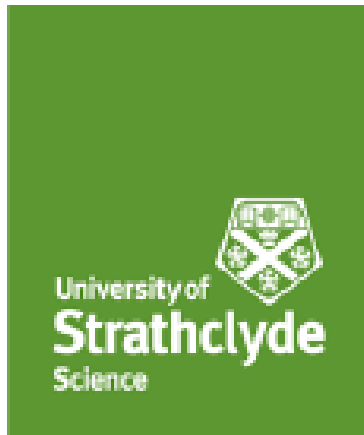


Ways to avoid shortfalls/ deal with shortfalls in the grant application process

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For ECAVI VACCINE ACADEMY



1. Introduction

2. Key aspects of grant applications

3. Summary and Conclusion

Brian Godman – research activities

- PhD research activities (starting in 2006) initially in 7 EU countries to:
 - Increase the prescribing of generics first line and drive down their prices to enhance prescribing efficiency
 - Optimise reimbursement/ funding decisions for new drugs and their subsequent utilisation
- Extended across Europe and globally researching. Research interests including activities to improve the quality and efficiency of prescribing/ dispensing across multiple disease areas/ product classes including infectious and NCDs
- Co-Founder of Piperska (Europe - 2008) and MURIA (2015)
- Over 350 peer reviewed publications/ acceptances in the past 13 years with payers/ advisers/ academics across multiple continents/ countries including Africa
- African countries worked with include Botswana, Cameroon, Congo, Egypt, Ghana, Kenya, Lesotho, Namibia, Nigeria, Uganda, Rwanda, Somalia, South Africa, Sudan, Swaziland (Eswatini), Tanzania, Malawi, Zambia, and Zimbabwe

There are key issues and hurdles to address when preparing grant applications/ proposals

- Grant applications are becoming increasingly competitive as new Universities and groups seek scarce resources – enhanced by the COVID-19 pandemic
- Consequently, a clear understanding of the disease area and application process are vital for progression as typically multiple steps are involved including successive review stages. In addition, a clear idea of the patient/ other benefits arising from your research and its translation to other settings/ countries
- Clear timelines, transparent and robust budget processes and a proven track record with colleagues are also increasingly vital - a proven track record helps ensure reviewers/ grant application bodies view your group as a 'safe pair of hands'
- Any inside knowledge about the personnel/ organisations providing the funding also helps to better shape any proposal/ discuss key elements in advance (take hold of any opportunity)

This publication by Przeworski and Salomon whilst old (1995) contains useful tips -
https://s3.amazonaws.com/ssrc-cdn1/crmuploads/new_publication_3/%7B7A9CB4F4-815F-DE11-BD80-001CC477EC70%7D.pdf

ON THE ART OF WRITING PROPOSALS

Some Candid Suggestions
for Applicants to
Social Science Research Council
Competitions

Przeworski and Salomon sum up a proposal as follows:

'A proposal's overt function is to persuade a committee of scholars that the project shines with the three kinds of merit all disciplines value, namely:

- Conceptual innovation
- Methodological rigor
- Rich, substantive content

But to make these points stick, a proposal writer needs a feel for the unspoken customs, norms, and needs that govern the selection process itself'

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There are key elements to any proposal:

Core elements of any proposal include:

- Title Page
- Introduction, context, and existing problem(s) summarised – based on a concise literature review
- Research Question or Hypotheses/ Aim & Objectives of the proposed project
- Study Design and rationale including the Theoretical/Conceptual Framework – this includes the core team (usually a short CV is necessary for team members including previous successful grants and publications – typically only list key papers in Pub Med/ Web of Science). Diversity in the core team can be beneficial
- Significance and Novelty of the proposed study/ work
- Ethical Considerations/ how addressed (if pertinent)
- Dissemination strategy including any planned publications
- Budget and rationale including any University add-on costs as well as the costs for any proposed Open Access Journal(s) (increasingly a vital part of any proposal)
- References/ Appendices

Key elements of the Title Page and Introduction include:

- **Title page** - consider focusing on either the problem, the method, the aim, or a combination of these. Need to make this as eye catching as possible
- **Introduction:**
 - ❑ Give a brief overview/summary of the question/problem in the disease area and how your study will help address this
 - ❑ The Introduction should also provide sufficient information to set the scene for your aims/ objectives and hypotheses
 - ❑ In addition explain why is this an important and/ or beneficial study
 - ❑ Include key information the reader needs to know in order to form a mental picture of the context of your research
 - ❑ Can also include descriptive background information that does not necessarily fit into the brief literature review
 - ❑ Should end with a clear statement that contextualizes the problem area/ clearly identifies the gaps that you are seeking to address with this study

