


4 nov | 21h



Da ideia ao paper: Como escrever um artigo científico



Ace your path ♦♣♥♠
Dá cartas na tua carreira.
Formações semanais pensadas para construir o teu sucesso - desde a apresentação da tese, até ao teu 1º emprego.

de 4 a 25 de novembro 

UniHealth - Junior Healthcare Knowledge

Da ideia ao paper: Como escrever um artigo Científico

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Da ideia ao paper... ... como escrever um artigo científico?



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RESEARCH ARTICLE

Aging Cell  WILEY

Ghrelin delays premature aging in Hutchinson-Gilford progeria syndrome

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Abstract

Hutchinson-Gilford progeria syndrome (HGPS) is a rare and fatal genetic condition that arises from a single nucleotide alteration in the *LMNA* gene, leading to the production of a defective lamin A protein known as progerin. The accumulation of progerin accelerates the onset of a dramatic premature aging phenotype in children with HGPS, characterized by low body weight, lipodystrophy, metabolic dysfunction, skin, and musculoskeletal age-related dysfunctions. In most cases, these children die of age-related cardiovascular dysfunction by their early teenage years. The absence of effective treatments for HGPS underscores the critical need to explore novel safe therapeutic strategies. In this study, we show that treatment with the hormone ghrelin increases autophagy, decreases progerin levels, and alleviates other cellular hallmarks of premature aging in human HGPS fibroblasts. Additionally, using a HGPS mouse model (*Lmna*^{2609G/G609G} mice), we demonstrate that ghrelin administration effectively rescues molecular and histopathological progeroid features, prevents progressive weight loss in later stages, reverses the lipodystrophic phenotype, and

Abbreviations: BAT, brown adipose tissue; ChQ, chloroquine; GHS-R1a, growth hormone secretagogue receptor; HGPS, Hutchinson-Gilford progeria syndrome; HRT-1, keratin-1; LCC, microtubule-associated protein 1A/1B-light chain 3; mTOR, mammalian target of rapamycin; SA- β -Gal, senescence-associated- β -galactosidase; SQSTM1, sequestosome 1; VSMCs, vascular smooth muscle cells; WAT, white adipose tissue; α -SMA, alpha-smooth muscle actin.
Cláudia Cavadas and Célia A. Azeiteira contributed equally to this study.

<https://onlinelibrary.wiley.com/doi/epdf/10.1111/ace.13983?src=getfttr>



Escolha do tópico /tema de investigação

[formas de comunicação e partilha do conhecimento]

Monografias
Teses de mestrado, doutoramento
Trabalhos de investigação
Comunicações orais/poster
Artigos Científicos

Com quem? Onde?

Supervisão/Orientação
Equipas de investigação
Unidades/Centros de Investigação

Grupo de Neuroendocrinologia e Envelhecimento
<https://cnc.uc.pt/en/research-group/neuroendocrinology-and-aging>





Quais as diferenças entre um artigo na revista *Visão* e na revista *Nature*.



- Autores
- Público
- Linguagem
- Estrutura
- Conteúdo
- E
- Revisão/avaliação por pares



11/4/23

Cláudia Cavadas

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Definição de um artigo científico.

