ERC application and evaluation procedure

Dr David Krása
Head of Sector Physical Sciences & Mathematics
ERC Scientific Management Department

ERC in the Eastern Partnership, Tbilisi, 20-21 April 2017
Outline

- Evaluation process
- Submission of proposals
- Proposal preparation: Hints and tips
ERC Grant schemes

**Starting Grants**
starters
(2-7 years after PhD)
up to € 1.5 Mio
for 5 years

**Consolidator Grants**
consolidators
(7-12 years after PhD)
up to € 2 Mio
for 5 years

**Advanced Grants**
track-record of significant research achievements in the last 10 years
up to € 2.5 Mio
for 5 years

**Proof-of-Concept**
bridging gap between research – earliest stage of marketable innovation
up to €150,000 for ERC grant holders
ERC Evaluation process (StG, CoG & AdG)
Panel structure: 3 domains and 25 panels

<table>
<thead>
<tr>
<th>Life Sciences (LS) - 9 panels</th>
<th>Social Sciences and Humanities (SH) - 6 panels</th>
</tr>
</thead>
<tbody>
<tr>
<td>LS1 Molecular &amp; Structural Biology &amp; Biochemistry</td>
<td>SH1 Individuals, Markets &amp; Organisations</td>
</tr>
<tr>
<td>LS2 Genetics, Genomics, Bioinformatics &amp; Systems Biology</td>
<td>SH2 Institutions, Values, Environment &amp; Space</td>
</tr>
<tr>
<td>LS3 Cellular &amp; Developmental Biology</td>
<td>SH3 The Social World, Diversity, Population</td>
</tr>
<tr>
<td>LS4 Physiology, Pathophysiology &amp; Endocrinology</td>
<td>SH4 The Human Mind and its Complexity</td>
</tr>
<tr>
<td>LS5 Neurosciences &amp; Neural disorders</td>
<td>SH5 Cultures &amp; Cultural Production</td>
</tr>
<tr>
<td>LS6 Immunity &amp; Infection</td>
<td>SH6 The Study of the Human Past</td>
</tr>
<tr>
<td>LS7 Diagnostics, Therapies, Applied Medical Technology &amp; Public health</td>
<td>Physical Sciences &amp; Engineering (PE) - 10 panels</td>
</tr>
<tr>
<td>LS8 Evolutionary, Population &amp; Environmental Biology</td>
<td>PE1 Mathematics</td>
</tr>
<tr>
<td>LS9 Applied Life Sciences &amp; Non-Medical Biotechnology</td>
<td>PE2 Fundamental Constituents of Matter</td>
</tr>
<tr>
<td></td>
<td>PE3 Condensed Matter Physics</td>
</tr>
<tr>
<td></td>
<td>PE4 Physical &amp; Analytical Chemical sciences</td>
</tr>
<tr>
<td></td>
<td>PE5 Synthetic Chemistry &amp; Materials</td>
</tr>
<tr>
<td></td>
<td>PE6 Computer Science &amp; Informatics</td>
</tr>
<tr>
<td></td>
<td>PE7 Systems &amp; Communication Engineering</td>
</tr>
<tr>
<td></td>
<td>PE8 Products &amp; Process Engineering</td>
</tr>
<tr>
<td></td>
<td>PE9 Universe Sciences</td>
</tr>
<tr>
<td></td>
<td>PE10 Earth System Science</td>
</tr>
</tbody>
</table>
How are ERC research proposals evaluated?

*Excellence* is the sole evaluation criterion

Evaluation of *excellence* at two levels:

- **Excellence of the Research Project**
  - Ground breaking nature
  - Potential impact
  - Scientific Approach

- **Excellence of the Principal Investigator**
  - Intellectual capacity
  - Creativity
  - Commitment
How are the proposals evaluated?

Evaluation procedure – StG, CoG and AdG calls
Single submission, but a two-step evaluation

STEP 1

Remote assessment by Panel members of section 1, part B1: synopsis and PI

Panel meeting

Proposals rejected (score B & C)
Proposals retained for step 2 (score A)

STEP 2

Remote assessment by Panel members and reviewers of full proposals: part B1+ B2

Panel meeting + interview (StG+ CoG)

Ranked list of proposals (scores A & B)

Feedback to applicants

Redress
Scoring scheme

- **Score 'A':** Fully meets the ERC excellence criterion and is recommended for funding if sufficient funds are available.

