Funding proposal writing: Hitting the target

RESEARCH IN ACTION
LIBRARY WEEK, FACULTY OF MEDICINE AND HEALTH SCIENCES

Dr Tania Brodovcky

3 August 2018
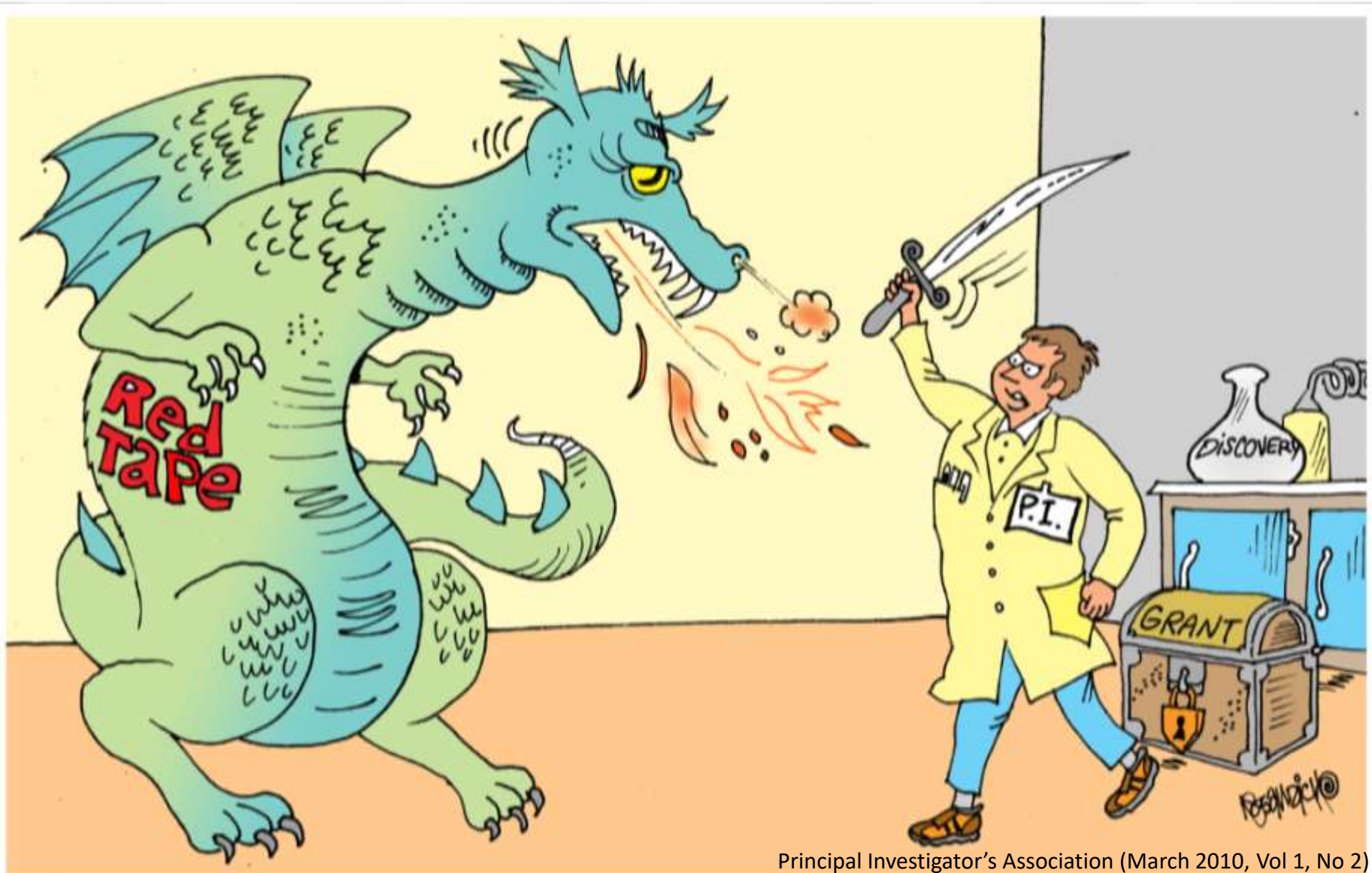
"I thought I was hired to lead experiments!"

EXPECTATIONS?

