

**Note: for non-commercial purposes only**

*Munich, Germany*

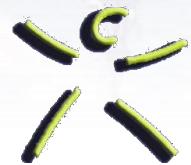
# Grant application - some tips

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**Dr. von Hauner'sches  
Kinderspital**



**EARLYNUTRITION**  
Long-term effects of early nutrition on later health

# Views of both an applicant and a reviewer / study section member



Bundesministerium  
für Bildung  
und Forschung



Deutsche  
Forschungsgemeinschaft

**DFG**



European Research Council  
Established by the European Commission



**NUTRICIA RESEARCH FOUNDATION**  
*founded for the advancement of research in human nutrition*



Deutscher Akademischer Austausch Dienst  
German Academic Exchange Service



**Bristol-Myers Squibb**

*Bristol Myers Squibb Foundation*

**Alexander von Humboldt**  
Stiftung / Foundation





# Know your granting agency and call

- Aims / mission of the granting agency
- Type of projects they support
- Amount they usually provide
- Adhere strictly to all notes for completion, avoid upsetting reviewers

# The research question

1. Specific research question/hypothesis?
2. What is already known? (literature)
3. Which group/population/setting?
4. Which major outcome(s) (dependent variables)?
5. Which interventions (independent variables)?
6. Are you looking for differences or a relationship (association)?
7. What answer do you expect to find?
8. Why is this important now? To whom (*patients, society, policy, economy, other*)? Potential translational application?



# Is it worth applying?

- Competition tends to be strong  $\Rightarrow$  collaborate
- Send in a very good application, not a weak one
- It takes time and work: balance vs. your priorities and chance of success
- But: only those who don't apply are guaranteed to have no chance

# Key criteria reviewers will likely apply

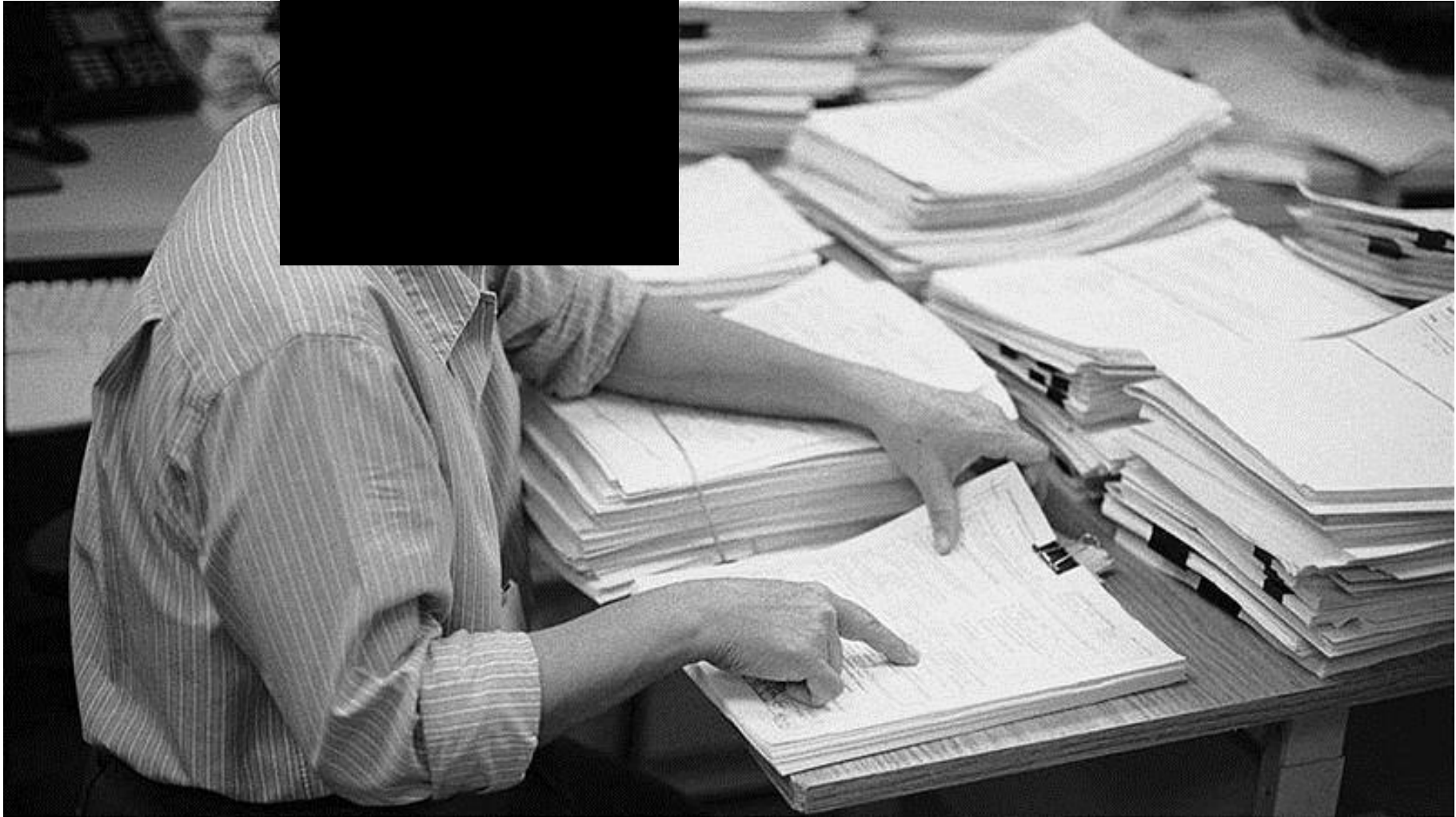
- Topic, innovation, scientific/clinical/public health relevance?
- Qualification of the team? Previous work, experience?
- Quality of the institution?
- Do concept, individual and institution match well?
- Is the workplan doable?
- Is the financial budget appropriate?
- Will it lead to competitive publications?
- Will it provide added value (*e.g. capacity building*)?



