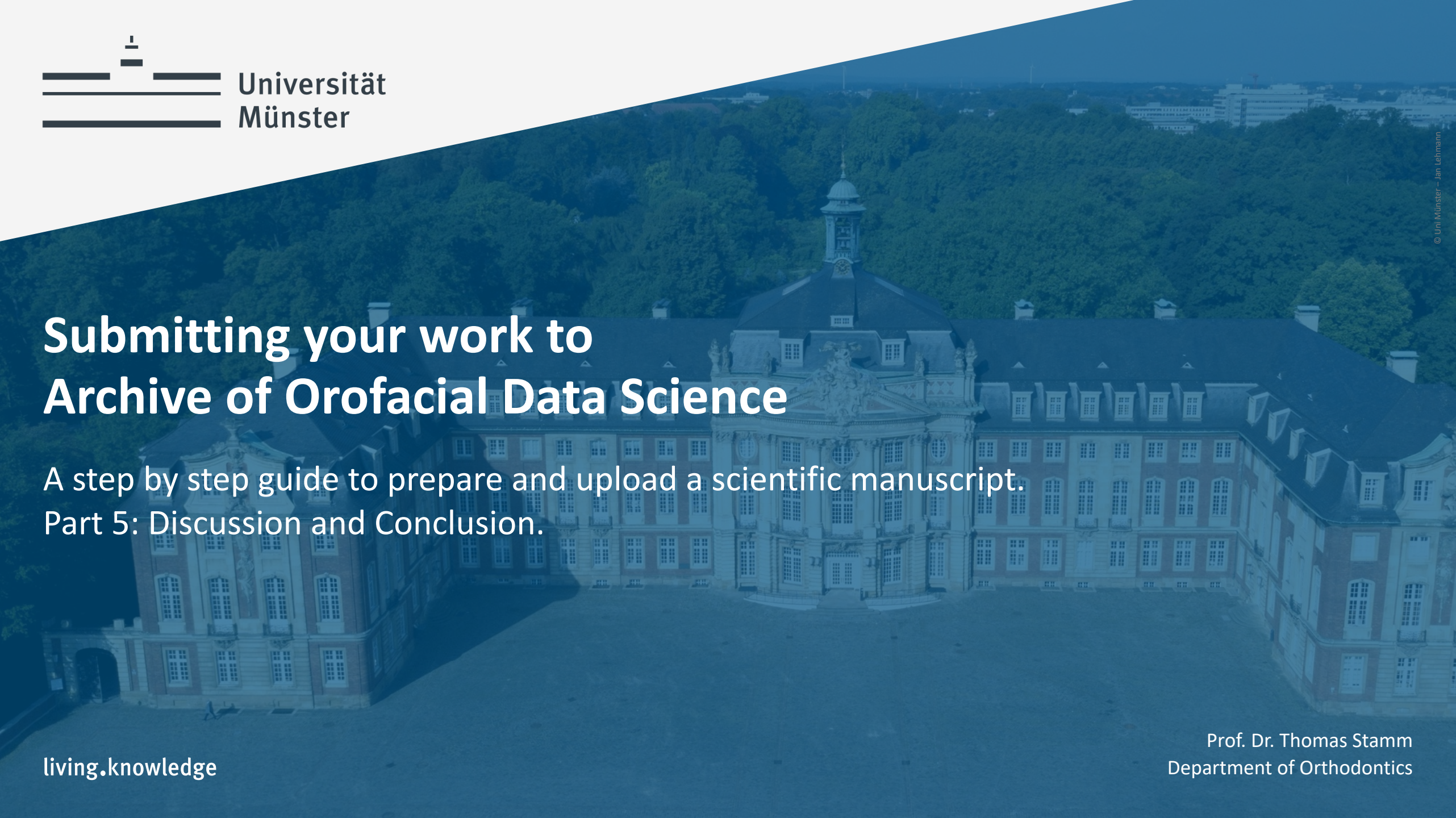

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A step by step guide to prepare and upload a scientific manuscript.
Part 5: Discussion and Conclusion.

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Department of Orthodontics

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Arch Orofac Data Sci - Discussion and Conclusion - 1

In your Overleaf Project click on the left side "**6_Discussion.tex**". Discussion and Conclusion are not demanding in terms of formatting for Arch Orofac Data Sci. What is important in the discussion?

- The discussion is not a repetition of the results or part of the introduction.
- However, you can start the discussion by repeating your aim of the study and describing whether this aim was achieved or not. Classically, one would write that the null hypothesis was rejected or confirmed.
- Then you discuss your own results with the results from the literature.
    - Don't forget to cite. Remember the infographic from the American Psychological Association on the six steps on proper citation.

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Arch Orofac Data Sci - Discussion and Conclusion - 2

- Again, avoid lists*, figures and tables in the discussion.
- Separate different thoughts or arguments with paragraphs. Do not make subsections.
- After the final draft with proper citation we recommend to finish your text with LaTeX special characters.
  - Example: Chamberland (2007) found in 86% of all patients a mean expansion at M1 of 6.6 mm (p ≤ 0.001) at the time of the second surgical procedure (95% CI, 5.2–6.8).

```
Chamberland (2007) found in 86\% of all patients a mean expansion at M1 of 6.6 mm ($p \le 0.001$) at the time of the second surgical procedure (95\% CI, 5.2–6.8).
```

*use lettered lists if necessary. See examples here: https://apastyle.apa.org/style-grammar-guidelines/lists/lettered

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Arch Orofac Data Sci - Discussion and Conclusion - 3

In your Overleaf Project click on the left side "**6_Conclusions.tex**".

- In terms of formatting, this is the easiest part, but intellectually the most difficult.
- Conclusions are not repetitions of the results.
- Write down what you conclude from your results in comparison to the literature.
- Your subjective opinion is required.
- A good conclusion consists of no more than two or three sentences.

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Submitting your work to Archive of Orofacial Data Science

A step by step guide to prepare and upload a scientific manuscript.
Part 6: Appendix: Acknowledgements, Ethical approval, Consent for publication, Authors' contributions, Competing interests, Author notes.

