How to get a Grant of the European Research Council?

Karol Życzkowski
Jagiellonian University, (Cracow)
Polish Academy of Sciences (Warsaw)

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Research Grants of the European Research Council

a) Advanced Grants:
open for all applicants => for the very best European scientists

b) Starting Grants:
for ‘young’ applicants, not more than 12 years after Ph.D.
Results of the 2008 ERC Advanced Grants competition

- **Physical Science and Engineering (PE)**
  - 997 projects submitted
  - 105 grants awarded (10,5% success rate)
  - among them
    - 1 from Poland (physics, T. Dietl, Warsaw)
    - 1 for a Polish physicist (M. Lewenstein, Barcelona) (physics only!)

- **Life Science (LS),**
- **Social Science and Humanities (SSH)**

No grants for Polish scientists!
Results of the 2009 & 2010 ERC Advanced Grants competitions

3593 projects submitted

510 grants awarded (14.2% success rate)
(jointly during two competitions), among them

• Physical Science and Engineering (PE)
  1 from Poland (astronomy, A. Udalski, Warsaw)
  (physical science only!)

• Life Science (LS),
• Social Science and Humanities (SSH)

No grants for Polish scientists!
Evaluation performed by panel PE-2 (Advanced Grants, 2008 & 2010 editions)

• Preliminary evaluation

Every panel member obtained electronically 30-40 applications and was asked to evaluate (using the scale from 0 to 4 points)

A) scientific achievements of the principal investigator,

B) quality of the research project.
Observations:

• Results occurred to be strongly correlated:
  (applicants with the best grades for scientific profile usually scored many points for their projects)

• Conclusion:
  To have a fair chance for the final success an applicant has to show an outstanding scientific CV!
Final list of winners occurred to be similar to the top of the initial ranking list

• Project were evaluated according to the opinions of the experts and **NOT** by any bibliometric data.
• **However**, a high correlation between parameters and the success rate can be observed.
• Example: the median sum of citations of 10 articles selected by the applicant reads
  – **384** (among all 117 applications in panel PE-2)
  – **853** (among 33 projects evaluated in phase II)
  – **1326** (among 14 winning proposals)
Median values of bibliometric parameters of 2008 ERC grant winners

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Ad G - To have a fair chance for the final success an applicant has to:

1. prepare his application precisely according to the formal hints provided by ERC
2. produce a very good research proposal written in a clear way. It should satisfy the best experts in the field, but has to be understandable for other panel members
3. demonstrate an outstanding scientific CV which allows the experts to consider him as one of the leaders in the field. Not only his bibliometric parameters should be far above the average in his specialisation, but his scientific achievements should be widely known and appreciated.
Results of 2008-2011 ERC
Starting Grants competitions

1450 grants awarded, among them 8 for Polish scientists:

- Stefan Dziembowski (computer science, UW) 2007
- Natalia Letki (sociology, UW) 2009
- Mikołaj Bojańczyk (computer science, UW) 2009
- Janusz Bujnicki (molecular biology, PAS) 2010
- Maciej Konacki (astronomy, UMK Toruń) 2010
- Piotr Sankowski (computer science, UW) 2010
- Piotr Garstecki (physical chemistry, PAS) 2011
- Marcin Nowotny (molecular biology, PAS) 2011
Panels evaluating proposals for Starting Grants take into account:

1. Scientific achievements of the applicant - 45%
2. Quality of the research project - 35%
3. Plan to achieve scientific independence - 10%
4. Local scientific facilities - 7%
5. Other factors - 2%
6. Letters of recommendation - 1%

Source: survey performed in 2009 by K.Ż. after interviewing six Polish ERC panel members representing medicine, biology, archeology, physics. See „Przegląd Akademicki” 4/2009
St G. To have a fair chance for the final success an applicant has to:

1. Complete a **post-doc** abroad in a world class group
2. Produce there several **top research papers** (possibly with the world known leaders in the field)
3. Prepare a very good **research proposal** written in a clear way.
4. During the **presentation** at the ERC in Brussels, be able to impress the panel with her/his scientific achievements and a clear vision of the research project and the future scientific career.
Our local (Polish) perspective

- There are several good Polish scientists, but only very few of them have a chance to be competitive with the very top European level.
- This remark seems to concern also other states from the „New Europe”.
- In some communities scientists do believe that evaluation of the ERC grants is biased against candidates from „less developed states”.

Taking into account our economic situation, is it at all reasonable to compete with the best European scientists?
Football analogy:

• Is it reasonable to give money for a kind of "European League" and require that Polish football clubs compete with the European best teams, which have (at least) 10 times larger budget?

• Some miracles may happen:
Football analogy:

• Is it reasonable to give money for a kind of „European League” and require that Polish football clubs compete with the European best teams, which have (at least) 10 times larger budget?

• Some miracles may happen:
  (Wisła Kraków - Barcelona 1:0, August 2008) but this will unlikely change the general trend: Barcelona - Wisła 4:0, August 2008....
Concluding Remarks

1. Ministry should **encourage** the **best Polish** scientists to take part in the **ERC competitions**.
   - **Special grants** financed by the Polish Ministry of Science for all scientists, whose applications made it to the **second round** of the ERC competition.
   - **Support** to all applicants from their universities.
   - Ask all scientists paid from the taxpayer money to post their lists of 10 best papers (updated yearly)

2. Long term perspective:
   - attracting best young scientists to pursue their academic career in Poland (**higher salaries !**)  
   - **Mathematics** at *matura* back (final high school **exam**)
A very recent good news: Results of the 2011 ERC Advanced Grants competition

(at least) one Advanced Grant awarded to

Ryszard Horodecki (physics, Gdańsk)

Congratulations!

Please try to follow this good example!