Outline

- **Rules of engagement: Research funding**

  ^**Unravelling some terminology**

- **Steps in funding proposal writing**

- **Purposes of a protocol / proposal**

- **CV for funders**

- **Funding proposal review criteria**

- **Some common mistakes**

- **Where to access funding opportunities**

Rules of engagement: Research funding

Funding call (advertisement)

Funding proposal

Deadline

Review

Source: penman-winton.com
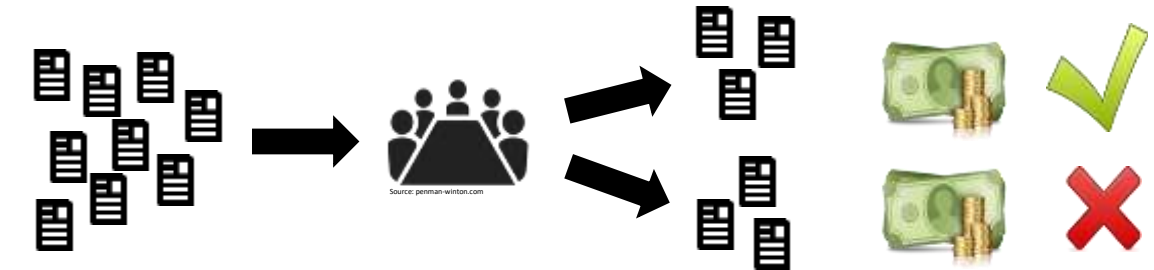
Funding award

Unravelling some terminology

Funding calls

=

Funding announcement (FA)

=

Funding opportunity announcement (FOA)

=

Request for applications (RFA)

=

Calls for proposals

Rules of engagement: Research funding

Plan ahead !

- Funding applications typically have to be submitted
  1 year before a project starts
  "Grant season" typically April - October

- Utilise **every opportunity**
  - if you are eligible
  - if you are responsive to the funder's criteria

Rules of engagement: Research funding

Process

Apply for funding by the
DEADLINE → Review *W..A..I..T* → Outcome letter → Start project → Report

Apply for ethics approval → Ethics approval

Funding awards
- Always made **competitively**
- Are only available for a given time period, typically 1 year (but can be 3-5 years)
- Can not be utilised retrospectively

Rules of engagement: Research funding

- You don't have to have **ethics approval** by the time of funding application (mostly)

- You <u>must</u> sometimes **apply to different funders** for the same project (20-80% chance)

- You <u>can</u> apply to **more than one funder** for same project at the same time, **BUT…**