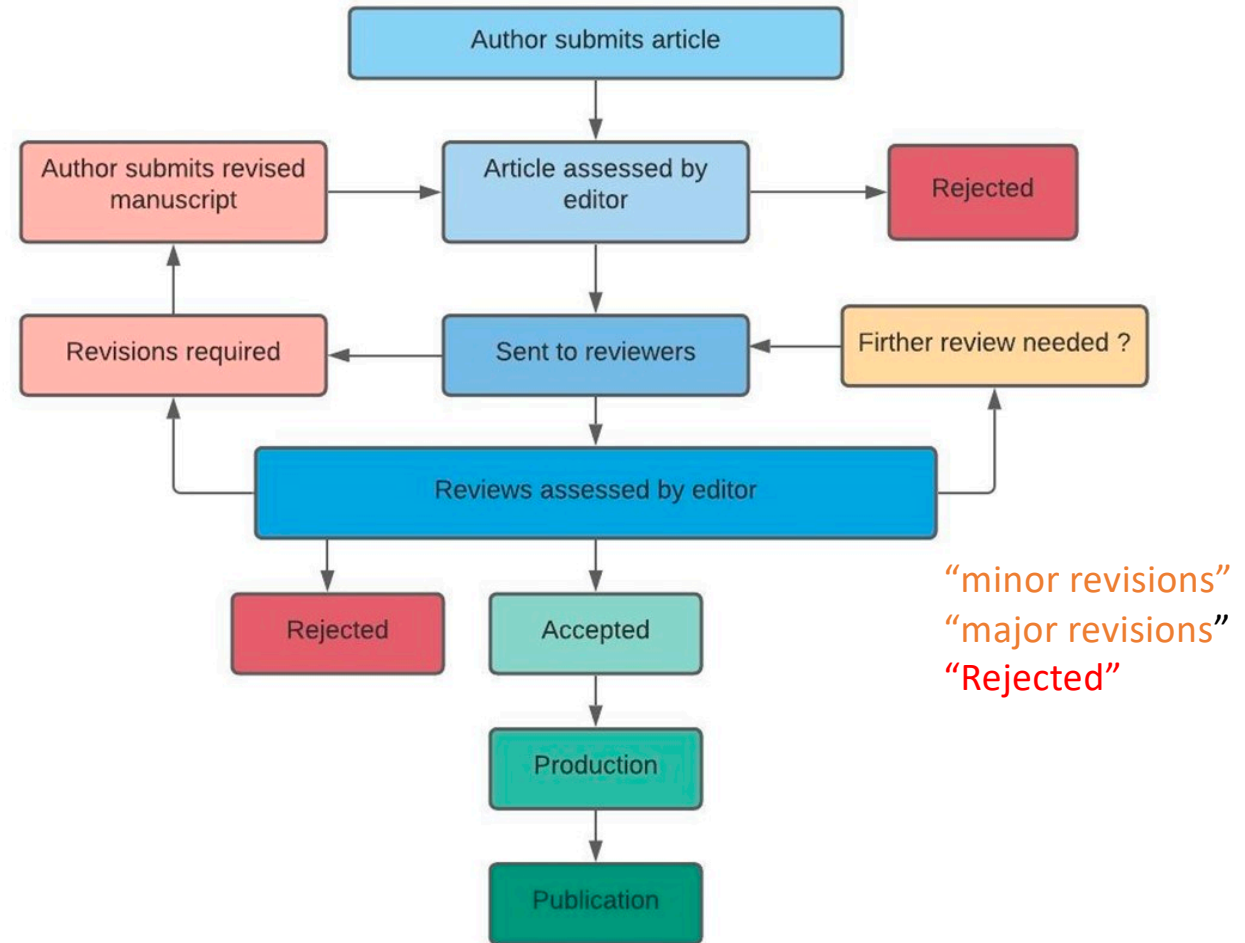
- O que é?
- Para que serve?

Artigos científicos

E

Avaliação por pares

Revisores do Artigo
Editor/a da Revista
O processo



<https://www.ijceds.com/ijceds/about/peer-review-process>

Quais os tipos de artigos científicos que conhece?

