

Erfolgreich Forschungsanträge schreiben: worauf es ankommt.

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www.vet.uzh.ch/Studium/gast.html

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General structure of a grant application

- abstract
- introduction
- current status of research and personal contributions to the field
- objectives of the project (overall aim divided in 2-4 sub-aims)
- research plan / experimental approach
- significance of the proposed project, milestones
- timeline and personnel
- available resources, infrastructure and support (framework of the project)
- budget (salary, equipment, consumables, other)
- references

additional information/documents to submit:

- CV of applicant
- letter of recommendation
- copy of licenses (ethics commission, animal experimentation etc)
- relevant contributions of the applicant, which are not yet published (e.g. in press)
- quotes for expensive equipment

Important points to consider:

- Who will be reading and evaluating your grant?
scientists? laymen?
in any case, people outside your field!
- Why is your project important?
The reader has to easily understand its purpose and relevance
Sell your story as an example for an concept with a broad relevance
- Why are you the ideal person to carry out this project?
The project has to fit into the context
- Is your project realistic?
feasibility is judged by
 - your expertise
 - time (usually grants are overloaded)
 - costs
 - availability of samples/patients, infrastructure...

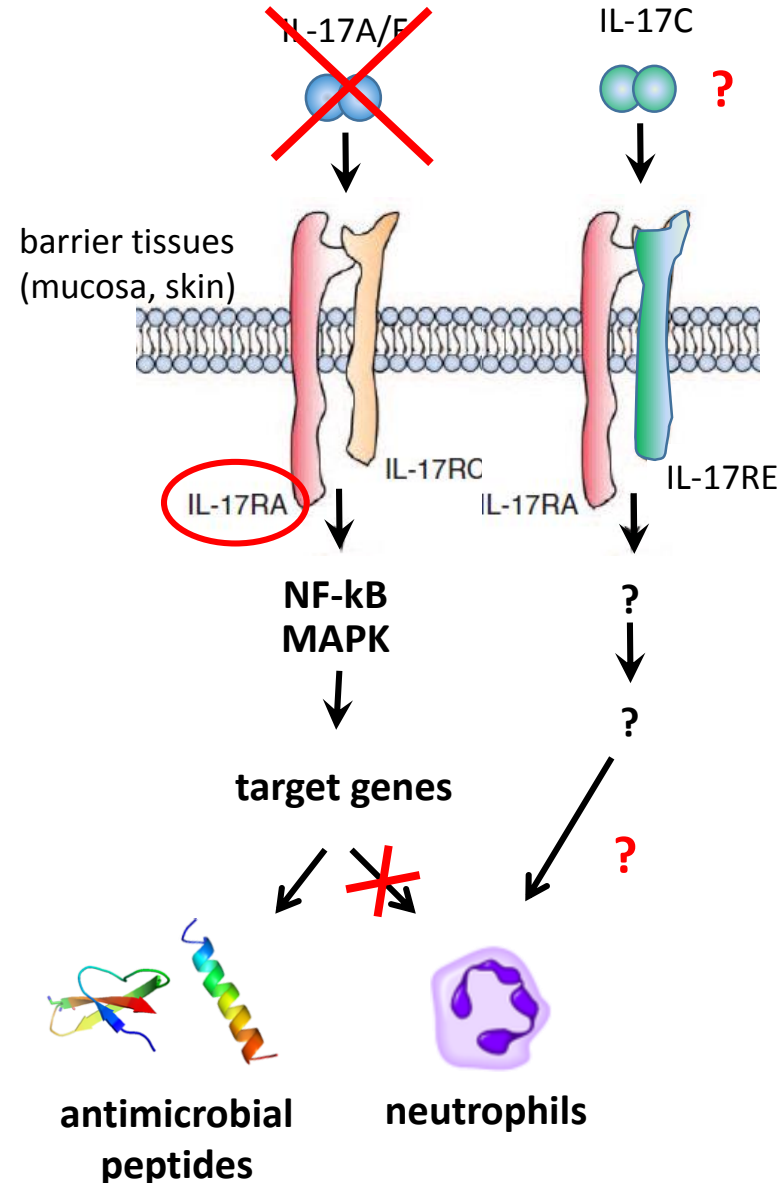
A few additional points about 'selling' your project

- your approach should be comprehensive
- try to cover different (complementary) aspects and approaches
- address the 'how' and 'why' (mechanism)
- include back-up strategies
- include preliminary data
- clear structure, logical sequence of approaches

Useful resources about grant writing:

- <http://www.niaid.nih.gov/researchfunding/grant/strategy/pages/3stratplan.aspx>
- <http://www.wellcome.ac.uk/Funding/Biomedical-science/Application-information/wtvm052727.htm>
- <http://www.mrc.ac.za/researchdevelopment/researchgrant.pdf>
- http://www.gla.ac.uk/media/media_146420_en.pdf

Example: Application for a 3-year PhD project (private foundation)



Rational:

The IL-17 pathway is essential for the control of infection with *Candida albicans*