- **If at first you don't succeed, try and try again !**

Rules of engagement: Research funding

- Consider the tiers of funding
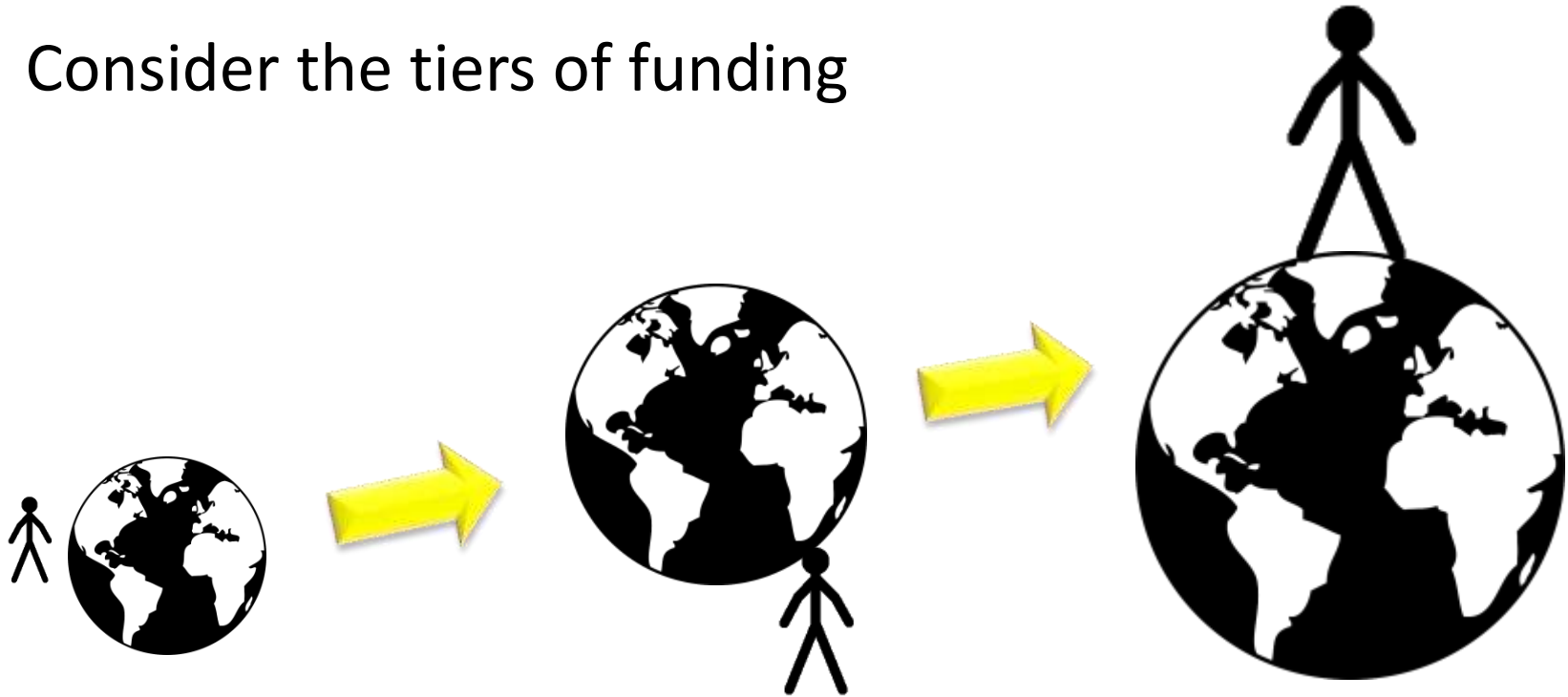
FMHS, SU sources
Early-career
R

National sources
Mid-career
RRR

International sources
Established
$$$$$$

Rules of engagement: Research funding

REMEMBER:

The funder has   to give to research projects

YOUR AIM? To get some!

Primary focus: Ensure funder will not find reasons
   not to send your application for review (eg. late / incomplete /
   ineligible / over budget / ignoring guidelines)

Secondary focus: Convince funder you have a relevant research
   question, present is clearly & concisely with sound scientific
   principles

Steps in funding proposal writing

1. Identify **appropriate funder(s)** & **funding opportunities**

later...

Ensure your needs & funder = **match (responsive)**

How would you know?

Steps in funding proposal writing

1. Identify **appropriate funder(s)** & **funding opportunities**

   later…

   Ensure your needs & funder = **match**

   - Funder **priority area(s)**
   - Your **eligibility** as student / staff
   - Total **budget** & types of support
   - **Period of support**
   - When **start**

Steps in funding proposal writing

2. Prepare a **research protocol**

Better yet...

have one ready ☺

SECTION LOOKING EAST

Steps in funding proposal writing

2. Prepare a **research protocol**

- What you are going to do: **Research methods**
  (detailed, including sample size)

- What you will need to do it: **Research budget**
  (item types, unit numbers, unit cost, total cost)

- Duration of your study: **Research timeline**
  (when data collection will start, <u>after</u> protocol & ethics approval)

