Tips and Tricks for a Successful Grant Application

ISB Spring meeting

28.5.2010

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My own experience

- **As a graduate student**
- Different foundations
- Travel grants

- **As a post-doc**
- Academy of Finland

- **As an independent researcher**
- Academy of Finland (general grants, several programs)
- EU (7th frame work programme)
- TEKES
- Foundations (Juselius, Cancer association)

My own experience – as an evaluator

Academy of Finland

Medical counsil

- panel member

Life science counsil

- vice chair

Finnish cancer association

- panel member

Finnish cancer institute

- SAB member

Foreign organizations

- evaluator

A good grant application

- Different application for each purpose

- Have a clear focus that fits well to the goals of the foundation/counsil/program (e.g. basic life science v. medicine)

- Think, what is realistic, given the time and manpower (a large group and four years v. one person and one year)

A good grant application

- Read the instructions carefully and follow them
- Maximal length
- Subtitles / sections

A good grant application

- Many research plans would become better if:
- Less words
- Clear sections
- Simplified ideas
- Fewer references

Never:

- Use small fonts (less than 12)
- Long and tightly packed lines

to get all your great ideas and important experiments to fit in a limited space. Nobody reads it and you just irritate reviewers

A good grant application

- Who will evaluate the application?

- It helps, if the referees know you and your work
- Good papers in high i.f. journals or working in a famous research group are clearly a benefit
- When ever possible give oral presentations in conferences or try to get other opportunies to learn to known the researchers in your own field

A good grant application

- Who will evaluate the application?

- What will be the evaluation criteria?
- Read instructions
- An old evaluation feed-back form (if available) is very useful

A good grant application

- Try to make it clear for the evaluators, that the end result will be something valuable

- If all experiments will go as proposed, what do we get?
- A patent, and what after that?
- Novel information, enoung experiments, data and novelty for a Cell/Science/Nature paper?
- A standard BBRC paper might not be enoung

A good grant application

- The most important points should be repeated in different sections (Summary, aims, objectives etc.)

- It is possible that the evaluator does not read every word in your application

My standard research plan

- **Abstract / Summary**
- As short as possible
- Clear aims (1-4, no more than 4)
- What is novel?
- General significance
- 3-4 most important words can be with bold font

My standard research plan

- **Background**

- About one page
- Reviews used as reference + one or two new high-profile papers from leading laboratories
- Make the point that your research area is very important

My standard research plan

- **Own previous results**

- Short description about previous results from own laboratory, related to the research area
- A summary table is often nice
- Introduces the (quality) papers that you have published and tries to make the point that you know the field and that you have previously been able to publish in good journals

My standard research plan

- **Plan / Proposed experiments**

- Clear and short objectives and related hypotheses (max 4)

E.g.

Objective 2. To study conformational alterations in α2β1 integrin during activation of cellular signaling pathways

Hypothesis: It is possible to separate pathways activated by either α2 or β1 subunit.

My standard research plan

- **Plan / Proposed experiments**

- Preliminary results are often needed to show that the experiments have already been started and that the goals are realistic
- In some cases, e.g. structure determination, reviewers may want to see crystals already at application stage
- For young researchers, who have not published a lot about the proposed topic, the preliminary results are even more important

My standard research plan

- Materials and Methods should be included shortly
- If applying for 4 years, first two years in more details

My standard research plan

- **Collaborators**
- **Time table, milestones, budget, research group, division of labor, research environment**

Where to apply?

ACADEMY OF FINLAND

RESEARCH FUNDING AND EXPERTISE

Academy project	Research program	CofE
Post-doc	Acad Research Fellow	Acad prof
Infrastructure	Graduate Schools	FiDiPro

- 2 or more commercial enterprices that pay 20%
- Present system does support neither product development nor development of basic science related observations to inventions/innovations
- Future? Bio-SHOK **SalWe Oy**

EU

Cooperation
(Research network grants) 32.3 G€

Ideas (ERC, starting and advanced) 7.5 G€

People (Marie Curie, training, mobility) 4.7 G€

Capasities (Infra) 4.2 G€

How to get EU funding?

- Strategy of the University of Turku: External funding should increase (a lot)!
- Total national funding will not significantly increase in the near future – actually the competision will get harder than ever
- EU funding will get more and more important

How to get EU funding?

- Lobby to get right topics included into the calls
- Join / establish a good quality network (success rate is less than 20%, so the scientists/research groups should be in top 20%)
- Get companies (SMEs) involved
- Write a good application
- Hire a good management company

To remember

- Peer review is the best possible evaluation system, but not without problems
- Evaluators make mistakes, try again
- Still, if you do not get money take it as a learning experience, instead of blaming the system try to find the possible mistakes that you have done
- Read comments carefully