

Tips for applicants

How to prepare an application for an AIRC individual grant

For eligibility requirements and rules, please refer to the 2023 AIRC Calls

https://www.direzionescientifica.airc.it/

AIRC individual grants 2023



My First AIRC Grant (MFAG)	Southern Italy Scholars (SIS)
on 5 years	5 years
unity junior scientists who have never obtained an AIRC grant before, in order to establish record of independent research.	junior scientists seeking an opportunity of developing their independent careers in Southern or Insular Italy and establishing a network of collaborations with research groups
resedicii.	netwo collab

All Principal Investigators (PI) MUST demonstrate a **strong commitment to cancer research**.

Do you fulfill all eligibility criteria?



Make sure you satisfy all the formal **requirements** described in the <u>Call</u> and upload in the application the documentation supporting your eligibility.

In 2022

41 applications for individual grants
were excluded from the peer-review process
because they did not satisfy all formal
requirements.



Mark your calendar and do not miss the deadlines!



THE APPLICATION CANNOT BE SUBMITTED and CANNOT BE MODIFIED AFTER THE DEADLINE FOR SUBMISSION

The eligibility check and the evaluation of the proposal are based **ONLY** on the information included in the application.



Select the appropriate Hosting Institution & Legal Representative



The Principal Investigator (PI) and the Legal Representative of the Hosting Institution must digitally sign the full application.

What is the HOSTING INSTITUTION?

The research center where the PI will carry out the research activity supported by the grant.

→ Hosting Institutions already registered in the AIRC system are listed in the "Title page" form.

Who is the LEGAL REPRESENTATIVE?

The person with the legal authority to sign documents on behalf of the Hosting Institution.

→ A legal representative is already associated to each Hosting Institution in the AIRC system.

Please check that all data are correct.

What DIGITAL SIGNATURE should I use?

Applicants must use the digital signature tool (FEA) provided through the AIRC web platform. Legal Representatives must use their own legally recognized tool for electronic signature. For further details, please see:

https://www.direzionescientifica.airc.it/wp-content/uploads/2021/01/FEAInstructions.pdf

Keep in mind that reviewers are asked to answer these questions:



Project

- Is the project significant for cancer, and will it have an impact on cancer knowledge and treatment?
- Is there innovation and potential for competition at the international level?
- Is the project feasible and scientifically rigorous?
- Does the Hosting Institution support the establishment of a new research group? (MFAG and Start-Up)
- What is the quality of collaborations and the plan for training young fellows? (SIS)

Pl's track record

- Is the PI seriously committed to cancer research?
- Does the PI have the expertise and the track record needed to perform the proposed work?
- Is the PI showing enough maturity to act as an independent group leader? (MFAG, Start-Up and SIS)
- Is the PI coming from a truly valuable post-doc experience abroad? (Start-Up)

Budget

Is the requested budget appropriate?

Choose an effective title





The title should accurately and briefly describe the scientific question(s) being addressed

Examples of **strong titles**:

- "Dissecting p63 functions in skin cancer initiation and progression"
- "Plasma microRNA profiling as first line screening test for lung cancer detection: a prospective study"

Examples of weak titles:

- "Terminal differentiation opposes transformation, functional bases" too vague
- "The energy sensing LKB1-AMPKα1 pathway regulates IGF1 secretion and consequent activation of the IGF1R-PKB pathway in primary hepatocytes." too long, too specific, too many abbreviations

A good rule of thumb for abbreviations

- If you need to use acronyms, use only those that are widely known in the field, and do it sparingly
- Avoid, if possible, inventing acronym that are unique to your proposal
- Do not annoy a reviewer using acronyms instead of simple words and fully formed sentences

Write a focused and balanced abstract



Answer the following questions:

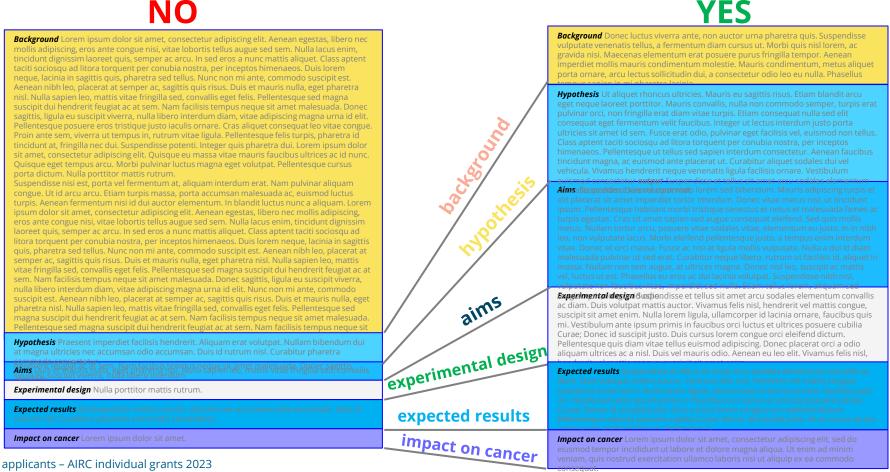
- Why is your question important?
- What is your key aim?
- How will you address the problem?
- What is the impact on cancer?
- What advances will be made?



