

# AMPK-glycogen interplay: an opportunity for drug design

## Citation for published version (APA):

Miglianico, M. (2015). *AMPK-glycogen interplay: an opportunity for drug design*. Maastricht University. <https://doi.org/10.26481/dis.20151023mm>

## Document status and date:

Published: 01/01/2015

## DOI:

[10.26481/dis.20151023mm](https://doi.org/10.26481/dis.20151023mm)

## Document Version:

Publisher's PDF, also known as Version of record

## Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

## General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

[www.umlib.nl/taverne-license](http://www.umlib.nl/taverne-license)

## Take down policy

If you believe that this document breaches copyright please contact us at:

[repository@maastrichtuniversity.nl](mailto:repository@maastrichtuniversity.nl)

providing details and we will investigate your claim.

**Propositions belonging to the thesis entitled**  
**AMPK–glycogen interplay: an opportunity for drug design**

1. The interaction between AMPK and glycogen is of relevance for the regulation of both AMPK activity and glycogen content. (*this thesis*)
2. The development of novel drugs targeting AMPK greatly under-exploits the data from the field of structural biology. (*this thesis*)
3. Autophosphorylation at distal sites is an important, yet underappreciated mechanism of regulation of protein activity. (*this thesis*)
4. Isoeugenol derivatives target the carbohydrate-binding module of AMPK and may be further developed into a brand new class of AMPK modulators. (*this thesis*)
5. The identification of active compounds is a major step in a drug design project, but not a giant leap towards the clinic. (*this thesis*)
6. Drug discovery is not like finding a needle in a haystack, but rather like searching for a specific needle in a very large stack of needles. (*adapted from Scott J. Lusher et al., Drug Discovery Today, 2011*)
7. A signaling hub like AMPK must show heterogeneity in post-translational modifications, subcellular localization and splicing.
8. From an evolutionary point of view, insulin resistance results from an inappropriate adaptation of survival mechanisms used in times of famine, infection and stress. (*adapted from Agathocles Tsatsoulis et al., Metabolism: Clinical and Experimental, 2013*)
9. If you close the door to all errors, the truth shall remain outside. (*Rabindranath Tagore*)
10. On fait la science avec des faits, comme on fait une maison avec des pierres: mais une accumulation de faits n'est pas plus une science qu'un tas de pierres n'est une maison. [Science is built up of facts as a house is with stones: but a collection of facts is no more a science than a heap of stones is a house.] (*Henri Poincaré*)
11. This thesis is the fruit of the saying “Science knows no border”, or rather of “De wetenschap kent geen grenzen, Wissenschaft kennt keine Grenzen, bilim sınır tanımaz, la science ne connait pas de frontières”!