#### Careers in Cancer Research Development Program

# Tips for a Successful Grant Application

Lead/Moderator: Christine Friedenreich Panelists: Carol Bishop, Eva Grunfeld, David Huntsman, David Malkin

Saturday November 7, 2015





#### Start early

- Identify appropriate funding opportunity and type of grant (match shape and size of idea to correct competition)
  - pilot/feasibility grant
  - project grant
  - work up to larger more complex projects (e.g. team grants)



- Start six months (or more) before funding deadline if possible
  - Like most acts of desperation, last minute grants are a "hail Mary play" and are highly unlikely to succeed in anything other than exhausting you and the good will towards you in your community

### Start early cont'd

- When funding announcements to submission deadline are very short
  - Map out how much time is needed for each step before working on grant
- Incorporate sufficient time for internal peer review
  - Ensure internal peer review is face-to-face, if at all possible
- Be strategic and think about the long game



### Identify compelling research niche

- Do thorough literature review to identify knowledge gap that will be addressed in your project
- Consider a "chalk talk" with senior colleagues to test your idea/concept
- Consider how this research niche can be developed and lead to a research program that permits leadership opportunities
- Frame work as clearly separate or distinct from previous collaborations, mentors, supervisors





## Identify compelling research niche



- Prioritize projects where your environment gives you a competitive advantage
- Smaller version of bigger projects being done elsewhere are unlikely to be funded. The idea must be exciting and you must seem the best person/team to do it.
- Limit grant scope avoid being too ambitious and including whole career aspiration in one grant

#### Assemble a strong and balanced team

- Include senior, established investigators
  - ensure that it is clear that YOU are leading grant

a letter from them saying that they are mentoring you

can help

- Include trainees
- Integrate knowledge users and stakeholders fully
- Include all disciplines
  - Biostatisticians and health economists important for clinical, translational projects

### Team building cont'd





- Consider seeking experts regardless of their home institution
  - Highly respected mentors who know and value you and are willing to mentor you have more value than locals with less credibility as mentors.
  - Ensure you have buy-in from each team member and they understand what their roles, responsibilities and timelines are
  - Work hard at developing a truly collaborative team

## Have grant conceptualization/planning sessions

 If possible, bring co-investigators and collaborators together for a brainstorming/planning session

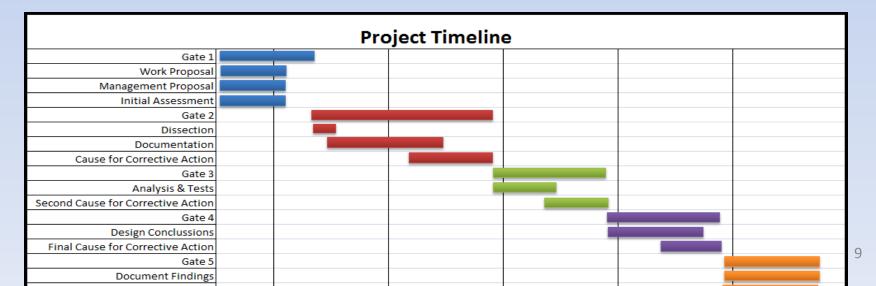


 Establish regular meetings/correspondence between yourself and your team



## Have grant conceptualization/planning sessions

- Keep everyone engaged
- Learn how to draw effort without pestering
- Use your senior investigators learn from their experience
- Map out your project in as much detail as possible (create a Gantt chart)



#### Arrange for internal peer review

- Value of internal peer review
- Type of reviews/reviewers



## Work through research design and methods and identify any possible weaknesses

- Ensure all topics are covered that are required by the funding opportunity
  - ie read instructions carefully for required topic areas
- Use figures and tables judiciously
- Include preliminary data if possible