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Department of Orthodontics

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Arch Orofac Data Sci - Appendix - Acknowledgements

(Yes, we skipped the references, they come at the end).

- In your Overleaf Project click on the left side "**9_Acknowledgements.tex**".
  - According to current ethical standards, it is usual to obtain the consent of individuals if we wish to mention them (with names) in the acknowledgements. Therefore, you should never enter the names of people here without being asked. Further examples can be found in the file "**9_Acknowledgements.tex**".
  - In case of uncertainty, please leave: Not applicable.

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Arch Orofac Data Sci - Appendix - Ethical approval

- In your Overleaf Project click on the left side "**10_EthicalApproval.tex**".
  - Ethical approval is a fundamental requirement for scholarly publications and is rooted in ethical principles and guidelines established to protect research participants and uphold the integrity of scientific inquiry.
  - The need for an ethical approval statement depends on several factors.
    - Generally, literature reviews do not involve direct data collection from human subjects. Instead, they involve the analysis and synthesis of existing literature.
    - It is nevertheless advisable to provide a statement, as literature reviews may contain unique or sensitive information or ethical considerations related to the sources used. Please see examples in the file "**10_EthicalApproval.tex**".

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Arch Orofac Data Sci - Appendix - Consent for publication

- In your Overleaf Project click on the left side "**11_ConsentForPublication.tex**".
  - Even if images are non-identifiable, it's important to consider issues of patient privacy and dignity. Some persons/patients may still be uncomfortable with their images being used, and obtaining consent is a way to respect their autonomy.
  - Arch Orofac Data Sci recommends anonymizing images of faces or identifiable body parts (e.g. tattoos, injuries etc.) or omitting them altogether.

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Arch Orofac Data Sci - Appendix - Authors' contributions (not to be edited)

The International Committee of Medical Journal Editors (ICMJE) provides guidelines on authorship criteria in the field of medical research. The ICMJE recommends that authorship be based on the following criteria:

1. Substantial contributions to the conception or design of the work, or the acquisition, analysis, or interpretation of data for the work.
2. Drafting the work or revising it critically for important intellectual content.
3. Final approval of the version to be published.
4. Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

All 4 criteria must be met for an author. We take this for granted, so this part cannot be changed.

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Arch Orofac Data Sci - Appendix - Competing interests

- In your Overleaf Project click on the left side "**12_CompetingInterests.tex**".
- Declaring competing interests in medical articles is crucial for maintaining transparency, credibility, and the integrity of scientific research. Competing interests, also known as conflicts of interest, can arise when authors, reviewers, or editors have financial, professional, or personal relationships that may influence their objectivity or judgment in the research process.
- If you have no competing interests write: "The author(s) declare that there are no competing interests related to this work."
    - Otherwise please see the examples in **12_CompetingInterests.tex** which you can customize for your needs.

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Arch Orofac Data Sci - Appendix - Author notes

- In your Overleaf Project click on the left side "**13_AuthorNotes.tex**".
  - Here you can provide information about the authors, such as title, affiliation with a university, private practice, etc.. Furthermore, it is useful to leave an e-mail address for correspondence.

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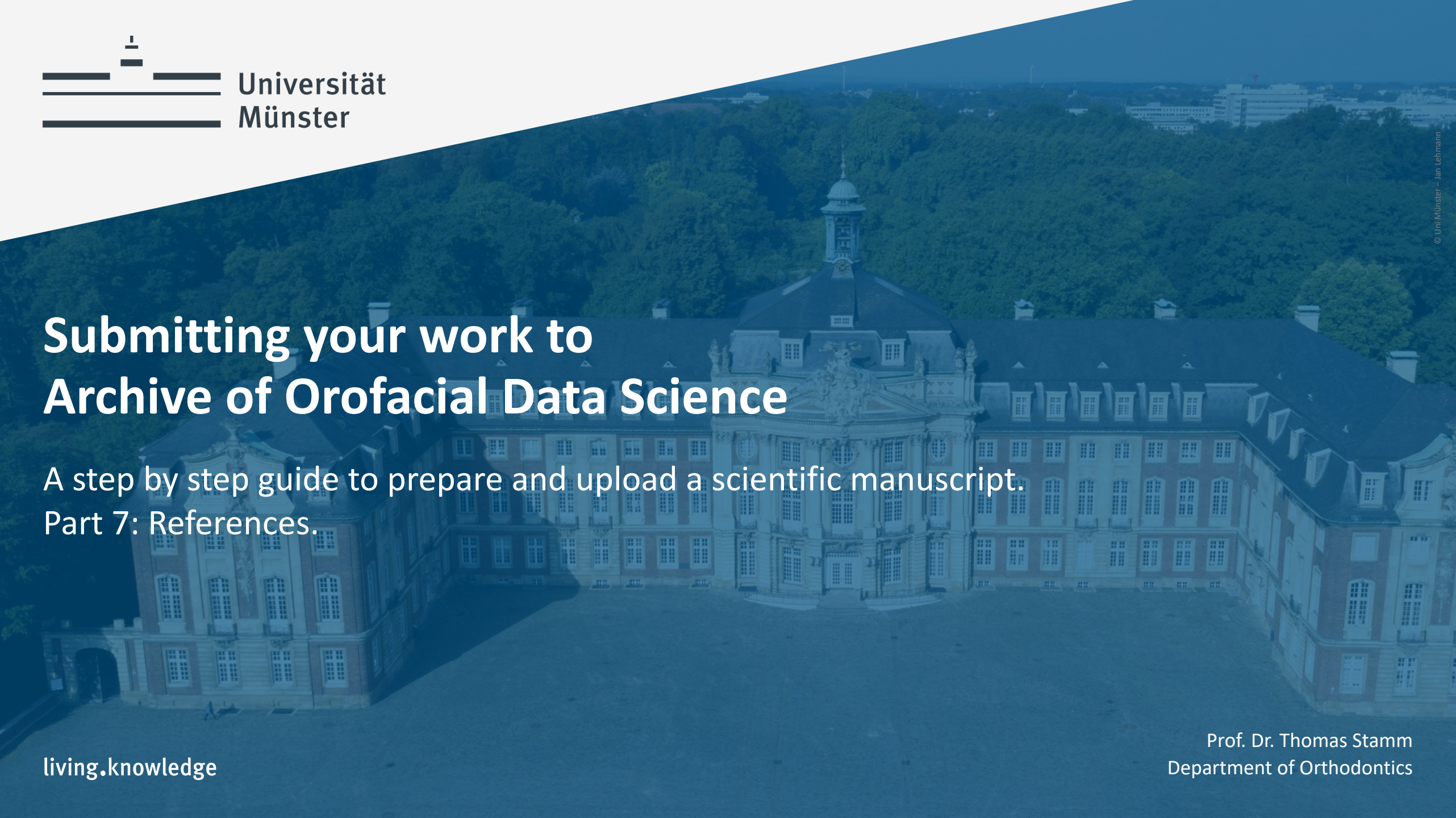