Write a focused and balanced abstract



Do not give too much of introduction in the background, go straight to the point describing the hypothesis, the aims, experimental design, expected results, the impact on cancer.

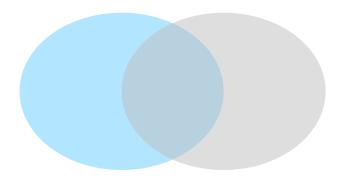


Choose keywords that describe the key features of your research plan



Keywords chosen by applicants and reviewers help make an initial match between an application and appropriate reviewers.

APPLICATION keywords



REVIEWER's keywords

The complete list of keywords is available here:

https://www.pages.airc.it/DataFiles/Calls/SupportInfo/Keywords.pdf

Choose keywords that describe the key features of your research plan



You can select up to 5 keywords – we suggest to follow this approach:

Type of cancer	+	Topic	+	Experimental models	+	Techniques used
Melanoma Solid tumors Leukaemia Tyroid ca. Breast ca. Glioma Colorectal ca		DNA damage Nanotechnology Biomarkers Immunotherapy Microenvironmen t Epigenetics p53		Clinical studies Pre-clinical studies Mouse models Animal models Zebrafish Yeast Organoids		MRI, PET, Biophysics NGS Imaging Metabolomics Drug screening Systems biology
		•••		•••		

Avoid keywords that are:

- too vague (e.g. genetics + animal model + genomics)
- too similar with each other (e.g. DNA damage + DNA repair)

The Proposal Main Body must be ORIGINAL





An anti-plagiarism software

is used to verify documents originality.

If the research plan bears a high level of identity to that presented by someone else <u>without including proper reference</u>, the application will be excluded from the peer review.

This also applies to:

- Applications by another team member or collaborator
- Proposals submitted within different AIRC funding schemes
- Applications submitted in past years, regardless of whether they have been funded or not





Focus and keep it simple

- "The usage of many acronyms does not help e.g. inhibitors are called PPI or DI etc."
- "The present proposal seems to be «a little of everything on very many topics»."
- "Background is long and rambling. Aims are diffuse ('explore, evaluate, investigate, compare') without specific hypotheses"

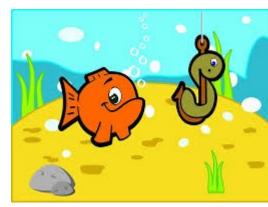
Define a clear and cancer relevant hypothesis

- "There is a lack of clear goals/aims/impact when it comes to cancer research except for some rather general statements."
- "Overall, the project is diffuse. Since no clear questions are put, no clear answers can follow."
- "After reading the aims page, I still had no initial idea what this proposal entailed."



Avoid fishing expeditions (unless supported by preliminary data)

- "This is mainly a 'fishing' expedition. On the one hand, it is possible for fishermen to catch fish. On the other hand, one would like some indication that fish are really present in these waters."
- "Overall, the study seems like a major fishing expedition and the two proposed tasks are very loosely associated."





Write a compelling story

- "A collection of tasks not related to each other is not a project."
- "It is not terribly well-written and sometimes it looks like a collage of somewhat unrelated work-packages with no logically stated and organized aims."
- "The grant reads a bit like as if the applicant did a PubMed search on exosomes and the tumor microenvironment and then proposed to perform every experiment he read about."



Feasibility

Support hypotheses with solid preliminary data

• "While the initial idea is excellent, the proposal is poorly prepared and does not contain any preliminary data to support the feasibility of the proposed approach."

Make sure your numbers are statistically significant (See also, David L. Vaux, "Know when your numbers are significant", Nature, 2012)

• "The experimental plan is seriously flawed. Some of the studies are too small to achieve statistically powered results."

Show that you are experienced in the proposed research field

"It is not clear that the investigator has the experience to do the work".

Caveat and pitfalls: make sure you have a «plan B»

• "If the first experiment fails (i.e. the hypothesis was wrong and you disprove it), they have nothing to do".





If your application is a revision, reply to reviewers' criticisms

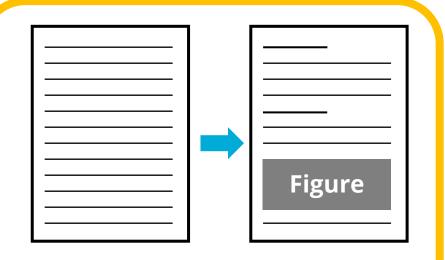
- "The applicant's chief response to the prior critique seems to be «give me the money and I'll show you». This was a very disappointing revision in nearly every respect."
- "The project shows some advancement and some changes with respect to last year, however the framework is fundamentally the same."
- "Following comments on the previous application, it is appreciated that actions have been taken to substantially modify some of the approaches."