# Prepare your application

- Read call & instructions in detail, consider all words
- Obtain detailed information, find out what is needed
- Does your plan match?
- Try to obtain succesful previous applications to this agency *(from your colleagues)*

# Make your application „reviewer friendly“





[Meine Sicht / my view](#)

## **Ansicht Diskussionsfälle 33. Sitzung Sektion 4 "Genetische, metabolische und regulatorische Basis von Krankheiten und Public Health"**

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**Study section must review and decide on  
≈50 complex applications in one day**



# General structure of application

- Reviewers often must review very many applications
- Some reviewers are not experts in your topic
- Write clear and interesting, spell out all information rather than "implying"
- The first 2-4 pages may predict to >80 % whether your application is funded

# Specific aims/hypotheses

- Are the aims and hypotheses clearly spelled out?
- Are the aims well focused and fully conceptualized?
- Do the aims appear balanced – not overly ambitious or unrealistic?

# Background - relevance

- State of knowledge clearly described?  
Current/balanced references?
- Significance/importance evident? Innovative?
- Does it contribute substantially to previous work?  
Is it new? Or *"me to"* only?
- Need for the study/method justified?
- Is the significance overstated?
- Previous / preliminary work





# Workplan - Methods

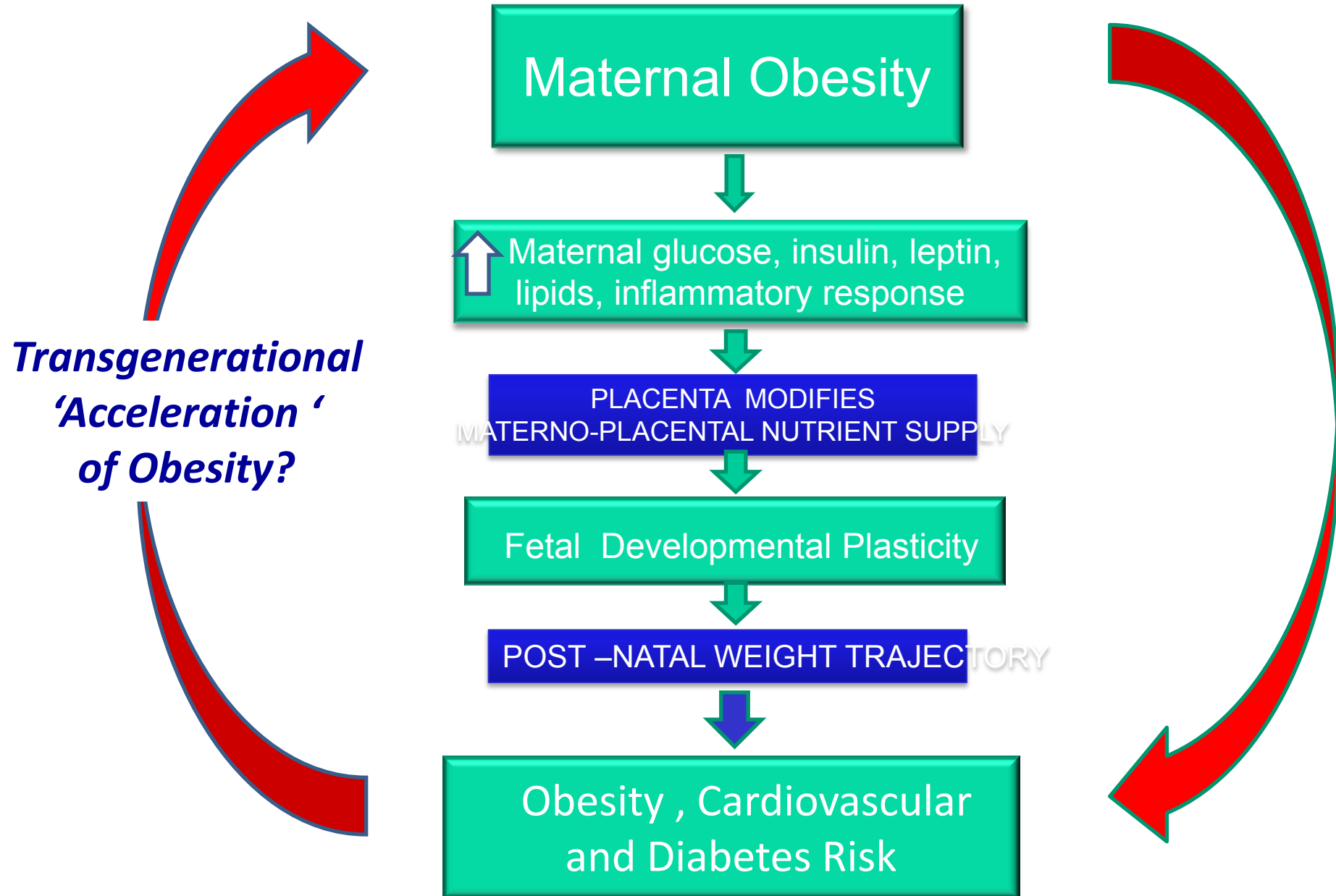
- Good reason f. selecting this sample? Convenience only?
- Potential bias in sample selection?
- Inclusion and exclusion criteria fully described, well-justified?
- Post-enrollment exclusions that might lead to bias?
- Power calculation. Enough participants in the setting to do this study as described? Is recruitment realistic? Previous experience?
- Tested and feasible enrollment and/or intervention procedures?
- Are primary and secondary outcomes adequately selected, described, and specified?