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Part 7: References.

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Arch Orofac Data Sci - References - 1

In your Overleaf Project click on the left side "**8_References.tex**".

As mentioned in **Part 2: Introduction and in-text citations** (see next slide) Arch Orofac Data Sci (AODS) recommends the reference style used in Pubmed (the NLM style; NLM stands for National Library of Medicine) but AODS also accept references in Harvard or APA style, all three with minor modifications:

- NLM style modification: delete doi, PMID and PMCID (see next slide).
- Harvard or APA style modification: Remove "&" in front of the last author's name (see next but one slide).

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Arch Orofac Data Sci - References - 2

- **NLM style modification:**
  - NLM style:
    - Sondeijker CFW, Lamberts AA, Beckmann SH, Kuitert RB, van Westing K, Persoon S, Kuijpers-Jagtman AM. Development of a clinical practice guideline for orthodontically induced external apical root resorption. Eur J Orthod. 2020 Apr 1;42(2):115-124. doi: 10.1093/ejo/cjz034. PMID: 31087032; PMCID: PMC7109605.
    - **then delete doi, PMID and PMCID:**
      - Sondeijker CFW, Lamberts AA, Beckmann SH, Kuitert RB, van Westing K, Persoon S, Kuijpers-Jagtman AM. Development of a clinical practice guideline for orthodontically induced external apical root resorption. Eur J Orthod. 2020 Apr 1;42(2):115-124.

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Arch Orofac Data Sci - References - 3

- **Harvard or APA style modification:**
  - Harvard/APA style:
    - Sondeijker, C. F. W., Lamberts, A. A., Beckmann, S. H., Kuitert, R. B., van Westing, K., Persoon, S., & Kuijpers-Jagtman, A. M. (2020). Development of a clinical practice guideline for orthodontically induced external apical root resorption. *European Journal of Orthodontics*, 42(2), 115-124.
    - **delete "&" (before the last author's surname):**
      - Sondeijker, C. F. W., Lamberts, A. A., Beckmann, S. H., Kuitert, R. B., van Westing, K., Persoon, S., Kuijpers-Jagtman, A. M. (2020). Development of a clinical practice guideline for orthodontically induced external apical root resorption. *European Journal of Orthodontics*, 42(2), 115-124.

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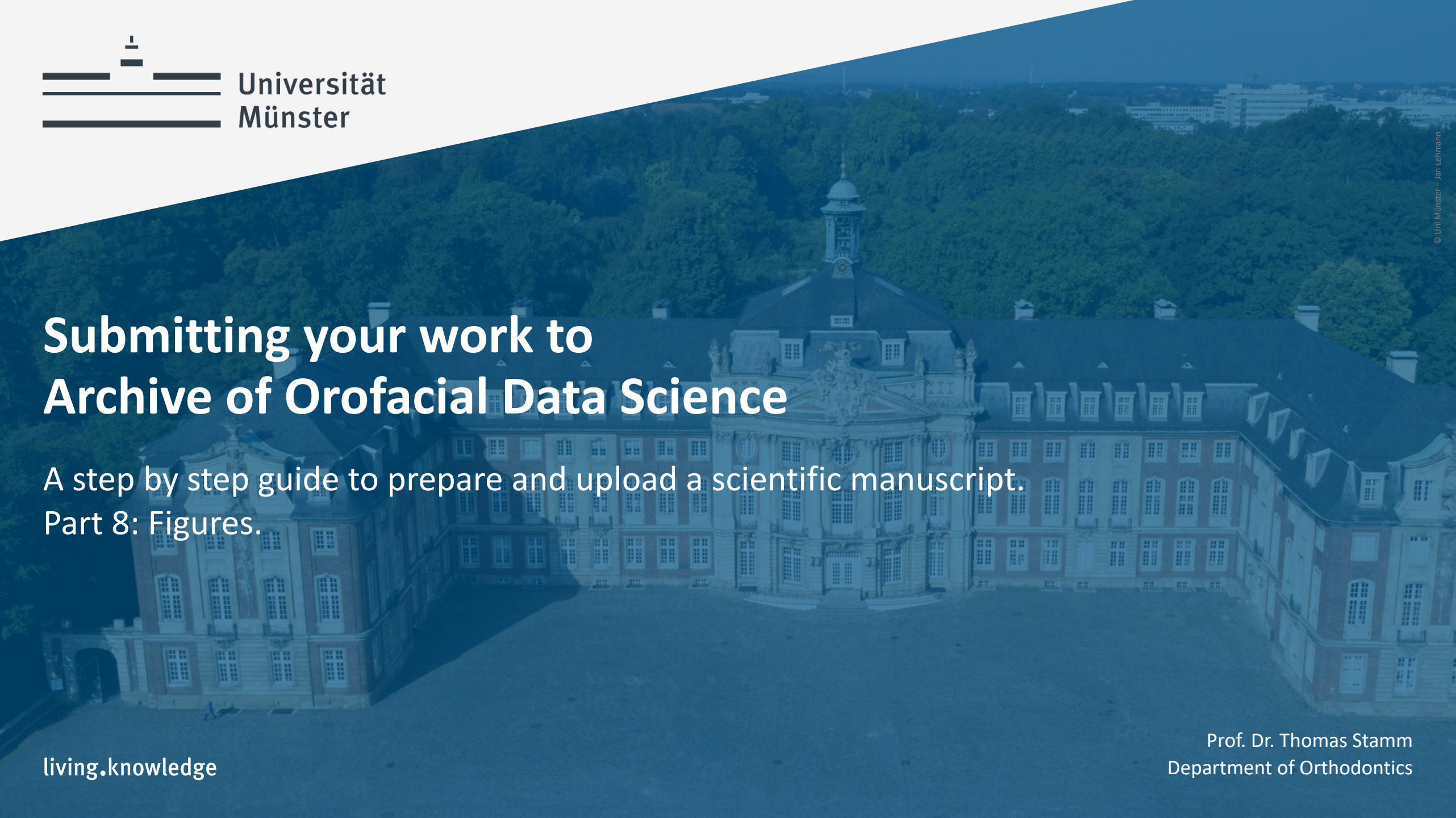
Arch Orofac Data Sci - References - 4