Key considerations for the research question/ aims and objectives include:

- Aims/ Objectives need to be clearly stated and the research question(s) aligned with these
- Hypotheses usually written as a null hypothesis and there is typically only one over-arching aim of the project/ proposal
- The objectives for any proposal:
 - ❑ Must be well-defined and measurable
 - ❑ Indicate the key steps toward achieving the project aim(s)
 - ❑ Worded in such a way that you indicate what you are measuring, how you will measure it, and when it will be achieved (i.e. by the end of the study period)
 - ❑ Must be realistic within the time frames of the proposal as well as the budget – do not over-promise as this will indicate a lack of knowledge/ ability in this area

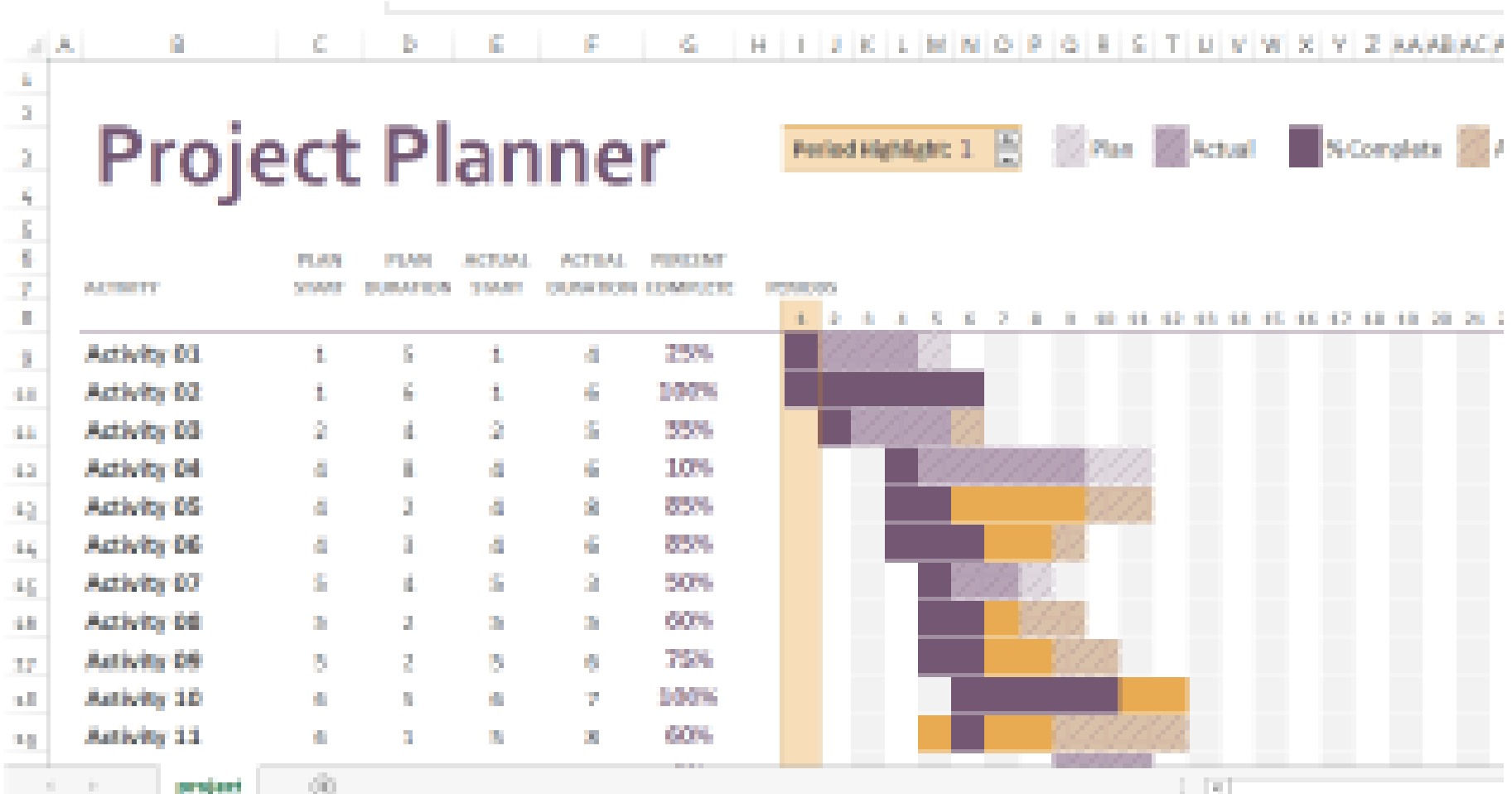
The literature review should clearly indicate current thinking and demonstrate your knowledge