Tipos de Artigos científicos

Research Papers (resultados originais)



Revisão Sistemática (Systematic Review Papers)

Revisão (Review Papers)

Opinião (Opinion Papers)

A Escolha das Revistas/Jornais científicos

Área científica

Tipo de artigos Reputação (índice de impacto)

Acesso aos artigos - open access; custos

Cuidado: “**REVISTAS PREDADORAS!**” “Editoras Predadoras”

CHECKLIST

For identifying predatory publishers

What to look for

- ✓ **Contact information**
 - Does the journal's website provide complete contact information?
 - Does it include a verifiable address?
- ✓ **Scope of the journal**
 - Is the journal's scope multidisciplinary?
 - Does it combine multiple, unrelated, wide-ranging fields?
- ✓ **Editorial board**
 - Does it include recognized, affiliated experts? (TIP: Contact a few & inquire about their experience with the journal)
- ✓ **Author fee policy**
 - Does the journal charge authors publication fees? (TIP: Find out about such charges before submission)
- ✓ **Quality of articles**
 - Does the journal publish good quality research? (TIP: Check with your Dept. Head or Supervisor to gauge quality)
- ✓ **Peer review process**
 - Is the peer review process described on the journal's website? (TIP: Most credible journals are likely to display it)

What to check

✓ **Indexing information** ?

credible journals are likely to display it)

- Is the journal indexed or a member of a prominent publisher association?
- Does it display an ICV*?

✓ **Retraction policy**

- Does the journal have a clear policy for recalling articles? (TIP: Check journal policies or it's instructions to authors)

✓ **Pitch for authors**

- Does the journal guarantee publication or quick peer review? (TIP: If it sounds too good to be true, it probably isn't.)

✓ **E-mail invitation**

- Do the journal, its editors and staff all have institutional or journal-affiliated email addresses?

*Index Copernicus Value (ICV) is a questionable journal metric, and is generally used exclusively by predatory journals. You will not find an ICV on the website of a legitimate journal.

For more resources related to academic publishing, visit www.editage.com/insights

editage Insights
Resources for authors and journals

www.facebook.com/editage

www.twitter.com/editage

www.linkedin.com/company/editage

Qual a estrutura de um Artigo Científico

- Autores
- Título
- Resumo/Abstract
- Introdução
- Metodologias/Material and Methods
- Resultados/Results
- Discussão/Discussion (and conclusion)
- Referências Bibliográficas /References

E ainda: Agradecimentos

BOM Artigo Científico

**GOOD DATA
GOOD STORY
Well Written**

'ABC' of writing

.A is to be accurate
B is to be brief
C is to be clear.

BOM Artigo Científico

GOOD DATA
GOOD STORY
Well Written

'ABC' of writing

.A is to be accurate

B is to be brief

C is to be clear.

Do use:

- One idea per sentence and one concept per paragraph
- The active voice
- Simple phrasing (but stay specific and precise)

Do not use:

- Ambiguity
- Unnecessary complexity
- Passive voice

For example, do you tend to write long sentences? If so, try to separate each idea into a different sentence as you write. When revising your writing later on, split up long sentences (25 words is usually more than enough) into two shorter sentences, again keeping one idea per sentence.

Autores ... (instituições) Quem são? Funções? Posição?








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Título e abstract (resumo)



Título: AB,C,D,E,F

ABC

A is to be accurate

B is to be brief

C is to be clear.



DEF

Declarative: Clearly state your main findings

Engaging: Invite the reader to find out more

Focused: Give the readers only the information that they need



Não usar: exagerado, acrónimos, piadas, pergunta

Resumo/Abstract

150 to 200 words

The 5-question technique

- Why did you do it? (Contexto)
- What did you do? (objetivos; tipo de abordagem=)
- How did you do it? (métodos)
- What did you find out? (resultados)
- And what does that mean?

Resumo/Abstract

The abstract is structured in the following way at *Nature* and its sister journals:

1. There is an **introduction**
2. There is a sentence about the **gap**, the problem you are trying to address
3. There is a phrase "**Here we show...**" where you name what you actually showed, your main claims
4. There's a summary of **what you did**
5. And then there is a part where you describe the **implications** of your work.

1. **Introduction**
(the context for your findings)
2. **The 'gap'**
(the problem)
3. **"Here we show"**
(a summarizing sentence)
4. **What did we do and what find out**
(approach and the main result)
5. **What does it mean**
(the advance over previous work and implications).