As mentioned in **Part 2: Introduction and in-text citations** (see next slide) we recommend to keep a reference list outside of Overleaf. Of course, you can save the references directly in **8_References.tex**, but Overleaf does not offer a sorting option in the editor.

- In AODS style, the bibliography list should be sorted alphabetically by the last names of the first authors of each source. This applies to all types of sources, including books, journal articles, and other references.
    - If there is more than one work by the same author, arrange them chronologically with the earliest publication first.



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A step by step guide to prepare and upload a scientific manuscript.
Part 8: Figures.

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Arch Orofac Data Sci - Figures - 1

In **AODS**, any visual representation, excluding tables, is classified as a figure. Examples of figures encompass a variety of visual formats such as line graphs, bar graphs, charts (including flowcharts and pie charts), drawings, maps, plots like scatterplots, photographs, infographics, and various other types of illustrations.

- If possible, create images in landscape format rather than portrait format.
- If the landscape format is not possible, combine 2 or 3 portrait formats thematically next to each other:

Fig. 1. X-ray of the palate before SARPE.

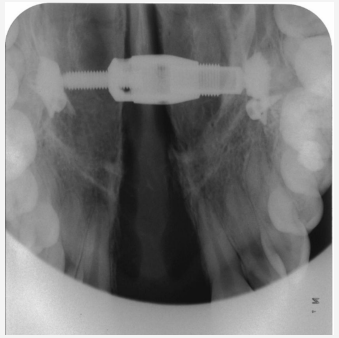

Fig. 2. X-ray of the palate after SARPE.

better:

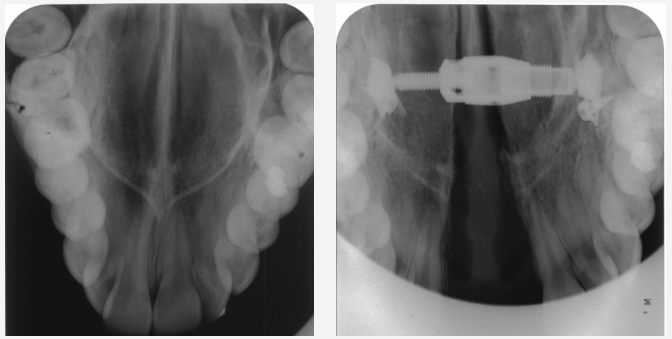

Fig. 1. X-ray of the palate before (left) and after (right) SARPE.

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Arch Orofac Data Sci - Figures - 2 - Resolution Standards

- For print: Images should typically have a higher resolution. Common print standards range from 300 dpi to 600 dpi, depending on the printing method and intended size.
- As a rule of thumb, if the image in the PDF should have an acceptable quality when printed, the image on your PC monitor should have an approximate width of 1900 pixels, but not less than 1000 pixels.
- Avoid excessive scaling or resampling of images, as this can lead to a loss of quality. Start with high-resolution images and scale down if necessary.
- For good results, we recommend saving images in PDF format.

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Arch Orofac Data Sci - Figures - 3 - Legal matters

AODS is a freely accessible journal. For your own safety:

Do not use images from the Internet for your work!

Do not use images from other articles for your work,

if you do not have the written permission to use the images.

Even if you use so-called "free images", you must always cite the source.

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Arch Orofac Data Sci - Figures - 4

To simplify the processing of figures with LaTeX in AODS style, the mapping environment consists of two components:

1. **The image in PDF format (image_1.PDF)** and
2. **A file with special LaTeX code (Figure_1.tex)**.
    - The **LaTeX code** takes care of the consecutive figure numbering, the arrangement of image and legend, as well as the relationship between image and text width.
        - To place the figure into the main text only one command is necessary: `\input{Figure_1}` (see next slides).

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Arch Orofac Data Sci - Figures - 5

Before we go to **Figure_1.tex** on the left side in your project we need to upload the image to Overleaf.

- **Precondition:**
  - The image must have sufficient resolution (not less than 1000 pixels in width).
  - The image is in PDF format.
  - The first image should be named as "image_1.pdf", the second as "image_2.pdf" etc.
- **Upload:** Click on the upload icon (upper left)  and drag your image on the window.
  - There are example images in your template folder. Overleaf asks to overwrite it. Yes, accept!

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Arch Orofac Data Sci - Figures - 6

In your Overleaf Project click on the left side "**Figure_1.tex**".

Figure_1.tex contains the **LaTeX code** for generating the figure with regard to numbering, centering the figure to the text, position and content of the figure legend. The image display in AODS is standardized and all images are displayed in 80% of the text width to guarantee a uniform appearance.

