ERC Starting/Consolidator 20xx - Annotated Templates.

Below are the Part B1 and Part B2 templates for the ERC Consolidator call onto which we have added relevant evaluation criteria for each section and advice based on our experience.

Text highlighted in grey is part of the original template instructions

Text in orange boxes are our comments and advice based on experience

Text in green boxes are evaluation criteria taken from the Work Programme and relevant to the particular section

ERC Starting/Consolidator Grant 20xx Research proposal [Part B1]¹ Part B1 is evaluated both in Step 1 and Step 2.

(Part B1 is evaluated both in Step 1 and Step 2, Part B2 is evaluated in Step 2 only) Step 1 is assessed ONLY by the panel so the B1 should be aimed a broad but expert audience.

Proposal Full Title PROPOSAL ACRONYM

The acronym is used in panel discussions to identify your project. It should be easy to pronounce and ideally remind the reader of the essence of the project.

Cover Page:

- Name of the Principal Investigator (PI)
- Name of the PI's host institution for the project
- Proposal duration in months

Text highlighted in grey should be deleted.

Proposal summary (identical to the abstract from the online proposal submission forms, section 1).

The abstract (summary) should, at a glance, provide the reader with a clear understanding of the objectives of the research proposal and how they will be achieved. The abstract will be used as the short description of your research proposal in the evaluation process and in communications to contact in particular the potential remote referees and/or inform the Commission and/or the programme management committees and/or relevant national funding agencies (provided you give permission to do so where requested in the online proposal submission forms, section 1). It must therefore be short and precise and should not contain confidential information.

Please use plain typed text, avoiding formulae and other special characters. The abstract must be written in English. There is a limit of 2000 characters (spaces and line breaks included).

This summary is often used to identify the most appropriate panel members (and external reviewers) to review the proposal so try to aim the content of the abstract towards the best audience for favourable review. Only 3-4 panel members will actually read and comment on the proposal.

Explain and justify the cross-panel or cross domain nature of your proposal, if a secondary panel is indicated in the online proposal submission forms. There is a limit of 1000 characters, spaces and line breaks included.

This second box MUST be included if you choose to select a secondary panel. Having a secondary panel is generally considered a disadvantage since it means your proposal will be reviewed by more people and usually the proposal is not written towards the secondary audience which can

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¹ Instructions for completing Part B1 can be found in the 'Information for Applicants to the Starting and Consolidator Grant 2019 Calls'.

Section a: Extended Synopsis of the scientific proposal (max. 5 pages, references do not count towards the page limits)

[The Extended Synopsis should give a concise presentation of the scientific proposal, with particular attention to the ground-breaking nature of the research project, which will allow evaluation panels to assess, in Step 1 of the evaluation, the feasibility of the outlined scientific approach. Describe the proposed work in the context of the state of the art of the field. References to literature should also be included. Please use a reference style that is commonly used in your discipline such as American Chemical Society (ACS) style, American Medical Association (AMA) style, Modern Language Association (MLA) style, etc. and that allows the evaluators to easily retrieve each reference.]

Please respect the following formatting constraints: Times New Roman, Arial or similar, at least font size 11, margins (2.0cm side and 1.5cm top and bottom), single line spacing.

Evaluation Criteria

Ground-breaking nature and potential impact of the research project

To what extent does the proposed research address important challenges?

To what extent are the objectives ambitious and beyond the state of the art (e.g. novel concepts and approaches or development between or across disciplines)?

To what extent is the proposed research high risk/high gain (i.e. if successful the payoffs will be very significant, but there is a higher-than-normal risk that the research project does not entirely fulfil its aims)?

Scientific Approach

To what extent is the outlined scientific approach feasible bearing in mind the extent that the proposed research is high risk/high gain (based on the Extended Synopsis)?