#### Focus on writing a "beautiful grant"

#### Key components

- Convincing narrative that hooks the reviewer immediately
- Strong rationale and justification
- Clearly identified research gap and how it will be addressed
- Clear aims and objectives
- Logical flow to grant
- Detailed methods that are organized according to the stated objectives
- Impact and relevance of the project
- Concise summary
- Reiterate what the contribution of this project will be

### Beautiful grant cont'd

#### Key attributes

- Simple English/readability. If you are not routinely praised for the crispness of your prose then two evenings snuggled up with "Elements of Style" by Strunk and Whyte could be one of the best investments of time you could make.
- Avoid jargon/acronyms –
  don't assume reviewers know
  details of your specific area
- Use of clear headings and appropriate formatting (white space)



#### Beautiful grant cont'd



Key attributes

- Logical structure
- Internal consistency avoid tangential material, ensure everything builds the main purpose/argument
- Use consistent terminology, abbreviations (limited) throughout the document
- Take the time to write appropriate lay language sections (grade 8 level) if required by the agency

#### **Knowledge translation**

- Who are the relevant knowledge users?
  - include them in team if possible for integrated knowledge translation
- What 'products' of research are being produced?
  - More than just publications and presentations
- How will they be tailored to the needs of the key knowledge users?
- Include a budget that aligns with the KT plan
- Incorporate KTE throughout the grant (from stakeholder engagement through knowledge generation to knowledge mobilization)



# Build comprehensive and realistic budget and timelines

- How does budget address the objectives? Make this link explicit
- Have all costs been considered? Are they reasonable?
- Are in-kind supports available?
- Are all requested funds eligible (e.g. secretarial support is ineligible)
- Ensure that the budget justification is comprehensive and clear



# Build comprehensive and realistic budget and timelines

- Double check that the amounts are all correct
- Avoid overinflating budgets
- Ensure that the timeline matches the budget
- Don't wait until the last minute to submit, if an online system, allow time for validation and correction since deadlines are very firm – check the time zone on deadline dates/times!



## Plan to develop research program with projects across the research continuum

- Some grants pending, some projects in data collection/analysis stage and others in manuscript phase (rolling of grants)
- Consider requesting funds from different agencies at different times so not all grants due at same time
- Diversify to optimize your chances for funding
- Maintain cadence



#### Dealing with rejection

- Plan to revise and resubmit (almost always)
  - Recognize that some ideas go stale and unless you are encouraged to go back to a panel –don't!
  - Is less work than original submission
- Address reviewers' concerns, be polite (if not, you'll lose support for your resubmission)
- Obtain preliminary data if possible
- Consider adding other co-applicants
- Consider changing committees
- Include summary of progress
- Ensure that internal peer review is done



#### Grant review process

- Take opportunities to observe and participate in peer review
- Grant panels
  - Specially assembled based on grants received or 'standing' panels
  - May include lay/community members
  - Scientific abstract/keywords used to match to reviewers
  - Each grant reviewed by 2-5 reviewers with a written report provided
  - "Triaging" or "Streamlining" done for less competitive grants
  - Summary of panel discussion written by Scientific Officer
- Carefully consider the reviewer reports whether successful or not as panels are composed of experienced investigators



# What irritates reviewers (the need to be letter perfect)

#### Trigger points

- Muddled thinking and poor narrative flow
- Poor formatting
- Margins
- Copy/paste problems
- Too complicated figures
- No figures
- Last minute applications they will be sloppy
- Jargon / assumptions that abbreviations and acronyms are known to everyone



#### After the grant is funded...

- (and the champagne consumed actually consume champagne upon submission as it is a safer bet!...)
  - Ethics
  - Contracts
  - Sub-agreements
  - Managing the budget
  - Managing staff, co-investigators/partners
  - Team meetings
  - Common agreement on timelines/expectations
  - Acknowledge the funders in all publications and presentations
  - Reporting to funding agency including details on the impact of the grant and financial report
  - Obligations to funders for public speaking/events/committee work/peer review