- Do not edit the **LaTeX code**.
- The only adjustment concerns the line: `\caption{Example image 1.}`
- Replace "Example image 1." with your caption without deleting the curly braces.

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Arch Orofac Data Sci - Figures - 7 - Figure Legend

You can use as much text as you need for the figure legend. Example:

- `\caption{The depicted graphs in Experiment 1 illustrate mean regression slopes across various conditions, including stereo motion, biocularly viewed monocular motion, combined, and monocularly viewed monocular motion. These slopes are plotted based on rotation amount, with error bars indicating standard errors. Adapted from "Large Continuous Perspective Change With Noncoplanar Points Enables Accurate Slant Perception" by X. M. Wang, M. Lind, and G. P. Bingham (2018), Journal of Experimental Psychology: Human Perception and Performance, 44(10), p. 1513.}`
- The text must be continuous, DO NOT use paragraphs:
  - `\caption{The depicted graphs in Experiment 1 illustrate mean regression slopes across various conditions, including stereo motion, biocularly viewed monocular motion, combined, and monocularly viewed monocular motion. These slopes are plotted based on rotation amount, with error bars indicating standard errors.`

    `Adapted from "Large Continuous Perspective Change With Noncoplanar Points Enables Accurate Slant Perception" by X. M. Wang, M. Lind, and G. P. Bingham (2018), Journal of Experimental Psychology: Human Perception and Performance, 44(10), p. 1513.}`

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Arch Orofac Data Sci - Figures - 8 - Figure Legend

- Describe your image as briefly but in as much detail as possible so that the reader understands the image without having to refer back to the main text.
- Do not use identical text for the figure legend and the main text.
- If you have a picture with several components, it is not necessary to label the picture elaborately. Indicate this in the description, e.g. "top left", "bottom row", "top row, center", etc.
    - `\caption{The path analysis (top row) reveals connections between ASMC (lower row) and internal body-related factors (body esteem, body comparison, and body surveillance), while accounting for the influence of time spent on social media. Top right: The coefficients provided represent standardized linear regression coefficients.}`

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Arch Orofac Data Sci - Figures - 9 - Figure Legend - Source

- Do not use double parentheses: (body esteem (lower left), body ...), combine it with square brackets: (body esteem [lower left], body ...)
  - `\caption{The path analysis (top row) reveals connections between ASMC (lower row) and internal body-related factors (body esteem [lower left], body comparison [upper right], and body surveillance), while accounting for the influence of time spent on social media. Top right: The coefficients provided represent standardized linear regression coefficients.}`
- If you do not use your own image **you must attribute the source**. Internet sites such as Wikimedia Commons provide precise instructions on how license notices should be designed. This can sometimes be very complicated:
  - `\caption{Star-forming region S106. Source: NASA & ESA (https://commons.wikimedia.org/wiki/File:Star-forming_region_S106_(captured_by_the_Hubble_Space_Telescope).jpg), „Star-forming region S106 (captured by the Hubble Space Telescope)“, https://creativecommons.org/licenses/by/4.0/legalcode}`

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Arch Orofac Data Sci - Figures - 10 - Figure Legend - Source

Due to the legal uncertainty concerning images from publicly accessible sources,

AODS recommends that

authors should create or use their own images.

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Arch Orofac Data Sci - Figures - 11 - Figure Position

- Once you have prepared your image, named it as recommended and created the legend,
  - go to the position in the main text where you want to insert your image,
    - ideally between two consecutive paragraphs and paste the following **LaTeX code**:
      - `\input{Figure_1}`
      - `(or \input{Figure_2} or \input{Figure_3} etc.)`

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Arch Orofac Data Sci - Figures - 12 - Figure Position

- If there is not enough space on the current page to fit the figure along with the text, LaTeX may decide to move it to the top or bottom of the next page, because the main goal of LaTeX is the readability of your work and a harmonic appearance of text, figures and tables.
- The goal of the **AODS** LaTeX template is, that authors could focus on the content of their work and not on layout. However, if you are not satisfied,
  - try to place `\input{Figure_1}` to a different position.
  - If that doesn't help, the editor team will take care of it.