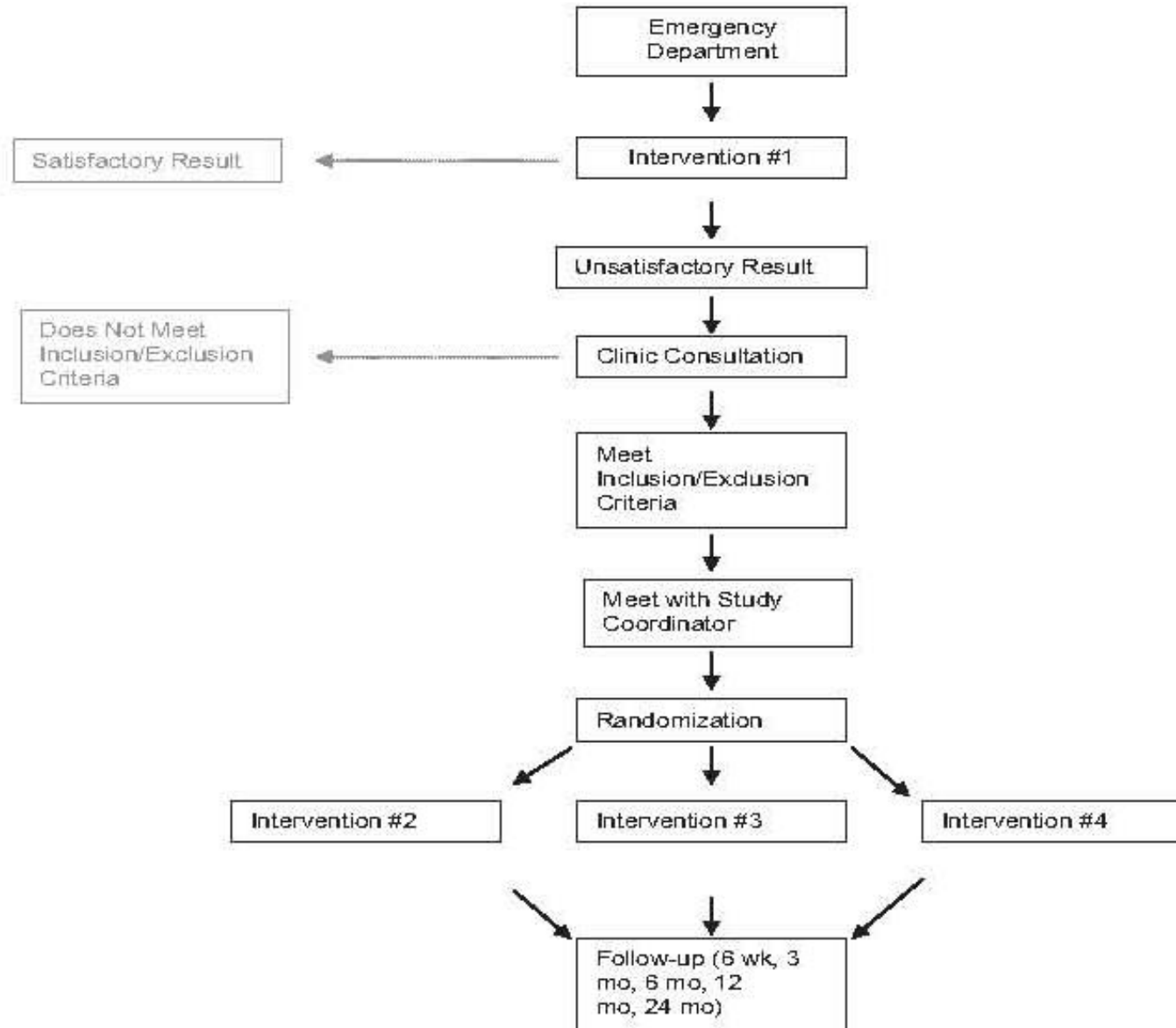
# Summary

- All strengths and limitations presented?
- How do limitations affect the validity or interpretation of the study results?
- Are potentially fatal flaws unaddressed?
- Are the implications of the work discussed?