1. Basic introduction to the field, comprehensible to a scientist in any discipline

2. Detailed background, comprehensible to a scientist in a related discipline

3. One sentence stating the general problem studied in the paper

4. One sentence summarizing the main result

5. Two or three sentences explaining how the main results add to previous knowledge

6. One or two sentences to put the results into a more general context

7. (Optional) Two or three sentences to provide a broader perspective, readily comprehensible to a scientist in any discipline

During cell division, mitotic spindles are assembled by microtubule-based motor proteins. The bipolar organization of spindles is essential for proper segregation of chromosomes, and requires plus-end-directed homotetrameric motor proteins of the widely conserved kinesin-5 (BimC) family. Hypotheses for bipolar spindle formation include the 'push-pull mitotic muscle' model, in which kinesin-5 and opposing motor proteins act between overlapping microtubules. However, the precise roles of kinesin-5 during this process are unknown. Here we show that the vertebrate kinesin-5 Eg5 drives the sliding of microtubules depending on their relative orientation. We found in controlled in vitro assays that Eg5 has the remarkable capability of simultaneously moving at $\sim 20 \text{ nm s}^{-1}$ towards the plus-ends of each of the two microtubules it crosslinks. For anti-parallel microtubules, this results in relative sliding at $\sim 40 \text{ nm s}^{-1}$, comparable to spindle pole separation rates in vivo. Furthermore, we found that Eg5 can tether microtubule plus-ends, suggesting an additional microtubule-binding mode for Eg5. Our results demonstrate how members of the kinesin-5 family are likely to function in mitosis, pushing apart interpolar microtubules as well as recruiting microtubules into bundles that are subsequently polarized by relative sliding. [...] We anticipate our assay to be a starting point for more sophisticated in vitro models of mitotic spindles. For example, the individual and combined action of multiple mitotic motors could be tested, including minus-end-directed motors opposing Eg5 motility. Furthermore, Eg5 inhibition is a major target of anti-cancer drug development, and a well-defined and quantitative assay for motor function will be relevant for such developments.