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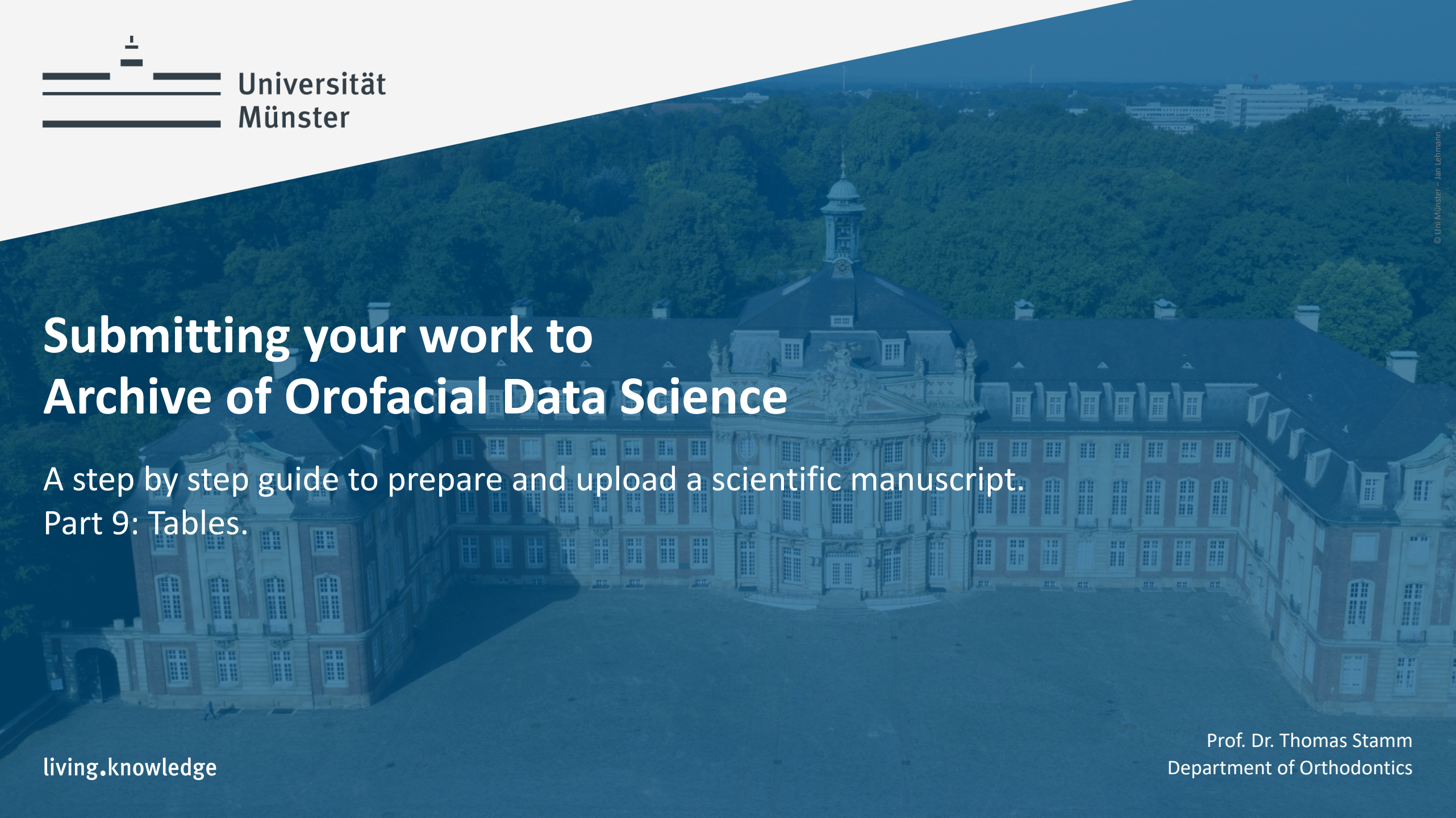
Summary - Figures

In **AODS** manuscript preparation with the **AODS** template, Figures are separated in:

- The image:
  - In PDF format, uploaded into the Overleaf project, 1st image named as image_1.PDF
- The Figure file:
  - A template file with LaTeX code of the figure environment including the
    - caption of the figure
- The input command in the main text where you want to display your image.



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Part 9: Tables.

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Department of Orthodontics

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Arch Orofac Data Sci - Tables

Before you create a table, you should ask yourself what data you want to display in a table.

- Are the data important for understanding the study?
  - Is it possible to describe the data clearly in the text? If yes, then a table is not necessary.
  - Is the same data also used in a figure? If yes, then a table is redundant.
- Data that consists of a lot of text, such as answers from a survey, is less suitable for tables. In such cases, survey forms should be provided as supplementary material.
- Tables should never be text filler or decoration.

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Arch Orofac Data Sci - Tables

- Statistical results such as mean, median, standard deviation, p-values of significance etc., are very suitable for tables.
- AODS recommends that you first compile your data in a spreadsheet (e.g. Excel).
  - Then try to make the data uniform.
  - Think about to combine data into groups.
  - Then try to condense the data to an understandable minimum.
  - Then try to condense the data further by using abbreviations and symbols (which are explained in table notes or captions).

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Arch Orofac Data Sci - Tables

AODS distinguishes between

- Manuscript Tables which are displayed in the final article PDF and
- Supplementary Tables that can be downloaded from the journal's web page.

Tables that appear in the manuscript are subject to special formatting that must be adhered to in order to ensure the readability of the entire work.

Supplementary tables are not subject to strict formatting and can be freely designed by the author. Supplementary tables should be named "Supplementary Table" and numbered consecutively. In the text, they are referred to as Table S1 etc.

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Arch Orofac Data Sci - Tables - Manuscript Tables

As already mentioned, tables in the manuscript are subject to strict formatting. This includes that

- Tables must be centered and should not exceed the text width.
- Long tables are not allowed. A table, including table legend and notes, must fit on one page of the manuscript.
- Rotated tables are not allowed.
- Only horizontal lines are allowed, avoid vertical lines and table borders.
- Table cells in AODS are not colored or shaded.

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Arch Orofac Data Sci - Tables

Data in table cells must be formatted uniformly:

- All numbers shown must have the same number of decimal places.
- Units of measurements must be placed in column/row headings or table notes, not in cells.
- Mixed units in columns are not allowed. Convert them uniformly.
- Additional information about specific data points could be indicated with symbols and explained in the table notes.
- Abbreviations are explained in the table notes or table caption.

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Arch Orofac Data Sci - Tables - Manuscript Tables

Example table:

Baseline characteristics	n	%	M [kg]	M [years]	Emp.	Unemp.	%Emp.	%Unemp.
Female	25	50	56.7	27.8	12	13	48	26
Male	25	50	73.2	33.2	22	3	88	6
Single	13*	26	66.5	19.1	13	0	100	0
Married/partnered	35	70	52.3	42.6	28	7	80	10

**two got married during the study; M = Mean value; Emp. = employed; Unemp. = unemployed*

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Arch Orofac Data Sci - Tables - Tablesgenerator.com

Once you have compiled your data in a spreadsheet and the requirements for tables in the manuscript are met, it is advisable to export this data as a .CSV file.