- **Score 'B':** Meets some but not all of the ERC’s excellence criterion and will not be funded. **If score B is awarded in step 1, PI may not submit a proposal to any call in 2018!**

- **Score 'C':** Proposal is not of sufficient quality to pass to Step 2 of the evaluation. The applicant may also be subject to resubmission limitations in the next call. **PI may not submit a proposal to any call in 2018 and 2019!**
Typical reasons for rejection

Principal investigator
- Insufficient track-record
- Insufficient (potential for) independence
- Insufficient experience in leading projects

Proposed project
- Scope: Too narrow ↔ too broad/unfocused
- Incremental research
- Work plan not detailed enough/unclear
- Insufficient risk management
# Submission of Proposals

## ERC Work Programme 2017 calendar and tentative dates for 2018 Work Programme

<table>
<thead>
<tr>
<th>ERC calls</th>
<th>Budget</th>
<th>Call Opening</th>
<th>Submission Deadline(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advanced Grants</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ERC-2017-AdG</td>
<td>567 M€</td>
<td>16 May 2017</td>
<td>31 August 2017</td>
</tr>
<tr>
<td><strong>Proof of Concept</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Starting Grants</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ERC-2018-StG</td>
<td>tbd</td>
<td>July 2017</td>
<td>October 2017</td>
</tr>
<tr>
<td><strong>Consolidator Grants</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ERC-2018-CoG</td>
<td>tbd</td>
<td>October 2017</td>
<td>February 2018</td>
</tr>
</tbody>
</table>
How to prepare and submit an ERC research proposal?

- Have a **bright, original and exciting idea**
- Design a **research project** to implement the idea
- Get a letter of support from a **Host Institution** where the project is to be carried out (the HI must be located in the EU or any of the H2020 associated countries)
- Write your **research proposal**
- **Fully electronic/web based submission system**
- Submit your research proposal **before the deadline**
Eligibility window for Starting and Consolidator Grants and possible extensions

- Condition StG: PhD at least 2 and up to 7 years before 1 January 2018
- Condition CoG: PhD at least 7 and up to 12 years before 1 January 2018

Extensions of eligibility window possible for documented cases of:
- Maternity – 18 months per child (before or after PhD)
- Paternity – actual time taken off
- Military service
- Medical speciality training
- Caring for seriously ill family members
- No limit to the total extension
Submission to Panels

- Proposals are submitted to a *Targeted Panel* (of PI's choice)
  - Can flag one “*Secondary Review Panel*”
- **Applicant chooses his/her panel**, this panel is “responsible” and takes ownership for the evaluation of the particular proposal
- Switching proposals between panels not possible unless clear mistake on part of applicant, or due to the necessary expertise being available in a different panel
- **But**: In case of cross-panel or cross-domain proposals, evaluation by members of other panels possible
Online Submission
Proposal structure

Administrative forms (Part A)
1 – General information
2 – Administrative data of participating organisations
3 – Budget
4 – Ethics
5 – Call specific questions

Annexes
Commitment of the host institution, PhD certificates, etc

Part B1 (submitted as pdf)
Evaluated in Step 1 & Step 2
Text box - Cross-domain nature explanation
a – Extended synopsis 5 pages
b – Curriculum vitae 2 pages
Appendix – Funding ID
c - Track-record 2 pages

Part B2 (submitted as pdf)
Not evaluated in Step 1 (Step 2 only)
Scientific proposal 15 pages
a – State-of-the-art and objectives
b – Methodology
c – Resources

Guidelines and Recommendations in the 2017 Information for Applicants
Submission of Proposals
Differences in Part B1 and Part B2

In Step 1: Panel members (generalists and with multidisciplinary approaches) see only Part B1 of your proposal: Prepare it accordingly!

- Pay particular attention to the ground-breaking nature of the research project – no incremental research. State-of-the-art is not enough. Think big!
- Know your competitors – what is the state of play and why is your idea and scientific approach outstanding?
- Only the extended Synopsis is read at Step 1: concise and clear presentation is crucial (evaluators are not necessarily all experts in the field)
- Outline of the methodological approach (feasibility)
- Show your scientific independence in your CV (model CV provided in the part B1 template)
- Funding ID to be filled in
Submission of Proposals
Differences in Part B1 and Part B2

- In Step 2: Both **Part B1 and B2** are sent to specialists around the world (*specialised external referees*)
  - Do not just repeat the synopsis
  - Provide **sufficient detail** on methodology, work plan, selection of case studies etc. (15 pages)
  - Check coherency of figures, **justify requested resources**
  - Explain **involvement of team members**
  - Provide alternative strategies to **mitigate risk**
Preparing an application
Hints and tips (Generalities)

- **Register early**, get familiar with the system and templates and start filling in the forms.