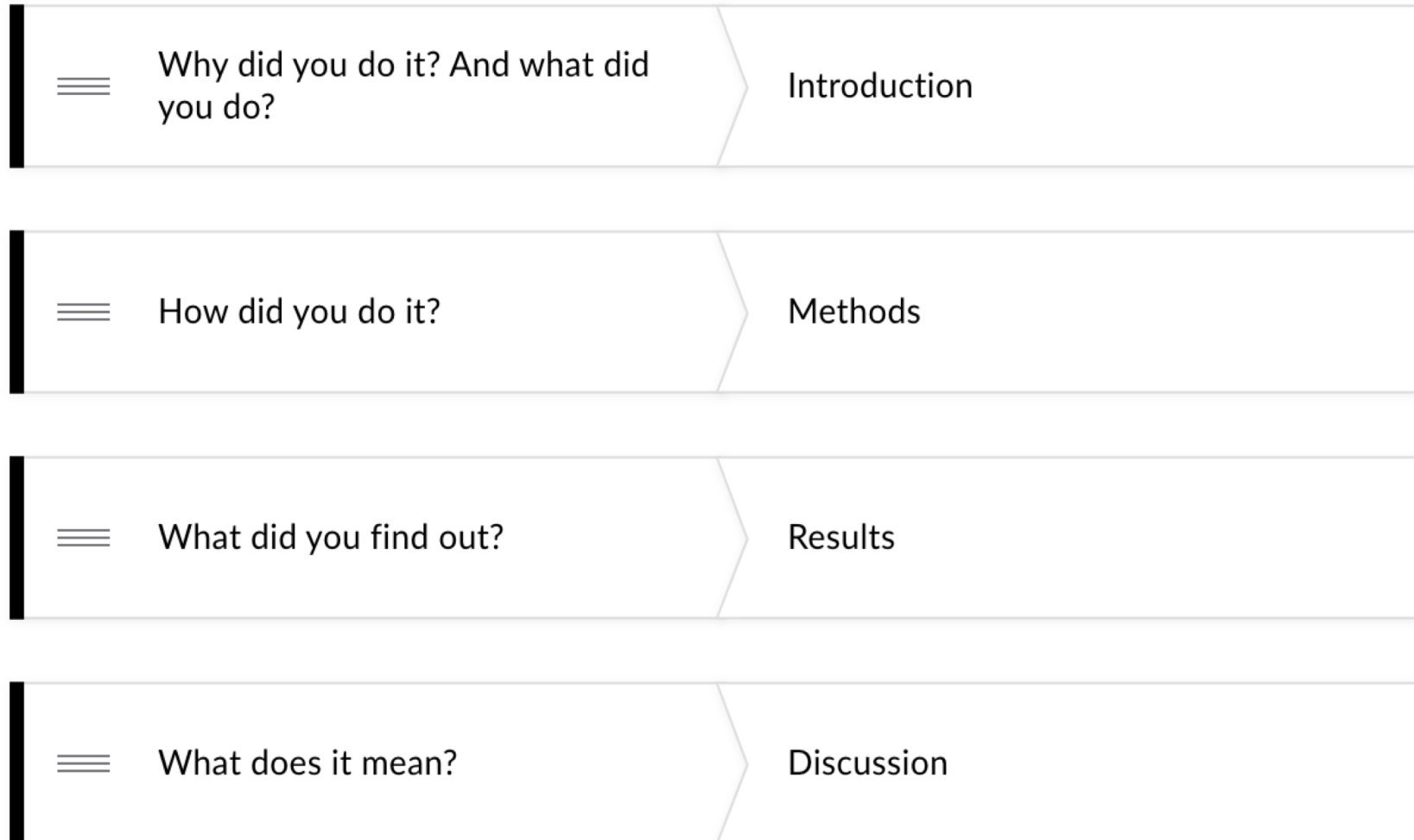
<https://masterclasses.nature.com/writing-a-research-paper/16605458>

11/4/23

Cláudia Cavadas

ted annotated example taken from *Nature* **435**, 114–118 (5 May 2005)

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Writing the introduction

- the introduction provides the key background information to allow readers to be able to find the paper accessible.
- It is not comprehensive literature review.
- It should only cover the topics that are relevant to the paper

Writing the methods section

- Detalhe e referencias

Writing the results section

- Contains the results.
- These can be experimental measurements, computational data...
- Include figures or tables or photos
- Write a narrative that helps the reader going through all of this.
- So one paragraph for each experiment or computation.

First sentence

The goal of the experiment

"To investigate the response of A or B on X or Y we measured [this or that]..."

Second Sentence

Present any relevant results

"Here we found..."

Third sentence

Refer to a figure or table or both

"Figure 1 and table 1 show..."

Fourth sentence

Conclude with a short statement

"This suggests that [this or that] depends significantly on X or Y..."

Writing the results section

- Figuras com Gráficos e Legendas
- Texto com referencia às figuras

Writing the discussion section

- interpretation of the results and an evaluation of the results
- a discussion of the implications
- is the place to convince the reader, or again, the referee, that you have ve indeed answered the research question.

Referencias bibliográficas

- Como fazer?
- Depende da revista
- Usar programas de bibliografia; ex: Zotero

Integridade científica

- Plágio | texto | referências | figuras
- Programas de deteção
- Falsificação

Um exemplo ...

- <https://onlinelibrary.wiley.com/doi/epdf/10.1111/accel.13983?src=getftr>

- VER mais informação aqui:

<https://www.uc.pt/iii/nature-masterclasses/escrita-cientifica-e-publicacao/>

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