Best practices for securing funding

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Why do we need funding?

Necessary to get the science done

One of the success criteria for career evaluations

*Key performance indicator (KPI)*
How do you feel about funding?

Is it really a burden?
How do you feel about funding?

Is it an opportunity?

- Take some time to organize ideas & set goals
- Generate new ideas
- Road maps to communicate ideas to new lab members
- Get feedback
Where to start?

A great idea

Not too big, not too small

Well adjusted ambitions

Risk and gain
How to turn an idea into a great proposal

Start by finding the appropriate type of funding:

- **Basic research** - hard to fund, especially in Greece!
  - National: ΕΛΙΔΕΚ
  - EMBO Young Investigator Program
  - Marie Curie Actions (Individual fellowships, Training Networks, very competitive <10% success rate)
  - European Research Council grants (very competitive, self-selection, ~15% success rate)
  - Human Frontier Science Program Grants (super competitive, ~3% success rate)
  - Foundation Santé
  - National Institutes of Health (NIH) - very competitive <10% success rate

- **Applied research** – more funding opportunities
  - National: Ερευνώ-Καινοτομώ, Εμβληματικές δράσεις
  - European Innovation Council (very competitive, < 10% success rate)
  - The majority of European Commission calls welcome applied research and industrial partners
  - Major companies also offer funding for specific subjects
  - Disease oriented private foundations (e.g. Simon’s Foundation, Michael J. Fox Foundation, Alzheimer’s Foundation etc.)
Tools that can help you navigate the funding space:

Funding and Tenders EU portal (all EC grants)

[Image of Funding and Tenders EU portal]

Proposal Central (US grants portal)

[Image of Proposal Central]

https://praxinetwork.gr/orizontas-evropi/
Step 1: gather all relevant material

1. Carefully study the **call for proposals** and the **guide for applicants** before starting.

2. Know the evaluation criteria very well. **You must write the proposal in a manner that explicitly addresses the criteria.** Excellence, novelty and/or innovation potential should be emphasized strongly from the start.

3. Know your judges: find information about the expertise of reviewers and/or panel members, if available (e.g. look at previous ERC panels)

4. If possible, find **previously successful proposals** for the call of interest (from colleagues, local grant’s office) and study them carefully.

5. Attend **online webinars with information** about your call of interest (EC / PRAXI / National Contact points organize these regularly)

6. Experience the reviewer’s side: evaluate other proposals yourself (those of colleagues, national / EU agencies – register on expert databases!)
Basic components of every proposal

- Background / SOTA
  - What is **missing**, what is your **hypothesis**?

- Aims
  - Short bullet points

- Methodology (work-packages)
  - How to test your hypothesis, **how feasible, preliminary results**?
  - **Expected outcomes, deliverables**

- Conclusions, how this will **change the world**, what is the **outlook**?

- Risk assessment
  - **alternatives**

- Time-line, work plan
Keep in mind while writing: features of a good proposal

1. Scientific and/or technological excellence (review the SOTA very well, identify the open problems, point to the importance of unmet needs)
   → your idea must be the ideal way to address an important yet unmet need

2. A high degree of novelty and/or innovation potential
   → Your project must have a clear and measurable (with KPIs) novelty component

3. Ambitious, yet realistic and timely objectives
   → Explain this briefly, avoid repetitions.
   → Why are they timely? (SOTA, technology developments, maturation of field)
   → Ambitious yet realistic: importance of preliminary data, risk analysis/contingency plans, collaborators with expertise

4. Clarity, relevance and justification of the objectives and expected outcomes
   → For each objective, detail the expected outcomes and insights gained
Keep in mind while writing: features of a good proposal

5. A convincing and the most appropriate methodological approach
   → Include implementation details. Organize the work in concise work-packages, avoid extensive dependencies between WPs, use milestones and deliverables in a realistic manner, time the work appropriately. Explain why this approach is suitable.

6. Evidence of the necessary expertise/infrastructure for the implementation of the project
   → Refer to your own prior publications on the subject to establish credibility. Use preliminary data to support your claims.

7. A detailed justification of the requested budget.
   → Estimate resources (person-months / budget /infrastructure) needed in a realistic manner – don’t inflate

8. Significance and impact of the work on science, economy and/or society
   → Explain the lasting effects of your research to different fields. Propose specific actions for measuring these effects (e.g. publications, talks, outreach events, workshops etc.)

9. High quality of writing: all of the above are presented in a clear, systematic and well-organized manner, including visual aids and summary figures.
Useful Tips

1. Prepare a very good, clearly written CV in which all the boxes are ticked.

2. Provide a coherent and straightforward plan for the implementation of the proposed work that shows how well you have thought of the proposed experiments (Gantt Charts!)

3. Capitalize on your strengths and explain how any perceived weaknesses don't matter or, even better, can be turned into strengths after the project completion.

4. Ensure collaborations are in place (with letters) for those parts of the project that you are not an expert yourself.
8. Write a clear risk analysis and have contingency plans in place in case the work does not go as predicted. Ensure you do not have sections of the project that are entirely dependent on the success of an earlier phase of the work (this can be a killer).