The B1 should include the following:

- A brief description of the current state of the art and the existing challenges. Make the description interesting and understandable for a broad audience of scientists. Do not provide an overview of the history of the field but focus on describing the current understanding in the field and using this to highlight what is not known. Where there is a knowledge gap try to explain why the gap exists (technological limitation, no mechanistic studies for a newly discovered phenomena...)
- A broad overall goal. This should frame the project and the description of the current state of the art should set the stage for highlighting the importance and innovation of the broad goal. All the subsequent research aims should integrate together towards reaching this goal. Since ERC is a high risk/high gain grant this overall goal should be ambitious and may be so ambitious/risky as to be unachievable in the 5 years (although you will argue that the steps towards achieving this will themselves be ground breaking). Sometimes it makes sense to state the overall goal at the beginning of the proposal so the description of the state of the art can be written and read in the context of this goal.
- A description of how the overall goal will be achieved. Although the specific details of the methodology are presented in the full proposal the B1 must provide a good description of how the overall goal will be achieved, including an explanation for the underlying concepts and a description of the work which will be carried out during the project (usually this includes a breakdown into specific aims). One of the most common reasons for Stage 1 rejection is "a lack of detail in the methodology of the proposed project making the feasibility and novelty difficult to determine"
- <u>Justification for the feasibility of the project.</u> Feasibility includes a clear and well thought out research plan, preliminary findings which support the underlying concept of the project and your experience as a PI. Be careful of the very fine line between feasibility and continuation. ERC want to fund high risk/high gain projects and as such want to see that the major challenges and breakthroughs lie ahead. They do not want to fund projects which will continue or follow on from a major breakthrough. At the same time, you need to balance the high risk/ high gain of the project with a solid base showing feasibility for the direction or concept and your suitability as a PI to lead this project.
- Risk analysis. Identify risks in the project including a description of the level of risk and mitigation plans. There may be technical risks that need detailing but you need to focus on conceptual risks. A risk which you are sure you can overcome with enough time and money is NOT an ERC conceptual risk. A good risk analysis describes specific risks in detail (i.e. avoiding generic sentences) and also describes the project as a whole (e.g. achieving the overall goal may be risky but you can describe the importance of the steps towards that ultimate goal and the high gain that will come out of those steps alone). Risk analysis for the B1 section is focused on the risk of the project as a whole.

Remember that only 3-4 panel members read your proposal and the others will at most glance through the document. Also the 3-4 panel members reviewing your proposal are simultaneously reviewing tens of other proposals. In order to convey clear, concise and memorable messages you should:

- Make use of visual messages like a schematic overview of the project. Such a scheme might show how the aims come together to achieve the overall goal or highlight the challenge in the state of the art and the novelty of your proposal to overcome this etc.
- Use easily readable text with short sentences and avoid jargon and acronyms.
- Highlight key messages either by literally highlighting them by bolding the text or boxing a section or
 by repeating them within the text. Repeated messages should not be overly repetitive and it can be
 effective to use different justifications or explanations in order to make the repetition interesting and
 potentially noticeable by different reviewers.

The reference list is not included in the 5 pages.

The reference list is usually added to the end of the scientific proposal, before the CV.

If you have prepared the proposal early or are resubmitting a proposal make sure you have cited the most up to date results. We have seen proposals criticized for not including results published a few days before the deadline.

Section b: Curriculum vitae (max. 2 pages)

[Please follow the template below as much as possible (it may however be amended if necessary).]

PERSONAL INFORMATION

Family name, First name:

Researcher unique identifier(s) (such as ORCID, Research ID, etc. ...):

Date of birth:

Nationality:

URL for web site:

Since the ERC review process takes several months and many ERC reviewers visit the PIs website this can be an excellent place to add extra strength to your proposal or provide "updates" about recently published data or even progress in preliminary results. Make sure the website is up to date and that the ERC relevant material is "visible" during the evaluation period.