- A submitted proposal can be **revised until the call deadline** by submitting a new version and overwriting the previous one.

- Follow the formatting rules and page limits.

- Download and proof-read the proposal before submitting.

- Make use of the **help tools and call documents** (Information for Applicants, Work Programme, Frequently asked questions) to prepare your proposal.

- Talk to the National Contact Points and your Institution's grant office.
Questions to ask yourself as an applicant

• Am I internationally competitive as a researcher at my career stage and in my discipline?
• Am I able to work independently, and to manage a 5-year project with a substantial budget?
• Why is my proposed project important?
• Does it promise to go substantially beyond the state of the art?
• Why am I the best/only person to carry it out?
• Is it timely? (Why wasn't it done in the past? Is it feasible now?)
• What's the risk? Is it justified by a substantial potential gain? Do I have a plan for managing the risk?
Some useful tools and links

- Read **Information for Applicants** and Work Programme
- View the **step-by-step video** Introduction to application process, including tips & tricks for the interview, [https://vimeo.com/94179654](https://vimeo.com/94179654)
- Consult **ERC website** for latest funding opportunities, view ERC funded projects
Preparing an application
Check the already Funded Projects

Menu allows searching by Funding Scheme, Research Area, Country of Host Institution.
Preparing an application

Check the statistics on granted projects and on submissions

distribution might differ from the indicative statistics, published at the release of the results, which are based on the outcome of the evaluation process.

<table>
<thead>
<tr>
<th>ERC Call</th>
<th>Applications received</th>
<th>Evaluated*</th>
<th>Funded</th>
<th>Success rates (%)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting Grant 2007</td>
<td>9,167</td>
<td>8,787</td>
<td>299</td>
<td>3.4</td>
</tr>
<tr>
<td>Starting Grant 2009</td>
<td>2,503</td>
<td>2,392</td>
<td>245</td>
<td>10.2</td>
</tr>
<tr>
<td>Starting Grant 2010</td>
<td>2,873</td>
<td>2,767</td>
<td>436</td>
<td>15.8</td>
</tr>
<tr>
<td>Starting Grant 2011</td>
<td>4,080</td>
<td>4,005</td>
<td>486</td>
<td>12.1</td>
</tr>
<tr>
<td>Starting Grant 2012</td>
<td>4,741</td>
<td>4,652</td>
<td>566</td>
<td>12.2</td>
</tr>
<tr>
<td>Starting Grant 2013</td>
<td>3,329</td>
<td>3,266</td>
<td>300</td>
<td>9.2</td>
</tr>
<tr>
<td>Starting Grant 2014</td>
<td>3,273</td>
<td>3,204</td>
<td>375</td>
<td>11.7</td>
</tr>
<tr>
<td>Starting Grant 2015</td>
<td>2,920</td>
<td>2,862</td>
<td>349</td>
<td>12.2</td>
</tr>
<tr>
<td>Starting Grant 2016</td>
<td>2,935</td>
<td>2,887</td>
<td>325</td>
<td>11.3</td>
</tr>
<tr>
<td>Starting Grant total</td>
<td>35,821</td>
<td>34,822</td>
<td>3,381</td>
<td>9.7</td>
</tr>
<tr>
<td>Consolidator Grant 2013</td>
<td>3,673</td>
<td>3,604</td>
<td>313</td>
<td>8.7</td>
</tr>
<tr>
<td>Consolidator Grant 2014</td>
<td>2,528</td>
<td>2,485</td>
<td>371</td>
<td>14.9</td>
</tr>
<tr>
<td>Consolidator Grant 2015</td>
<td>2,051</td>
<td>2,023</td>
<td>302</td>
<td>14.9</td>
</tr>
<tr>
<td>Consolidator Grant 2016</td>
<td>2,305</td>
<td>2,274</td>
<td>314</td>
<td>13.8</td>
</tr>
<tr>
<td>Consolidator Grant total</td>
<td>10,557</td>
<td>10,386</td>
<td>1,300</td>
<td>13.1</td>
</tr>
<tr>
<td>Advanced Grant 2008</td>
<td>3,167</td>
<td>3,034</td>
<td>282</td>
<td>13.9</td>
</tr>
</tbody>
</table>
Preparing an application
Check past panel members for the call

supervised work, is ready to work independently and shows potential to be a research leader? The ERC Starting Grant could be for you.