# Use illustrations, e.g. hypotheses



# Use illustrations, e.g. flow chart





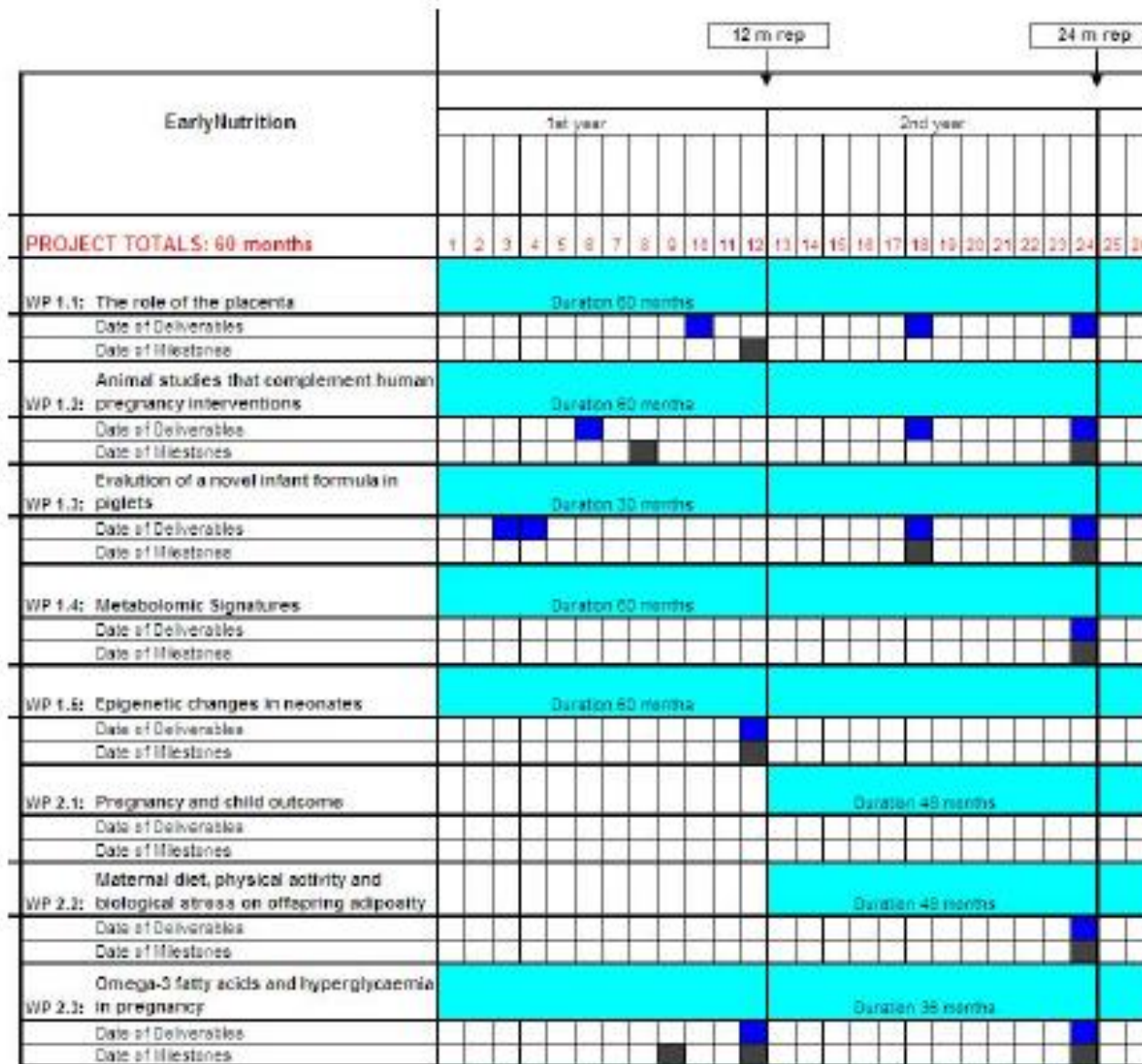
# Use illustrations, e.g. time plan

Tentative Timeline (5-Year Study)