EDUCATION

200? PhD

Name of Faculty/ Department, Name of University/ Institution, Country

Name of PhD Supervisor

199? Master

Name of Faculty/ Department, Name of University/ Institution, Country

CURRENT POSITION(S)

201? – Current Position

Name of Faculty/ Department, Name of University/ Institution/ Country

200? – Current Position

Name of Faculty/ Department, Name of University/ Institution/ Country

• PREVIOUS POSITIONS

200? – 200? Position held

Name of Faculty/ Department, Name of University/ Institution/ Country

200? – 200? Position held

Name of Faculty/ Department, Name of University/

Institution/ Country

• FELLOWSHIPS AND AWARDS

200? – 200? Scholarship, Name of Faculty/ Department/Centre,

Name of University/ Institution/ Country

200? Award, Name of Institution/Country 199? – 199? Scholarship, Name of Faculty/

Department/Centre, Name of University/

Institution/ Country

• SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS (if applicable)

200? – 200? Number of Postdocs/ PhD/ Master Students

When mentioning local (national/university) prizes, it is relevant to have a short description (how prestigious they are or how many people receive this prize) to give a bit more depth since the reviewer might not be familiar with them. You can also highlight the importance of international prizes.

Mentoring the next generation of research leaders is important for the ERC. Beyond graduate students include other lab members; engineers, lab managers, summer students, visiting scientists etc. Include a short description of where past students are; prestigious postdoc position, industry, faculty etc.

University/ Institution/ Country

• TEACHING ACTIVITIES (if applicable)

| 200? – | Teaching position – Topic, Name of University/ Institution/ Country |
|-------------|---|
| 200? - 200? | Teaching position – Topic, Name of University/ Institution/ Country |

• ORGANISATION OF SCIENTIFIC MEETINGS (if applicable)

| 201? | Please specify your role and the name of event / Country |
|------|---|
| 200? | Please specify type of event / number of participants / Country |

• INSTITUTIONAL RESPONSIBILITIES (if applicable)

| 201? – | Faculty member, Name of University/Institution/ Country |
|-------------|---|
| 201? - 201? | Graduate Student Advisor, Name of University/ Institution/ Country |
| 200? - 200? | Member of the Faculty Committee, Name of University/ Institution/ Country |
| 200? - 200? | Organizer of the Internal Seminar, Name of University/ Institution/ Country |
| 200? - 200? | Member of a Committee; role, Name of University/ Institution/ Country |

• REVIEWING ACTIVITIES (if applicable)

| 201? – | Scientific Advisory Board, Name of University/ Institution/ Country |
|--------|---|
| 201? – | Review Board, Name of University/ Institution/ Country |
| 201? – | Review panel member, Name of University/ Institution/ Country |
| 201? – | Editorial Board, Name of University/ Institution/ Country |
| 200? – | Scientific Advisory Board, Name of University/ Institution/ Country |
| 200? – | Reviewer, Name of University/ Institution/ Country |
| 200? – | Scientific Evaluation, Name of University/ Institution/ Country |
| 200? – | Evaluator, Name of University/ Institution/ Country |

• MEMBERSHIPS OF SCIENTIFIC SOCIETIES (if applicable)

| 201? – | Member, Research Network "Name of Research Network" |
|--------|---|
| 200? – | Associated Member, Name of Faculty/ Department/Centre, Name of University/ |
| | Institution/ Country |
| 200? – | Founding Member, Name of Faculty/ Department/Centre, Name of University/ Institution/ |
| | Country |

• MAJOR COLLABORATIONS (if applicable)

Name of collaborators, Topic, Name of Faculty/ Department/Centre, Name of University/ Institution/ Country Add a short description about the subject of collaboration if relevant. Do not add the names of collaborators who might make good potential reviewers and would not be otherwise disqualified from reviewing your proposal (e.g. because of shared publications).

• CAREER BREAKS (if applicable)

Exact dates Please indicate the reason and the duration in months.

Add a factual line with basic details if you have requested an extension for eligibility:

e.g. 2012: Maternity leave

Appendix: All ongoing and submitted grants and funding of the PI (Funding ID)

Mandatory information (does not count towards page limits)

Ongoing Grants (Please indicate "No funding" when applicable):

The role of the PI refers to your responsibility for the project: e.g. sole PI, coordinating partner, partner(1 of 4) etc.

| Project Title | Funding source | Amount (Euros) | Period | Role of the PI | Relation to current ERC proposal ² |
|------------------|----------------|-------------------|--------|----------------|--|
| | | | | | |
| | | | | | |
| | | | | | |