FIGURES in the Proposal main body



The use of FIGURES, diagrams and tables helps convey a concept more clearly



Sections and Figures lead the evaluator to focus on important information

Simplify figures. Remove anything that doesn't convey information (such as 3D, shadowing and unnecessary colours).

Make figures readable. Verify that text in figures can be read if printed. Remove unnecessary information.

Provide short titles for figure legends.

Highlight your role in publications



Provide complete and accurate information about AUTHORSHIP because:

- they are required, among other things, to check for the eligibility criteria
- the track-record is considered part of the feasibility of the project
- it helps reviewers evaluate seniority and independence



Properly justify each budget category!!



TOTAL: € 194,775.00

Justification notes:

consumables services publication fees meetings



TOTAL: € 194.775,00

Justification notes: 1ST YEAR JUSTIFICATION NOTES

1ST YEAR JUSTIFICATION NOTES CONSUMABLES AND SUPPLIES: Kits for molecular biology: 5.000 euro

Enzymes: 4.500 euro

Reagents for PCR and RT-PCR: 11.000 euro Growth media for yeast and bacteria: 10.000 euro

Glassware and plasticware: 10.000 euro

Radioisotopes: 4.000 euro X-ray films: 2.000 euro

Membranes (hybond, nitrocellulose): 2.000 euro

Oligonucleotides and alp Antibiotics: 2.000 euro

MEETING AND TRAVEL COSTS:

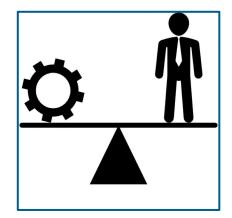
Registration fees and travel costs for attending scientific meetings

PERSONNEL COSTS:

Annual salary for a post-doctoral fellow



Make sure your budget is adequate for your scheduled tasks





Make sure there is consistency between the description of the activities and the staff involved!







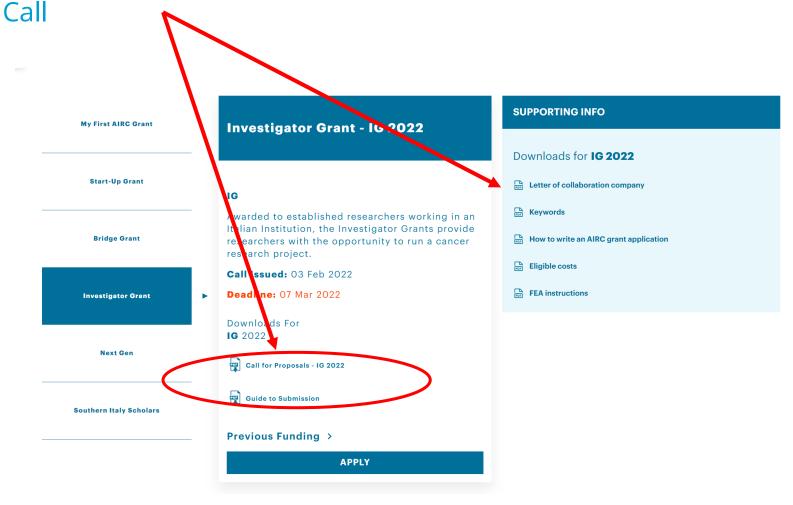


- Be realistic!
- A well prepared budget positively affects the evaluation of the application, and it guarantees its feasibility.

 Don't forget that funds are given (and must be accounted for) on a yearly basis.



Read all documents in the Call! Check the eligible costs established for every

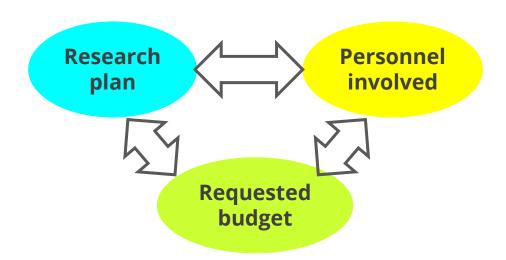


Budget: Lessons from Reviewers' comments



Ask for what you really need to carry out the proposed research plan (no reverse budgeting).

"The statement that he is setting the number of patients based on budgetary issues is neither valid nor acceptable. Statistical relevance and not budgets is what drives good science."



Reviewers will understand whether the budget is inflated and can recommend budget cuts, which AIRC WILL undertake.

"Each and every component of the budget is inflated given the relatively straightforward nature of much of the programme. I recommend a 40% reduction in the total budget requested."

The financial request should be in line with the number of people involved in the project and with the required consumables.

"This budget is overestimated for the few people that will be actively working on the research plan."

Contact us:



airc.direzione-scientifica@airc.it

AIRC Calls for proposals and supporting documents can be found at: https://www.direzionescientifica.airc.it/funding-for-research/individual-grants/

This presentation is meant as a series of suggestions for writing an application for an AIRC individual grant. To apply, please read the AIRC Calls for proposals 2023 and the "Guide to proposal preparation 2023", where eligibility requirements and rules are listed.