Experience with the ERC Proposal for the Project

STiMulUs – Space-Time Methods for Multi-Fluid Problems on Unstructured Meshes

Panel PE1

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Some General Advice I

- Two-stage review process, corresponding to proposal part B1 and B2
- If proposal fails in first stage, no application in the next year is possible
- **Advice:** Do a very good job on the first part B1, so you can at least reapply immediately the next year, taking into account review comments
- Choose the review panel early in your proposal writing and lookup the panel members & panel chairs, published on [http://erc.europa.eu/](http://erc.europa.eu/)
- Although painful, read the 70 page “Guide for Applicants” document of ERC (important information on age limits, proposal streaming, review criteria, ethics issues for life sciences and expected minimum profile of the PI)
- 50% of the review are on the PI, i.e. on your career and your past achievements, and only 50% are on the project. You cannot modify your past work, but you must try to sell it well!
Some General Advice II

• Although encouraged by the ERC, try to avoid interdisciplinary proposals. You will be more exposed and can be „attacked“ from more sides.

• Previous experience with proposal writing (EU projects, NSF/DFG grants, PRIN / FIRB projects) is very important

• Being already a referee for NSF, DFG, MIUR etc. is very helpful

• Have a look at the research topics of the panel members

• Have a look at the statistics published at the ERC website (overall success rate in 2011: about 12%)
  
  Good news 1: many Italians win ERC grants
  Bad news 1: only very few ERC grants go to Italian Universities
  Good news 2: UniTN success rate is relatively high
  Bad news 2: Average age of selected researchers in 2011 was 37 and only 21% of the successful PI were women
ERC Starting Grant: 2010 call
Grantees by nationality & gender
Source: 427 proposals

39 nationalities
ERC Starting Grant: 2010 call
Grantees by country of host institution & domain
Source: 427 proposals

21 countries

- Social Sciences & Humanities
- Physical Sciences & Engineering
- Life Sciences

Country of host institution:
- UK
- FR
- DE
- CH
- IL
- NL
- ES
- IT
- SE
- AT
- PT
- DK
- FI
- HU
- IE
- CZ
- EL
- NO
- PL
- CY

Number of Grantees:
- UK: 79
- FR: 71
- DE: 67
- CH: 27
- IL: 25
- NL: 25
- ES: 23
- IT: 22
- SE: 20
- AT: 17
- PT: 12
- DK: 6
- FI: 5
- HU: 5
- IE: 5
- CZ: 3
- EL: 3
- NO: 3
- PL: 3
- CY: 1
Some General Advice III

• You should have a really innovative idea...

• ...but it must be credible that you can do it.

• You must convince the panel, that you have already done some significant contributions to your field, and that with this grant you would be able to contribute even more.

• If you have some particularly important publications and or awards, this information can be put several times into the proposal to make sure the referees definitely see it (scientific leadership potential B1, early track record B1, CV in B1, state of the art in extended synopsis in B1 and state of the art in B2)

• Modest use of colors or bold face to attract attention

• Be ambitious!
Specific Information on Panel PE1

- Panel members and referees count publications and citations (without self-citations) and verify the quality of the journals.

- The applicant **MUST** have papers without his PhD supervisor(s), see also the minimum requirements of the ERC’s *Guide for Applicants*.

- The applicant should have at least one or two papers as a *single* author.

- The applicant must have experience as PhD supervisor or at least as co-supervisor and as a leader of a (small) group.

- International contacts and collaborations are very important, both for the panel, but also since potential international referees should know you and your work.
The Proposal for my Particular ERC Project

• Estimated time for writing the proposal: 1-2 months, starting well in advance of the deadline

• 2-3 days spent for writing the proposal summary well (page 1), proof-read and improved by prof. Toro and prof. Giunchiglia

• B1 scientific leadership potential (page 2):
  • small team (master + PhD student + international guests), 1 PhD student, winner of Leonardo da Vinci Award silver medal in 2009
  • summary of the main own contributions to science

• B1 CV (pages 3-4):
  • academic career (in my case: PhD, post-doc, ricercatore, winner of 2 associate professor competitions in Italy and Germany)
  • International collaborations and activities (organization of conferences and workshops), activity as referee for journals and funding institutions
  • Funding ID (previous research grants, research projects as PI and co-PI, e.g. PRIN projects, NSF projects, EU projects)
The Proposal for my Particular ERC Project

• B1 early achievement track record (pages 5-6):
  • list of journal publications with citations (no self-citations), separated in papers with and without the PhD supervisor
  • plenary lectures
  • list of national and international awards (in my case: Lecturer award of the German MIUR 2003, 20.000 EUR, Heinz-Maier Leibnitz award 2007 of DFG, 16.000 EUR, Richard-von-Mises award 2007 of GAMM, 1.500 EUR)
  • summary of publications and citations (Scopus 55 / 465)

• B1 extended synopsis:
  • Should be understandable by a non-expert panel member. Use some figures or sketches to illustrate your ideas.
  • I used the following structure:
The Proposal for my Particular ERC Project

- Structure of B1 extended synopsis (5 pages):
  i) Introduction and Motivation for our Research
  ii) Summary of the Research Activity in the Context of the State of the Art and own Contributions
  iii) Project Management and Quality Control
  iv) Concept for Teaching PhD Students and Post-Doc Researchers

- Part B2:
  - More technical, for the expert panel member and the external referees (will be definitely experts in your field)
  - State of the art, your own contributions to the state of the art, detailed list of references
  - Detailed work-plan, use of work-packages and milestones
The Proposal for my Particular ERC Project

• Structure of B2
  a) State-of-the-art and objectives, list of references
  b) Methodology
    - Detailed work plan with linked and interconnected work packages; list of milestones and compact graphical summary of the work plan
    - Although not compulsory any more: short description of the host institution, your department and the available facilities
  c) Resources
    - Budget of about 1.0 - 1.5 million EUR divided into 4-5 years
    - Panels can decrease the requested budget
    - Don’t be too modest. You should ask for a million.
    - 2-3 PhD students, 1-2 PostDocs, Linux cluster (in maths, for others laboratory equipment), travel expenses, visiting program
    - Put your own salary and put the maximum possible overheads of 20%
Good luck...

...and if you are rejected...

TRY AGAIN!