8. Highlight the impact of the work explicitly, about you as a PI, your Institute, the scientific community, society, the economy etc. Provide concrete examples, not generalizations.
8. Keep it short and to the point.
   • Read it as if you were the reviewer and simplify.
   • Reviewers normally read multiple proposals over short periods of time. Make it easy for them and your chances of getting a good score will increase.

9. Get an experienced colleague to look at your application at an early stage and possibly in the near final stages. (Preferably someone who has served on grant-giving panels)
Examples of funding sources in Europe

**PhD fellowships**
- AXA PhD Fellowships
- Leventis Foundation
- Fontation Sante
- Hellenic Foundation for Research and Innovation
- Onassis Foundation
- The Boehringer Ingelheim Fund (BIF)
- BAEF – Fellowships for US Citizens in Belgium
- Bayer Fellowship Program

**Postdoctoral fellowships**
- HFSP Long-Term Fellowships
- MARIE SKLODOWSKA-CURIE Actions
- Welcome Trust Sir Henry Welcome Postdoctoral Fellowship (for early post-docs based in the UK, but also permitting extensive international travel and collaboration)
- Banting Postdoctoral Fellowships for Canadian Citizens
- Canon Foundation – Research Fellowships (Japan and European exchange)
- Fondation de la recherché medicale
- Fondation Fyssen (postdoctoral fellowship for 2 years, postdoc to be carried in France)
- German Research Foundation (DFG) – Research Fellowships
- SNF (early and advanced postdoc mobility- for people that had their PhD in Switzerland and want to go abroad for the postdoc)
- Royal Society Newton Fellowship (for non-UK early-stage scientists who wish to conduct research in the UK)
Examples of funding sources in Europe

**Young Principal Investigators**
- AFAR (American Federation for aging research) – Research Grants for Junior Faculty
- Agence Nationale de la Recherche, Young Investigator Award
- ALZ.org (Advancing Alzheimer's research)
- BBSRC David Phillips Fellowship (for building UK – based independent research career)
- Brain and Behavior Research Foundation (NARSAD)
- EMBO Young Investigator Program – research grant for individual group located in Europe within less than 4 years since their independent position
- Emmy Noether Programm of the German Research Foundation
- ERC Starting Grant
- ERC Consolidator Grants
- Fondation Fyssen (Usually support Young Investigators installing their lab in France)
- German Research Foundation (DFG) – Research Grants
- Heisenberg Program of the German Research Foundation
- HFSP Career Development Award – HFSP fellows who return to their home country or move to an HFSP member country to establish their independent laboratory
- HFSP Young Investigator Grant – research grant for a team of multi disciplinary and preferentially intercontinental researchers
- MRC New Investigator Research Grant (UK only)
- MRC Career Development Award (for building UK – based independent research career in medically-oriented bioscience)
- MQ, Transforming Mental Health, MQ is supporting the best and the brightest early career scientists and clinicians
- Simon’s Foundation
- SNF (Ambizione-young investigator that wish to conduct and lead an independent project at a Swiss higher education institution)
- Wellcome Trust/Royal Society Sir Henry Dale Fellowship (for building UK – based independent research career)
Examples of funding sources in Europe

Research Grants

- Alzheimer's Drug Discovery Foundation (ADDF): Translational and Clinical Research on Alzheimer's Disease
- Alzheimer's Research UK (UK only)
- Alzheimer's Society UK (UK only)
- BBSRC Bioscience for the future (UK only)
- Fondation Jérome Lejeune (Genetic neurodevelopmental disorders)
- Fontation Sante
- Horizon Europe (the main funding instrument of the European Commission, multiple types of grants)
- Hellenic Foundation for Research and Innovation
- Human Frontier Science Program
- Huntington's Disease Society of America (HDSA): Human Biology Project
- March of dimes (work on development)
- MRC Medical Research Council (UK only)
- Brain and Behavior Research Foundation
- Netherlands Organization for Scientific Research (NWO), (Netherlands only)
- NIH international program
- Norwegian Research Council (RCN), (Norway only)
- NY Stem Cell Foundation
- Michael J. Fox Foundation for Parkinson's Research
- Parkinson's U.K.
- Research Foundation Flanders FWO, (Belgium only)
- Royal Society Research Grant (For scientists in the UK who are at an early stage of their career and want to purchase specialised equipment and consumables)
- Scientific and Technological Research Council of Turkey (TUBITAK), (Turkey only)
- SFARI Simon Foundation Autism Research Initiative (both pilot and research award)
- US Army: US Army Research Institute for the Behavioral and Social Sciences BAA for Basic Research
- Wellcome trust (UK and oversea applicants)
- Wings for life (spinal cord injury)
Find support!

Early Career Researchers – check out FENS-Kavli network of excellence for tips on various issues related to Young PIs

http://www.fens.org/Outreach/FENS-Kavli-Network-of-Excellence/Activities/Mentoring/Opinion-articles/
More from the FKNE: https://fenskavlinetwork.org/mentoring/resources/

FKNE Mentoring Resources:

2020

Starting and mid-career PI hurdles *(recorded online event)*

ALBA-FKNE live panel discussion: How to negotiate to get what you need

Towards an environmentally-friendly model for life sciences *(recorded online event)*

2018

Dealing with gender-bias in neuroscience *(recorded in-person event)*

2016


Collaborators:

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Thank you for your attention!