- Key elements of any literature review include what is currently known about the project area and include a brief summary of any pertinent studies to assess your findings against
- Clearly spells out knowledge from previous studies and their methodology to help with your research design. This is particularly important when different research studies have used different methodologies/ come to different conclusions
- Overall, this allows you to:
 - ❑ Describe the strengths in previous research findings along with any gaps and weaknesses. This includes concerns with any methodologies used in other studies, etc., and ways to address this
 - ❑ Debate potential methodological approaches
 - ❑ Provide a robust rationale for the proposed methodology in your project/ proposal as well as the theoretical/ conceptual framework for any proposed methodology/ study

The study design must be clearly stated. Key elements include:

- Where will your study take place/ rationale and timelines – **a project planner/ Gantt chart is an essential component of any proposal?**
- What/who is your population and rationale; what/who is your sample and how have the numbers been justified (the help of a statistician can be invaluable here!)? Why have these participants be chosen and how will they be recruited – this includes any sampling taking place?
- What is the inclusion/ exclusion criteria for any participant and the justification?
- Define all data collection tools, e.g. a questionnaire, and clearly define any relationship between quantitative and qualitative approaches if proposing a mixed approach
- Clearly indicate the themes that are going to used and the rationale
- Discuss the reliability and validity of any proposed instrument/ procedures; alternatively how this can be ascertained if needed
- What is the baseline data, what variables are being collected, what are the controls/ comparisons, will there be a pilot study/ what are the limitations?
- Will there be an intervention – for how long and the data analysis plan?

A GANNT Chart is essential for planning purposes – demonstrating clear understanding. Need to ensure regular meetings are built in so timelines do not lapse and not over-spent



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Key aspects of significance/novelty include:

- Concisely describing how the outputs from this project/ study will contribute to existing knowledge to improve future patient care/ outcomes
- Address how the findings from this research project will help fill the gaps in existing knowledge and advance ideas/ knowledge in this area to again help improve future patient care
- As part of this - make references to pertinent studies included in the literature review and note how your findings will help to complement/ contrast with existing findings to improve knowledge/ care in this subject/ disease area

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- Significance and Novelty of the Work
- **Ethical Considerations/ how addressed including Helsinki declaration/ patient confidentiality – including ethical approval and likely timescales**
- Dissemination strategy
- References/ Appendices

A clear dissemination plan enhances any proposal. Key areas include:

- Need to include a publication plan to ensure the findings and their implications are broadcasted to improve future patient care – need to make the findings as translational as possible
- How will participants be informed about the information from the study/ how will you engage them in the publication(s)?
- Need also justify the choice of Journals – a track record with publications helps in this regard
- Increasingly, funders and universities wish Open Access Journals – need to build this funding into grant applications where possible. Ascertain if your University has an agreement with any publication house and will APCs be waived for certain countries?
- What additional steps/ techniques will you use to disseminate the results of your work, e.g. social media, home page of your University/ Department (I deal with a number of Universities where there are considerable delays in listing key publications – need to actively address this), etc. Need to build this in

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- Dissemination strategy including any planned publications
- Budget and rationale
- **References/ Appendices:**
 - ❑ Ascertain the recommended style beforehand, e.g. Harvard/ Vancouver
 - ❑ Invest in a Reference Manager if not already done so – invaluable when it comes to drafting/ re-submitting papers especially if multiple references expected
 - ❑ ***Be up-to-date!***

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In conclusion for successful projects/ avoiding pitfalls:

- Need to make sure in advance that your proposal grabs attention in its title, format, and content and be as novel as possible. This will be helped by knowing (as far as possible) who are the key decision makers and what are their needs/ wants/ wishes
- A proven track record among some of those taking part in the project is invaluable to give the reviewers/ funders confidence along with a robust methodology – and their experience can help avoid/ address pitfalls during the project
- Make sure the budget is consistent with the study aims and is realistic – in addition have contingency plans to avoid pitfalls
- Planning and implementation are key to current and future success – need to have a robust planning and monitoring system in place before the start of any project to ensure as far as possible that the project is kept on time and on budget and any concerns are rectified early

GOOD LUCK

Thank You

Any Questions!

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