Grant applications (Please indicate "None" when applicable):

| Project Title | Funding source | Amount (Euros) | Period | Role of the PI | Relation to current ERC proposal ² |
|------------------|----------------|-------------------|--------|----------------|--|
| | | | | | |
| | | | | | |
| | | | | | |

This list is used by the reviewers to:

- Determine your previous success in acquiring research funds; if you have no current funding you might mention your startup funds or previous funding acquired during postdoc
- Estimate your time commitment to other projects; think about this list when stating your percentage commitment to the ERC project is it realistic?
- Understand the novelty of the ERC project in relation to other running projects; check that you are not using exactly the same title. It is OK that there is limited overlap with the ERC project and it is best to first put the degree of overlap into context (e.g. overlap with some of the first aim, similar concept but approach and goals, limited overlap) and then provide a short description focusing on highlighting how the ERC submission is different or alternatively how the running project supports an aspect of the ERC submission.

² Describe clearly any scientific overlap between your ERC application and the current research grant or on-going grant application.

Section c: Early achievements track-record (max. 2 pages)

(see 'Information for Applicants to the Starting and Consolidator Grant 20xx Calls' for completing this section)

In the Track Record the applicant Principal Investigator should list (if applicable):

- 1. Up to five (for StG) or ten (for CoG) publications in major international peer-reviewed multidisciplinary scientific journals and/or in the leading international peer-reviewed journals, peer-reviewed conferences proceedings and/or monographs of their respective research fields, highlighting those as main author or without the presence as co-author of their PhD supervisor (properly referenced, field relevant bibliometric indicators may also be included); preprints may be included, if freely available from a preprint server (preprints should be properly referenced and either a link to the preprint or a DOI should be provided).
- 2. Research monographs and any translations thereof;
- 3. Granted patent(s);
- 4. Invited presentations to internationally established conferences and/or international advanced schools;
- 5. Prizes, awards, academy memberships

Evaluation Criteria:

To what extent has the PI demonstrated the ability to conduct ground-breaking research?

To what extent does the PI provide evidence of creative independent thinking?

To what extent does the PI have the required scientific expertise and capacity to successfully execute the project?

This section should convince the reviewer of your excellence as a PI and your suitability to lead the proposed project.

This section should not be redundant with the CV. If you have listed something in the CV (e.g. prizes) then you can refer the reader to the CV.

You can include a few paragraphs on yourself describing your scientific career, major contributions to science, envisioned research path, your suitability to lead the proposed research, etc. Try to make this text interesting and engaging for the reader. If you have not found enough space in the B1 to justify your suitability to lead the ERC project you can use this space to do that (or simply reinforce the message in B1).

Before listing the requested 5/10 publications, give an overview of your bibliometrics (e.g. h index, total citations, total number of publications and naming typical or high impact journals you have published in).

Beyond listing publications, awards, conference presentations, highlight their importance. This might include relevance the proposed project (preliminary results), demonstrates innovation, interdisciplinary, high impact etc. Consider which 5/10 publications to list, especially in terms of conveying a message of scientific independence. For awards and conference talks you might need to highlight the prestige (e.g. the most prestigious award for neurobiology in Israel).

You can include pictures from your lab/cover pages on journals etc. Visuals are eye catching and interesting.

ERC Consolidator Grant 20xx Research proposal [Part B2]³ (not evaluated in Step 1)

Reviewers receive the B2 together with the B1 and CV/track record but may only read the B2 so treat it as a "stand alone" document.

Part B2: <u>The scientific proposal</u> (max. 14 pages, references do not count towards the pagelimits)

Text highlighted in grey should be deleted.

Please respect the following formatting constraints: Times New Roman, Arial or similar, at least font size 11, margins (2.0 cm side and 1.5 cm top and bottom), single line spacing.

Evaluation Criteria – all the evaluation criteria are relevant. What was not evaluated in the B1 is bolded

Ground-breaking nature and potential impact of the research project

To what extent does the proposed research address important challenges?

To what extent are the objectives ambitious and beyond the state of the art (e.g. novel concepts and approaches or development between or across disciplines)?

