Applying for an ERC grant; lessons learned from practice

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ERC Experience:

Grant	Applications	Progression to round 2	Financing		
ERC Startup	2	1	0		
ERC Consolidator	3	2	0 (1?)		
ERC Advanced	1	1	0		
Total	6	4	0		

LS6: Life Science – Immunity and infection

WHY DO WE GET SICK?

VIRAL INFECTION

ACTIVATION OF THE IMMUNE SYSTEM

METABOLIC CHANGES



LOSS OF APPETITE





FATIGUE

FEVER

Metabolic changes in context of infection



My curriculum



- Publications: 48
- Citations: 2408
- H-factor: **24**
- 1st author: **16**
- Last author: 10
- Publications in journals with IF over 15: 11
- Nature: 0 Science: 0 Cell: 0

SWOT of our team:

Strengths

- Interdisciplinary
- Relatable
- Strong in vivo

Weaknesses

- Low-tech
- Small team
- Low budget
- Little human data

Opportunities

- Low competition
- Rapid in vivo implementation
- Cheap people
 - 1 Swiss PhD = 3 Croats
 - 1 Swedish PhD = 6 Croats

Threats

- No investments in major infrastructure
- Little institutional support

Key elements of the ERC application:



CV – 2 pages





B2 – 15 pages



Budget – online form (1500 signs)



When should you consider applying for an ERC?

- You are ambitious
- Your CV is OK (not astronomical)
- You have a good idea
- You know how to <u>sell</u> that idea
- You have preliminary data



Getting started: Instructions

- HRZZ (€200.000): 'upute' → 33 pages
- HORIZON-TWINNING (\leq 1.500.000) \rightarrow 28 pages
- ERC (€1.800.000) → ...



Section b. Methodology

Advantage: You can write the proposal however you want Disadvantage: You can write the proposal however you want

ERC; What to communicate:

WHAT are you going to do

WHY should we care?

WHY NOW?

WHY YOU?



WHAT are you going to do?

Our mission



The ERC's mission is to encourage the highest quality research in Europe through competitive funding and to **support investigator-driven** frontier research across all fields, based on scientific excellence.



How to set up the project



1

Evaluate the preliminary data that you have

2

3

Formulate a central research question

Cut it up in 2 to 4 noninterdependent projects

-> Reviewers

Metabolic changes in context of infection



Central research question:

How does T2D impact CD8 T cell function?



Turk Wensveen Diab Res Clin Pract. 2021

Central research question:

How does T2D impact CD8 T cell function?



WHAT are you going to do?

• 3 projects

- For 2 experienced and 2 unexperienced people
- Mix of high/low risk
- No interdependence
- Overlap in models and topic



- Of which 10-30% is already proven
- In a field in which our team has proven itself
 - Papers
 - Preliminary data

Writing B2

- B2 division of space:
 - 1/3 to section a (state of the art)
 - The problem
 - Background of the topic
 - Preliminary data
 - 2/3 to section b (methodology)
 - Segregated by project
 - Gant chart
 - Host institute
- Contingency plan
 - Weaknesses without appearing weak



Fig. 5. Lipids in 3T3-L1 cells differentiated to fibroblasts or adipocytes were labelled by BODIPY and measured by flov cytometry. (b) Primary hepatocytes were untreated or cultured with oleic acid, stained with BODIPY, and analyzed b confocal microscopy. (c) OT-1 cells were differentiated to memory cells in vitro and restimulated with N4 or the APL A2, Q4 or T4. TNF production was measured by intracellular flow cytometry. (d) OT-1 cells were transferred to W recipients and infected with mCMV expressing N4 or indicated APLs. Frequency of donor cells was followed in blood.

WHY should we care?

- Define the problem that you will address and why it is important
 - Novelty
- Define the impact that your findings may have
- Summarize the importance at the end of the grant

WHY NOW?

• Indicate the urgency of this research

WHY YOU? CV

- Emphasize your scientific prowess:
 - Scientific projects
 - Supervision experience
 - Collaborations
- Emphasize the unique position your research has in the field:
 - Publication record
- Less important:
 - Education
 - Teaching activities
 - Institutional activities
 - Etc.



B1

- Aims to convince the PANEL.
- Should therefore give more weight to:
 - The uniqueness of the proposal
 - Your strengths in the topic
 - The urgency of the topic
- Should use strong visual tools
- Should target scientists in your field, but not your subfield

• Should not be a summary of B2 \rightarrow different language!!!



The Budget

Nobody cares about the budget

Excellence is key

3 - Budaet

Beneficiary Short Name	ΡI	Senior Staff	Postdocs	Students	Other Personnel costs	A. Total personnel costs/€	B. Subcontracti ng Costs/€ (No indirect costs)	C.1 Travel and subsistence	C.2 Equipment - including major equipment	Consum- ables incl. fieldwork and animal costs	Publications (incl. Open Access fees) and disseminatio n	Other additional direct costs	C.3 Total other goods, works and services	Total Purchase costs/€	D. Internally invoiced goods and services/€ (No indirect costs)	E. Indirect Cost/€	Total Eligible Costs	Requested EU contribution /€
Medri	35000	36400	200000	180000	185000	636400.00	42000	57000	345000	577000	21000	56000	654000.00	1056000.00	0	423100.00	2157500.00	2157500.00
Total	35000	36400	200000	180000	185000	636400.00	42000	57000	345000	577000	21000	56000	654000.00	1056000.00	0	423100.00	2157500.00	2157500.00

Section C. Resources (Maximum 8000 characters allowed)

PI	Senior Staff	Postdocs	Students
35000	36400	200000	180000
35000	36400	200000	180000
	PI 35000 35000	PI Senior Staff 35000 36400 35000 36400	PISenior StaffPostdocsSenior StaffPostdocsSenior StaffSenior Staff

Section C. Resources (Maximum 8000 characters allowed)



The interview

- 10-minute presentation
- 20 minutes of questions
- You are behind the webcam, the panel is in Brussels.

The interview – inside information

The panel needs to go through 30 interviews in 3 days

Only about 3-4 panel members have really read your proposal

The panel is armed with the reviewer reports that you did not see yet

You need to convince those 3-4 panel members to defend your cause in the general meeting

The interview – inside information



What will they ask \rightarrow reviewer questions

Methodology

- How will you address this issue?
- Why did you choose this model?
- Context
 - How does this relate to other data?
 - You focus on A? Why not on B?
- If you exceed the standard budget, the panel chair will ask you why (answer: for equipment).

Last tip: Ask for a 2nd opinion





When you are not financed

- Use the comments of the reviewers to improve your proposal
- **NEVER** submit your proposal as a resubmission
 - It always has a negative impact on your evaluation
 - Change the title and the acronym
 - The panel changes every year



In summary

The purpose of the proposal-is to convince the panel that you can realize its goals

- Based on your personal profile
- Based on your scientific basis

Write the B1 and the B2 to vards different audiences

 Take a step back and consider whether you would want to finance you, if you weren't you

Good luck!