Who can apply?

Researchers of any nationality with 2-7 years of experience since completion of PhD (Extensions are possible under certain circumstances — see the latest ERC Work programme), a scientific track record showing great promise and an excellent research proposal.

What proposals are eligible?

- **Criteria**
  Applications can be made in any field of research
  The ERC’s grants operate on a ‘bottom-up’ basis without predetermined priorities.

- **Location**
  Research must be conducted in a public or private research organisation
  (known as a Host Institution/HI). It could be the HI where the applicant already works, or any other HI located in one of the EU Member States or Associated Countries

- **Host Institution**
Information sources

More information on
http://erc.europa.eu

To subscribe to the ERC newsletter
http://erc.europa.eu/keep-updated-erc

National Contact Point
http://erc.europa.eu/national-contact-points

Where to apply

Your grant offices
Thank you!
What does ERC offer?

Creative Freedom of the Individual Grantee

ERC offers selective and generous grants, independence, recognition & visibility

- Work on any research topic: completely bottom-up
- Gain financial autonomy for 5 years
- Negotiate the best work conditions with the host institution
- Attract top team members and collaborators (EU and non-EU)
- Portability of grants
- Attract additional funding and gain recognition: ERC is a quality label
After 9 Years, a Success Story

- Over 6,000 top researchers funded since the ERC’s creation in 2007
- Over 40,000 researchers and other professionals employed in ERC research teams
- €13 billion ERC budget for 2014-2020 under Horizon 2020
- Over 90,000 articles from ERC projects published in prestigious scientific journals
- 677 research institutions hosting ERC grantees – universities, public or private research centres in the EU or associated countries
- 67 nationalities of grant holders
StG 2015 Funded proposals by gender
Success rates by years past PhD

STG 2015 funded PIs by years past PhD

<table>
<thead>
<tr>
<th>Years past PhD</th>
<th>M (252)</th>
<th>F (99)</th>
<th>SR Female PIs (10 %)</th>
<th>SR Male PIs (13.4 %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CoG 2015 funded by proposals gender
Success rates by years past PhD

CoG 2015 funded PIs by years past PhD

- M (208)
- F (94)
- SR Female PIs (16 %)
- SR Male PIs (14.5 %)
Established by the European Commission

Scoring Scheme

- **A score: within panel budget**
  - Proposals for immediate funding.

- **A score: outside panel budget**
  - One or more reserve list proposals may be funded. Unfunded applicants can resubmit next year.

- **B score: not funded**
  - Proposals rejected (Step 1 or 2). No resubmission next year if B awarded in step 1

- **C score: non fundable**
  - Proposals rejected (Step 1). No resubmission next 2 years
ERC schemes are highly competitive!

Average success rate 12%
ERC Starting and Consolidator Grants 2017
The applicant’s profile

“Am I competitive enough?”

- Potential for research independence
- Evidence of scientific maturity
- At least one (StG) /several (CoG) publications without participation of PhD supervisor

Condition StG: PhD at least 2 and up to 7 years before 1 January 2017
Condition CoG: PhD over 7 and up to 12 years before 1 January 2017

Promising track-record of early achievements

- Significant publications
- Invited presentations in conferences
- Funding, patents, awards, prizes

All these need to be shown in your proposal that will include your CV and an early achievements track record.
ERC Advanced Grants
The applicant’s profile

“Am I competitive enough?”

- Exceptional leader in terms of originality and significance of your research
- Excellent track record and achievements during the last 10 years (this time window can be extended in case of eligible career breaks)

Substantial track-record of significant research achievements

- as appropriate for the field
- publications in peer-reviewed journals, monographs, invited presentations, funding, patents, awards, prizes
- Organisation of international conferences
- Major contributions to the early careers of excellent researchers
- Bibliometry may be one of the proxies used (where appropriate) among many others
Proposal budget considerations

- Budget analysis carried out in Step 2 evaluation (meeting)
- Panels have responsibility to ensure that resources requested are reasonable and well justified
- Budget cuts need to be justified on a proposal by proposal basis (no across-the-board cuts)
- Panels to recommend a final maximum budget based on the resources allocated/removed
- Panels do not “micro-manage” project finances
- Awards made on a “take-it-or-leave-it” basis: no negotiations