To what extent is the proposed research high risk/high gain (i.e. if successful the payoffs will be very significant, but there is a higher-than-normal risk that the research project does not entirely fulfil its aims)?

Scientific Approach

To what extent is the outlined scientific approach feasible bearing in mind the extent that the proposed research is high risk/high gain (based on the Extended Synopsis)?

To what extent are the proposed research methodology and working arrangements appropriate to achieve the goals of the project (based on the full Scientific Proposal)?

To what extent does the proposal involve the development of novel methodology (based on the full Scientific Proposal)?

To what extent are the proposed timescales, resources and PI commitment adequate and properly justified (based on the full Scientific Proposal)?

Section a. State-of-the-art and objectives

Section b. Methodology

Although the B2 template has two subheadings you are not obliged to use them. The description of the resources, requested budget and justification has been now moved to the online form. The online Resources section is limited to 8000 characters, which is roughly 2 pages You don't have to fill all 8000 characters. References are not included in the page count.

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³ Instructions for completing Part B2 can be found in the 'Information for Applicants to the Starting and Consolidator Grant 20xx Call'.

The B2 should read as an independent document and must include all the elements listed above for the B1: A brief description of the current state of the art and the existing challenges, presentation of a broad overall goal and justification of its ambition, non-incrementality and novelty/innovation, a description of how the overall goal will be achieved, justification for the feasibility of the project and risk analysis. The B2 is expected to go into greater detail, particularly for the methodology. It is likely that the description of the state of the art and risk management will also be more detailed in accordance, since the more detailed methodology may require some extra background information. Remember that in B1 only 3-4 panel members, who most likely are not from your specific field, read the proposal whereas B2 is sent to external reviewers specifically from your field – convincing these experts as to the novelty, ambition and high risk/high gain dimension of the project will require specific, in depth details on how you will achieve the aims and ultimate goal.

Also take into account the additional evaluation criteria specific for B2 (listed above). These criteria should be addressed in the more detailed description of the methodology which should not only explain what you will do and how you will do it but also highlight the novelty of each aim and how you will integrate the outcomes of specific aims together in order to move towards the overall goal.

This section should include risk management at both project level and methodology level. For the methodology level, it should focus particularly on those methodologies that are novel, with a high margin of error or are, in some other way, high risk. A good mitigation plan defines alternative ways in which you can attempt to achieve the objective, or changes you might apply to the current approach that would increase its likeliness of success (e.g. reducing the selectivity and increasing repetitions). Expertise in the lab is acceptable but on its own it does not count as a mitigation plan.

It is advisable to indicate timescales for the project. Note the use of the word "timescales" and not "timeline". Being a 5-year high gain/high risk project, you are not expected to have a finely timed schedule and a Gantt for example is less appropriate for ERC. What you do need to show is a good plan of how the aims interconnect or rely on each other, how you can flexibly overcome challenges and how you will assign students and staff to different tasks.

Notes on the ONLINE resource description and justification: It is useful to outline what current resources you have both in terms of equipment and human resources. You might want to highlight resources beyond your own lab which might include specialist centers or faculty equipment available at the Technion or the colocation of experts in specific fields. On this background you can justify what further resources you need for the project.

A clear way of justifying the requested funding is using the subheadings within the budget table:

<u>Personnel:</u> Talk about the background the personnel need, which aims they will work on (assign project to students so that the more experienced students (like postdocs) will be recruited for the more high risk or more technically difficult tasks) and the percentage salary each will have.

<u>Travel:</u> Give a basic overview of how many conferences you/your students will attend per year. Don't commit to specific attendance but you might want to give an example of the kind of relevant conferences. <u>Equipment:</u> Basic details of the equipment to be purchased and for what purpose Consumables: XXXX

<u>Publications:</u> Take into account the cost of open access publication and state you will publish open access. Again, you might want to suggest which journal you expect to publish in, without committing. Other: XXXX, CFS (audit cost).

If you are requesting extra funding for major equipment/ access to large facilities it needs to be justified in this resources section and should be argued for within the scientific proposal. Without very convincing justification this funding will not be granted.