Year	1		2		3		4		5		
Study month	1	6	12	18	24	30	36	42	48	54	60
Date	7/04	1/05	7/05	1/06	7/06	1/07	7/07	1/08	7/08	1/09	7/09
1. Specific aim 1	●—————●										
2. Specific aim 2	●—————●										
a. Data acquisition	●————●										
b. Chart review	●————●										
c. Data analysis/manuscripts	●—————●										
3. Specific aim 3	●—————●										
a. Subject interviews	●—————●										
b. Data management	●—————●										
c. Data analysis/manuscripts	●—————●										
4. Specific aim 4: analysis and synthesis	●—————●										



# Use illustrations, e.g. GANNT chart



# Additional points

- Keep references to a minimum, include only current and relevant references, cite only references you have read
- Indicate your track record in the field, and institutional experience with field and methods
- Discuss the application with critical colleagues
- Proofread, proofread, proofread
- Think like a reviewer
- Consider the "Evaluation panel from hell"

# Some key questions

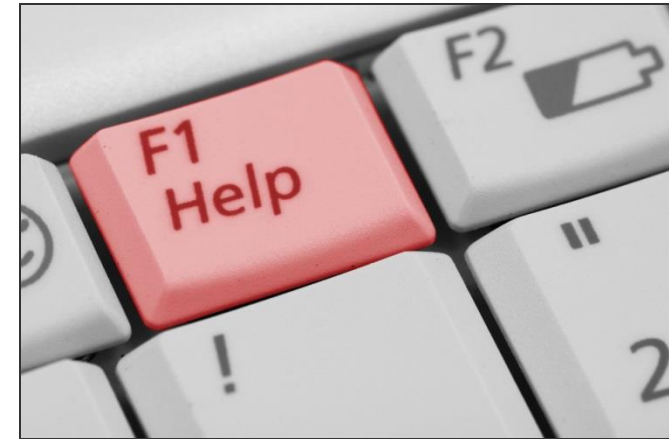
- Is the work novel, exciting and necessary?
- Are you repeating experiments that have already been undertaken?
- Have you justified various aspects of the funding requested?
- Have you filled out the 'housekeeping' portions of the form correctly?
- Have you checked your form for spelling and grammatical mistakes?





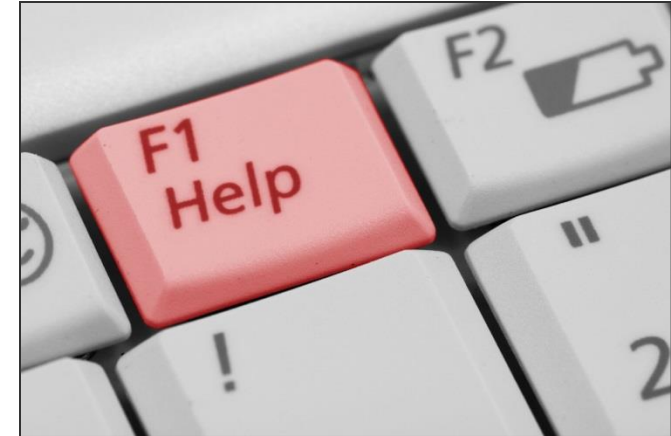
# Try to get help

- Experienced colleagues, supervisors & mentors
- University Grant Support Office
- Support Office of National Agencies
- Workshops by grant agencies
- Try to get successful applications



# Available resources re grant application

- PubMed
- Text books
- Web sites
- Courses
- Univ. research funding offices
- Check lists



# Key learning points

- Most important components: research question & study design
- Outcomes of interest dictate methods, not vice versa
- Statistical consultation is a wise investment
- Too few subjects can lead to erroneous conclusions, too many subjects can lead to trivial conclusions or waste of resources
- Funding agencies like studies that are important and relevant to their mission, scientifically sound, done by capable researchers, at limited costs
- Reviewers appreciate well written, easy to read proposals
- Study design and grant writing require time and much iteration



# Good Luck!