- **What is a .CSV file?** In simple terms, a CSV file is a type of plain text file used to store tabular data, like a spreadsheet or a table. CSV stands for "Comma-Separated Values." Each line in the file represents a row of the table, and the values in each row are separated by commas (or sometimes other delimiters, like semicolons).
- This .CSV file can then be easily further processed with
  - https://www.tablesgenerator.com/

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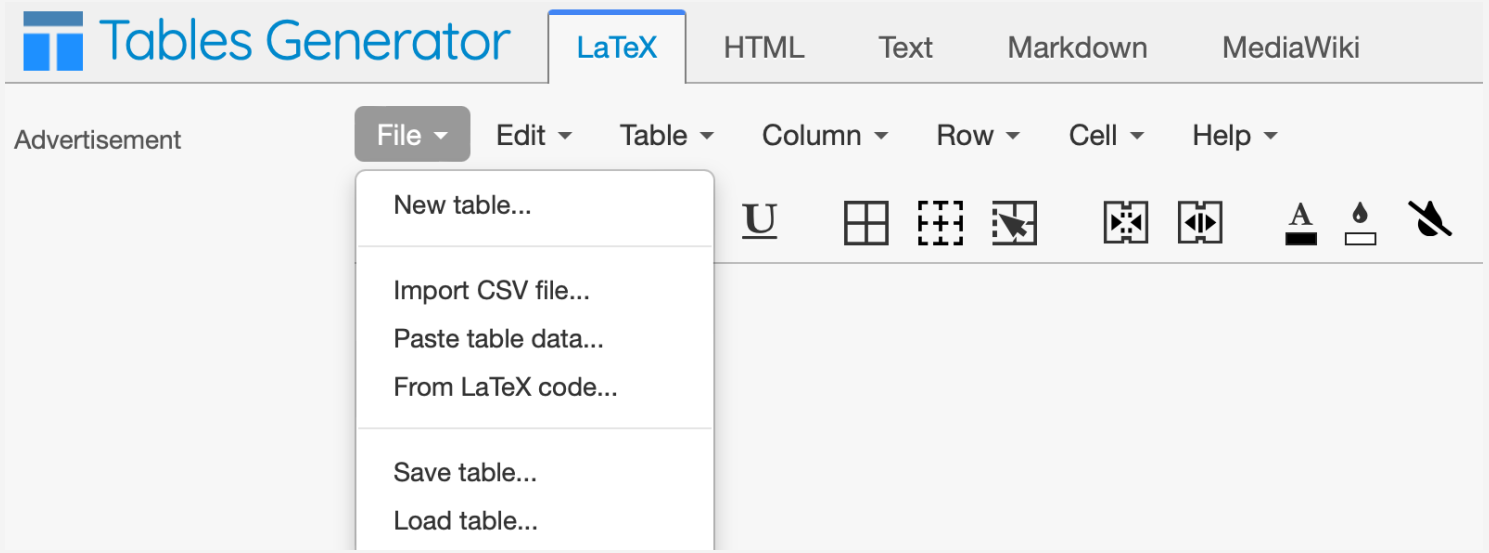
Arch Orofac Data Sci - Tables - Tablesgenerator.com

Tablesgenerator.com is a website that helps you create tables easily, and it provides a convenient way to convert them into different formats. It simplifies the process of creating and formatting tables, and it provides a handy way to convert them into various formats, e.g. LaTeX.

In Tables Generator go to
File
and then on
Import CSV file ...

You can also create a new table and insert your data manually



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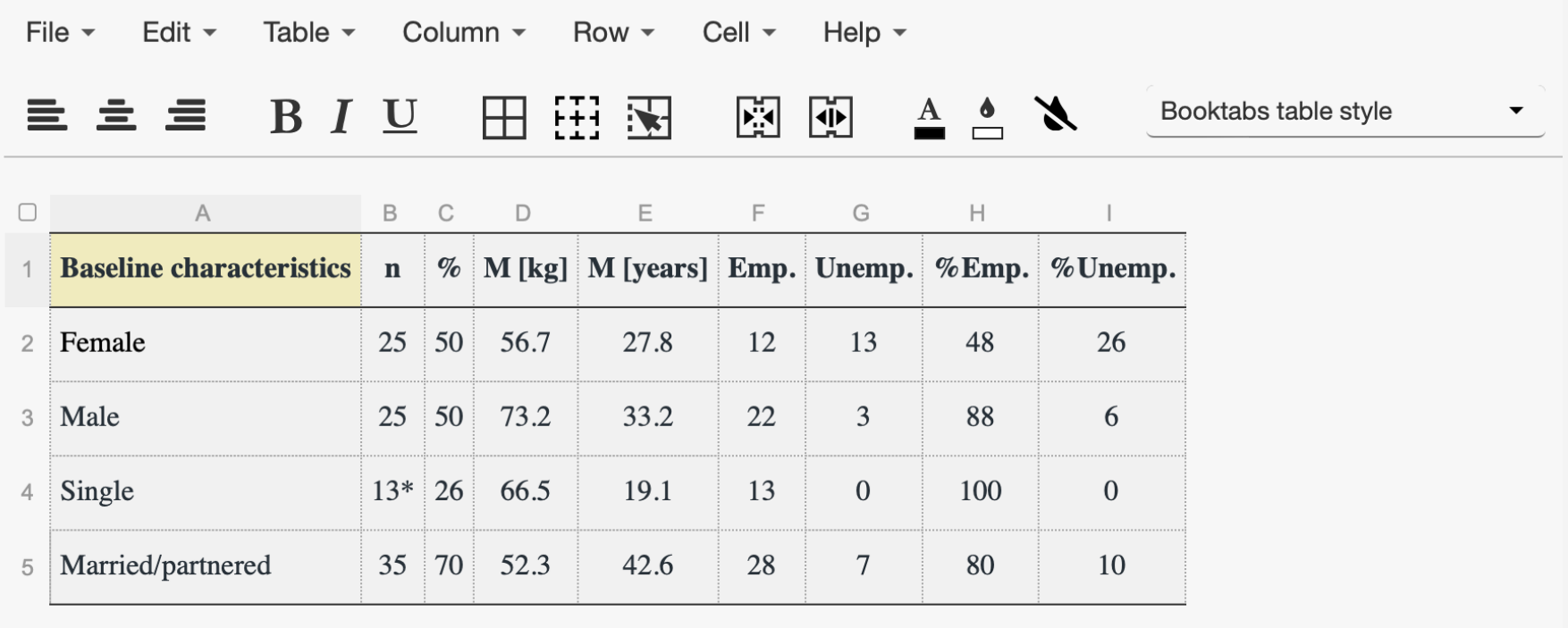
Arch Orofac Data Sci - Tables - Tablesgenerator.com

You can also copy and paste data from your spreadsheet.

