

Obtaining grants

Opportunities, tools & tips for success





Obtaining grants: How to get started?



What are your needs?

Start with basic questions

- Main research idea?
- New / exploratory idea? Preliminary data?
- Individual or collaborative?
- How much? Personnel, equipment, lab consumables, travel...?
- How long?
- Only basic research? Any product development or clinical trial?
- Related to another project?
- Any other specific issues?

Description of your funding needs

PI identity/Entity name			
Title/Subject/Project			
Type of project:	Collaborative project, Individual fellowship OR Mono-beneficiary		
Description of the possible collaborators	If you already have collaborators: Name of the institution, name of your collaborator & country		
Short scientific description (10 lines max):	Hypothesis/Goal(s), Who does what, Techniques used in the study, Clinical resegrency Impact on Public Health? etc		
Keywords (5 max)			
Funding for:	Equipment, Salaries for lab personnel, Functioning/Running costs, Networking, other?		
Funding range (amount) and duration			
Relation with other current projects?			
Comments			

How to know about funding opportunities?

Talk with colleagues, international collaborators, funders...

- Be ready: prepare an abstract of your research idea specific aims, requested budget, collaborations...
- Identify your potential US and other international competitors / partners and contact them, if relevant
- Contact your Grants Office (or equivalent office)
- Find out current opportunities through websites and newsletters from funding agencies
- ☐ Be proactive in **international meetings**
- Talk to representatives of funding agencies
- ☐ Contact your colleagues from other research institutes to let them know that you wish to apply to funding



How to choose the right funding agency?

Find the right funder and the right call for proposals

- ✓ Is your project more appropriate for national or international funds?
- ✓ Consider all key aspects: consortium, budget, topic...
- ✓ Take into account your status: are you an established PI, early or mid-career, post-doctoral fellow?
- ✓ Find the appropriate call for proposals / funding opportunity announcement
- ✓ Keep in mind the eligibility criteria
- ✓ What are your chances of being funded?
- → Your project must perfectly fit the call for proposals
- ✓ Think about other options, if relevant: industrial partnership, philanthropy...





















Obtaining grants:
Overview of some
international funders



Introduction to National Institutes of Health

NIH

NIH main features





Tools from National Institutes of Health

Find funding opportunities, funded projects and proposal samples





Look for funding opportunities

Database of funded projects

esearch Strategy

A) Significance:

Chronic infections caused by biofilms annually affect 17 million deaths, and cost the US healthcare system billions of dollars [2-patient, tens of thousands of dollars per year, and are prevented bacterial biofilms dominated by *Pseudomonas aeruginosa* [10]. Ediabetic and non-diabetic patients and can lead to amputation [14]

Biofilms resist antibiotics and evade the host immune def matrix of differentiated extracellular polymers (EPS) and pro controlling intercellular associations and differentiation of microe proteins also confer intercellular cohesion on biofilm bacteria, the of the biofilm to physical breakup. The impact of spatial structur such as virulence, antibiotic resistance, and immune evasion about what specific structures and mechanics develop in biofil bese properties are largely lacking. These are significant and

Read grant samples

International cooperation in Horizon Europe

horizon europe

How can non-EU institutions be funded by EC funds?

Health calls

open to **US**

EC member states

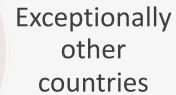
Associated countries

LMIC



Individual grants:

any nationality





Participants from other countries (i.e. countries that are neither EU Member States nor countries associated to Horizon Europe, nor countries listed above) are not automatically eligible for funding and therefore usually have to participate at their own cost. They can however receive **exceptional funding**. if:

- their country is explicitly identified in the work programme and call for proposals as being eligible for funding
- the granting authority considers that their participation as a beneficiary is essential for implementing the project, for example in view of their:
 - outstanding competence/expertise
 - access to particular research infrastructures
 - access to particular geographical environments
 - access to particular data).