IL-17RA was reported to regulate antimicrobial peptides and neutrophils

both effects are important for antifungal control

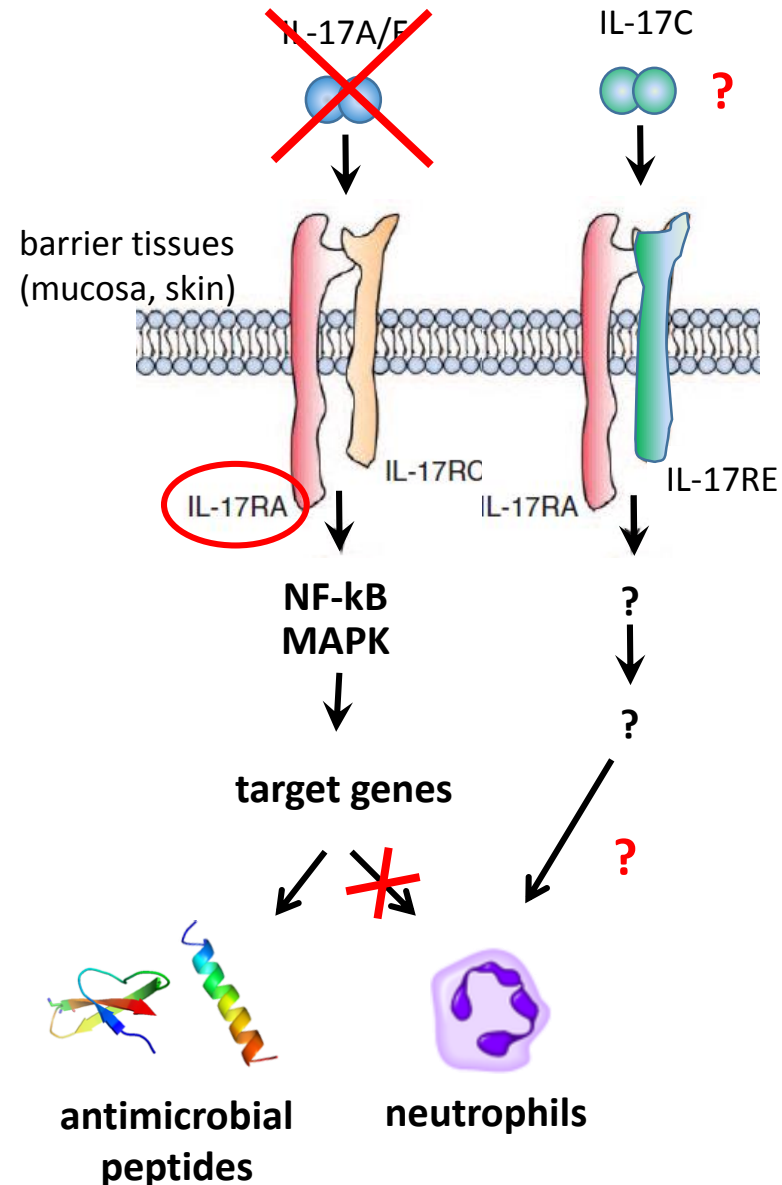
BUT: IL-17A/F is not essential for neutrophils during *Candida albicans* infection.

→ there must be another IL-17RA-dependent factor controlling neutrophils

Question:

Does IL-17C regulate neutrophils?

Example: Application for a 3-year PhD project (private foundation)



Aim of the project:

This project aims to unravel the **cellular and molecular mechanisms of IL-17 immunity** leading to protection from fungal infection.

In particular, it will address **the differential roles of different IL-17 cytokine family members** during *Candida* infection.

Specific goals of this project are

- **how is IL-17C expression regulated during infection**
- **cellular targets of IL-17A/F versus IL-17C**
- **response to IL-17C signaling (comp. to IL-17A/F)**
- **signaling networks**

→ include preliminary data (IL-17A/F depletion, IL-17C induction)

Example: Application for a 3-year PhD project (private foundation)

Significance of the project:

- importance to study IL-17 (IL-17 is important in other context as well)
- importance to study fungal infection (clinical relevance, understudied)
- details about IL-17-mediated immunity are not well understood
- The results obtained from this project will **reveal novel basic principles** of IL-17-mediated antifungal immunity. They may also **contribute to a better understanding** of how IL-17 can under certain circumstances acquire pathological functions leading to the induction of autoimmunity.
- Together, this may provide a **new basis for a rational design of preventive and therapeutic strategies** against fungal infections

Example: Application for a 3-year PhD project (private foundation)

Resources, Infrastructure

- place where the project will be carried out
- infrastructure at institute, core facilities
- collaborations, interactions (local, international)
- selection of PhD student for the project
- other funding
- availability of licenses

Timeline

months	1-6	7-12	13-18	19-24	25-30	31-36
A. ...	█	█	█			
B. ...			█	█		
C. ...			█	█	█	
D. ...				█	█	█