All formatting is adopted.

In the upper right you can choose Booktabs table style which draws horizontal lines above and below the header row and at the bottom of the table.



	A	B	C	D	E	F	G	H	I
1	**Baseline characteristics**	**n**	**%**	**M [kg]**	**M [years]**	**Emp.**	**Unemp.**	**%Emp.**	**%Unemp.**
2	Female	25	50	56.7	27.8	12	13	48	26
3	Male	25	50	73.2	33.2	22	3	88	6
4	Single	13*	26	66.5	19.1	13	0	100	0
5	Married/partnered	35	70	52.3	42.6	28	7	80	10

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Arch Orofac Data Sci - Tables - Tablesgenerator.com

Once you are satisfied with the arrangement of your data, go down and insert a table caption.

Then click Generate.

4	Single	13*	26	66.5	19.1	13	0	100	0
5	Married/partnered	35	70	52.3	42.6	28	7	80	10

Table caption

Demographic Distribution of Individuals Based on Gender, Marital Status, and Employment Status, Highlighting the Interplay of Female and Male Participants in Various Socio-Economic Categories.

Label tab:my-table Use \ref{tab:my-table} to refer to your table in LaTeX

Generate

Result (click "Generate" to refresh)

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Arch Orofac Data Sci - Tables - Tablesgenerator.com

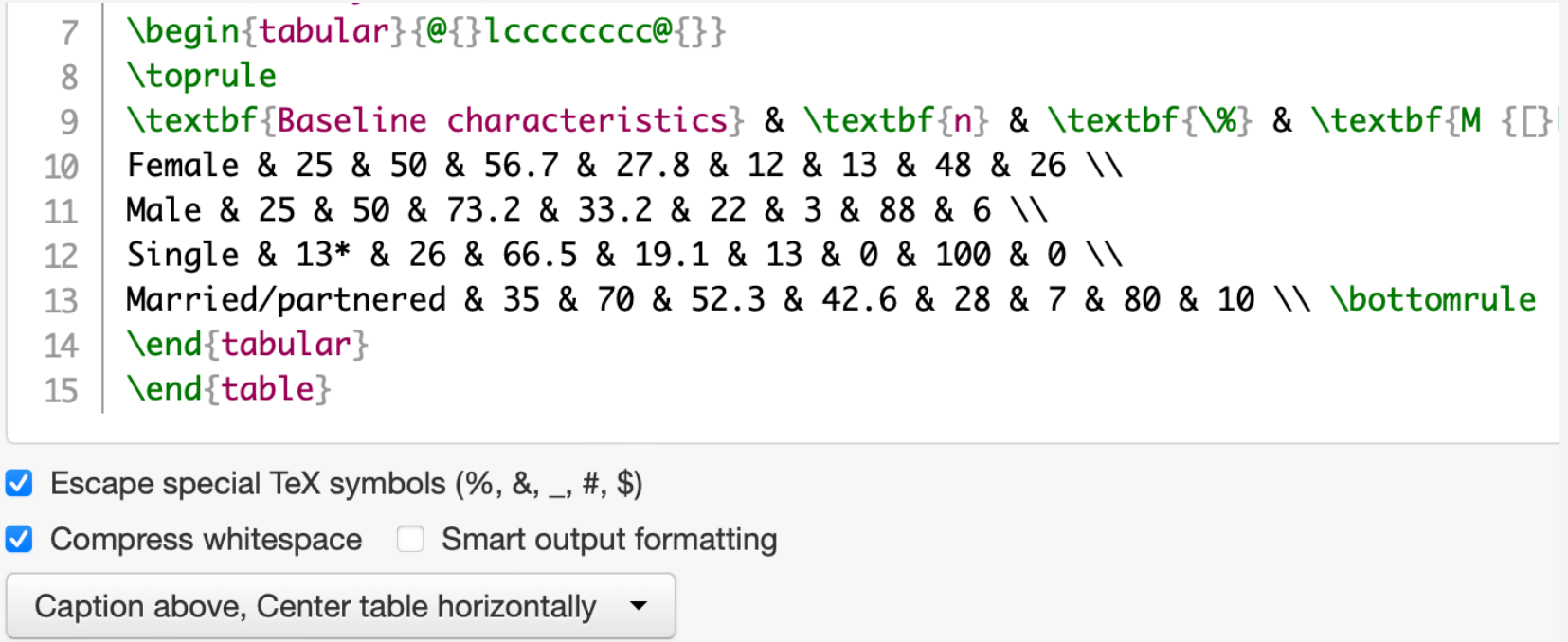
Before copying the LaTeX code to the clipboard, set a check mark next to:

- Escape special TeX symbols
- Compress whitespace

Moreover, choose:

- Caption above and
- Center table horizontally

Then click Generate again.



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Arch Orofac Data Sci - Tables - Manuscript Tables

In your Overleaf Project click on the left side "**Table_1.tex**".

- **Table_1.tex** contains the **LaTeX code** for generating the table. Please scroll down to the comment:
  - `% REPLACE the code from here ----------`
    - `DELETE ALL the LaTeX code between these two comments and paste the code from tablesgenerator.com`
  - `% REPLACE the code above to here ----------`
- The new **LaTeX code** for the table begins with `\begin{table}` and ends with `\end{table}`.

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Arch Orofac Data Sci - Tables - Manuscript Tables

Tables are inserted in the text in the same way as the figures.

- Go to the position in the main text where you want to insert your table,
  - ideally between two consecutive paragraphs and paste the following **LaTeX code**:
    - `\input{Table_1}`
    - `(or \input{Table_2} or \input{Table_3} etc.)`

LaTeX determines the ideal placement within the text not only for figures but also for tables, based on the available space. However, if you are not satisfied, try to place `\input{Table_1}` to a different position. If that doesn't help, the editor team will take care of it.