Official list of participating countries to Horizon Europe

Funding for post-doctoral fellows

3 major fellowships

EC – MSCA Postdoctoral Fellowships

- 24 months
- Any nationality based in EU/AC
- September 18, 2023

Skłodowska-Curie

Human Frontier Science Program

- 36 months
- Nationals or based in HFSP countries
- May & September, 2023

European Molecular Biology Organization

- 24 months
- Nationals or based in EMBO countries
- February or August, 2023





Funding from private international agencies

Examples of major private funders

Wellcome

- Founded in 1936, based in the UK
- Generally eligible for UK and low- and middle-income countries
- 3 health challenges: mental health, infectious disease and climate & health
- Early-Career, Career Development & Discovery Awards



Bill & Melinda Gates Foundation

- Launched in 2000, based in the US
- Generally targeted to low- and middle-income countries
- Mission: "fighting poverty, disease, and inequity around the world"
- Grant opportunities, Grand Challenges grant opportunities or direct contact



Chan Zuckerberg Initiative

- Founded in 2015, based in the US
- Generally open to research institutions based in any country
- Support the science and technology to cure, prevent, or manage all diseases
- Programs in Imaging, Single-Cell Biology, Neurodegeneration, Open Science



Coalition for Epidemic Preparedness Initiatives

- Founded in 2017 by the governments of Norway and India, the Bill Gates Foundation, Wellcome, and the World Economic Forum
- Mission: "to develop vaccines to stop future epidemics"
- Calls for proposals in vaccine development, technologies, clinical trials for vaccines





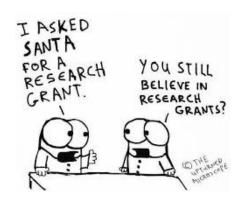
Contact: gointernational@pasteur.fr



Grant Writing for success

Ksenia Bagrintseva, MD PhD Expert in grant writing Grants Office









Low success rates

MSCA PF/ DTN 13%

ERC 8 - 16%

NIH 10-19%

ANR 25%



60-120 h/proposal

Do a Great Science and package well!









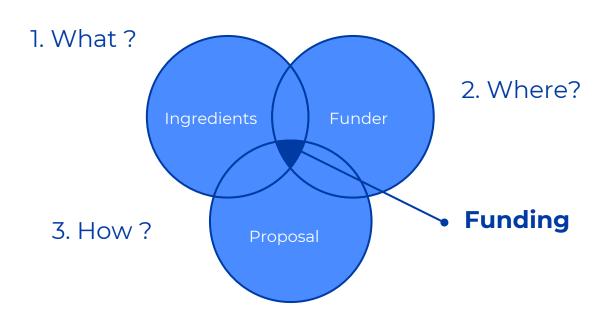
WHO & HOW?



Looks like they become extinct after developing of food and medicine packaging they were unable to open

Proposal Preparation





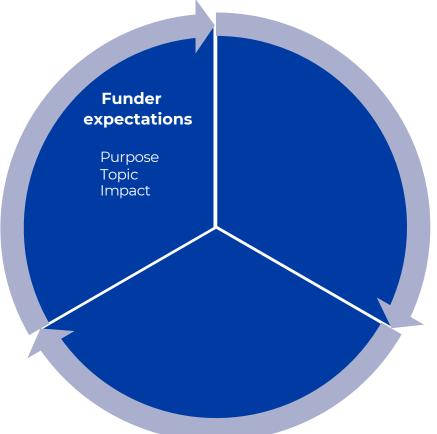
WHAT? Project's Ambition

	Basic	Average	World- Class	
Ingredients	•			
Recipe/ Methodology				
Expected outcomes				
Impact				
Budget			•	



The reviewers thought fieldwork in the Galapagos was a bit extravagant. So Darwin's travel budget got slashed.

WHERE? Adapt to funder

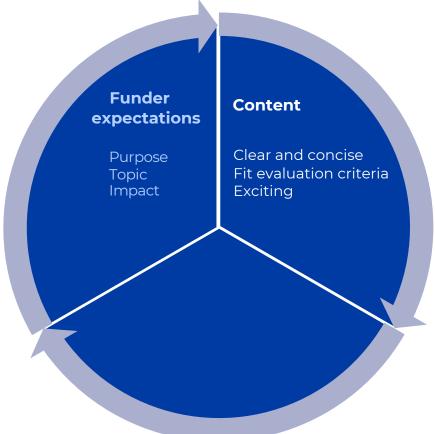




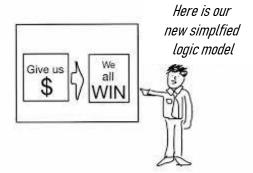
Isaac Newton struggles to write the economic impact section of his « gravity » proposal



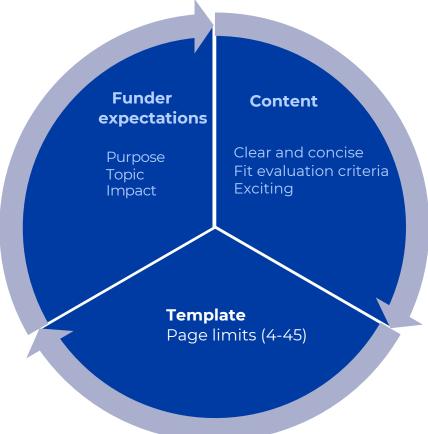
WHERE? Adapt to funder



Create a « logic model»



WHERE? Adapt to funder



PAGE LIMITS





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"Having knowledge but lacking the power to express it clearly is no better than never having any ideas at all."

— **Pericles** c. 495 – 429 BC

GRANT **PAPER**



Content Ingredients GRANT Recipe/ Methodology Expected outcomes **PAPER** Results Methods



GRANT

PAPER

Content

- Ingredients
- Recipe/ Methodology
- Expected outcomes
- Results
- Methods

Evaluators

- Experts
- Non-experts
- Not always interested
- Busy
- Experts
- Interested



GRANT

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Writing Style

- Narrative
- Convincing

- Descriptive
- Results value



Be concrete, show evidences?

At the appropriate stage, the necessary steps will be taken and sufficient funds committed to tackle the problems arising in several research institutions as a consequence of the COVID-19 confinement measures.



Be concrete, show evidences!

At the appropriate stage, the necessary steps will be taken and sufficient funds committed to tackle the problems arising in several research institutions as a consequence of the COVID-19 confinement measures.

Over the next six months, the MESRI will provide the Academic Research Institutions in France with a budget of €100 million to help them finish their funded research projects

"Good writing will not save bad science, but bad writing can kill good science."

— Jacob Kraicer The Art of Grantmanship

Evaluators

Project 1

"...the research design and aims were so briefly outlined that the likelihood of success or even the potential impact for the field were very difficult to assess. .. the proposal would benefit from more compelling arguing of its competitive advantage...

...It is difficult, if not impossible, to assess the feasibility in the absence of a proper outline of the work plan."



Project 2

The proposal is well structured and written. The applicant convincingly argued ... the applicant is one of few researchers in the world with the required technical skills, ... reviewer would judge ...this proposal is feasible.

Common mistakes and their impact

Long State of the Art description - the problem appears at the end

Evaluator is not engaged

The problem/main goal are not stated at all

Non-expert is not interested

Your preliminary results not clearly differentiated

The evaluator doesn't understand your contribution to the field

The feasibility of your approach is not clearly described

Evaluator may not be able to assess it

3 Steps to success

Ingredients

- Data/Hypotheses
- Methods/Models
- Collaborations

3 Steps to success

Ingredients

Time

- Hypotheses/Data
- Methods/Models
- Collaborations

- Think
- Structure
- Write

3 Steps to success

Ingredients Time Approach

- Hypotheses/Data
- Methods/Models
- Collaborations

- Think
- Structure
- Write

- Use grant-writing style
- Fit to evaluation criteria
- Be convincing



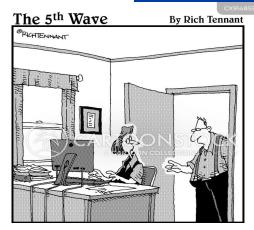
Thank you for your attention

Do you have any questions?

Contact

Grants Office IP

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« The money for this grant is probably coming from the Dept. Of Agriculture, so make sure to use words like « yonder », « mosey », « y'all », that sort of thing. »



References

My personal experience and:

- Lecture Stanford Scientific Writing 56 videos with corrections of scientific texts, with Kristin Sainani. I used her corrections in my slides (KS) https://www.youtube.com/playlist?list=PLGNyyrO8GoM7uUxVfYJbccEO8eNFfr1M
- Publications of the EU:

 - Claire's Clear Writing Tips <u>https://ec.europa.eu/info/sites/info/files/clear_writing_tips_en.pdf</u>
 - Clear English Tips for Translators https://ec.europa.eu/info/sites/info/files/clear-english-tips-translators_en.pdf
- The Art of Grantsmanship Human Frontier Science Program by Jacob Kraicer <u>https://www.hfsp.org/sites/default/files/webfm/Communications/The%20Art%20of%20Grantsmanship.pdf</u>
- Writing Well by William Zinsser
- Wish Granted! By Holly Rustick