Purposes of a protocol / proposal

QUALIFICATION	ETHICS APPROVAL	FUNDING
Clarity & Feasibility & Submit by deadline	Clarity & Feasibility & Submit by deadline	Clarity & Feasibility & Submit by deadline
Methodology focus	**Ethics** issues focus	**Budget** focus Significance / impact
Enough **detail** for others to repeat	Strong **scientific foundation;** **Ethics detail**	Scope & length & budget **strictly** within limits
Golden thread with objectives at center	Strong **rationale** & health impact	**Marketing** document

$$$

Unravelling some terminology

Funding proposal

=

Funding application

=
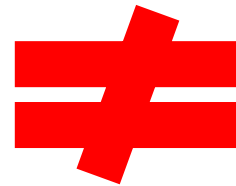
Grant proposal   **≠**   Bursary / Fellowship / Scholarship

=

Grant application

=

Grant funding proposal

Steps in funding proposal writing

1. Identify appropriate funder(s) & funding opportunitie(s)

2. Prepare a **research protocol**

3. **Study** the **GUIDELINES**

4. **Write the proposal** in conjunction with role players

5. **Proofread:** Let someone else read through it for objective comments & edit
   (not the day before the deadline ☹)

6. **Sign:** Get all required signatures in time...

7. **Submit** <u>before</u>/by the **DEADLINE**

QUESTION:

How important are the funder's guidelines?

STEP 3: Study the funder's guidelines

- Contain all the 'clues'

- Mark **items** required, thus 'what they want to hear'

- Tick off as **each** is **addressed**

- Complete the most recent application form

- Complete **ALL** sections of form
  or indicate if Not Applicable (N/A)

- Stay **within the guidelines**
  e.g. word / character limits,
  font, spacing & page format

NO DOGS.
NO, NOT EVEN
LITTLE ONES.

STEP 3: Study the funder's guidelines

NHLS RESEARCH TRUST PATHOLOGY RESEARCH AWARD: GUIDELINES

Please forward project applications as e-mail attachments to the centralised address: NHLSRT@nhls.ac.za by the 13th April 2018.

___

Proposals will only be accepted from **applicants employed in academic pathology laboratories (university affiliated or employed by the NICD or NIOH)** from the following departments:
1) Anatomical pathology
2) Chemical pathology
3) Haematology
4) Microbiology: Bacteriology/Immunology/Mycology/Parasitology/Virology
5) Oral pathology
6) Human genetics – only if the department is within a School of Pathology

Provided that the following eligibility criteria are met, applicants do not have to be employed by the NHLS.

Eligibility of Principal investigator (PI)

- PIs must be SA citizens or permanent residents.
- PIs must be academic/research staff members employed permanently or in long term contract positions within a pathology department and/or accredited laboratory or department in an academic/research institution, including Universities of Technology that are accredited to provide academic and professional training in medical pathology.
- PIs must have been in possession of a FCPath, Masters/MMed or MD/PhD degree for longer than 5 years.
- PIs must have significant research and training experience as evidenced by research publications and other recognised research outputs.
- **Only one proposal will be considered for funding per individual applicant and once granted, only one such grant may be held by an individual until the project has been completed.**
- **Only 3 proposals will be considered for funding per Institution and only 3 proposals should be submitted per Institution. Should the number submitted exceed this, then all proposals will be returned.**

Writing a proposal for a Pathology Research Award by the NHLS Research Trust
Below is a guide as to what content is required in a proposal submitted for a NHLS Research Trust Pathology Research Award

Problem identification

- Give a brief description of the pathology research problem that will be addressed by the proposed project.
- Outline the nature, source, extent and impact of the problem to be addressed in the broad global and regional context, giving particular attention to the extent of the problem in South Africa.

21

STEP 4: Write the funding proposal

- **Page setup** correct before you start!
A4 paper size vs Letter paper size

- **Narrative** style, **simple English**, **future tense**
(except Objectives – numbered)

- Don't try to impress with **grandiose statements**, e.g.
"Subsequently translating practice into research through exploring the evidence-based practice which is promoted by research as well as what evidence-based practice mean within the community's context."

STEP 4: Write the funding proposal

- If no guidelines for font and other formatting, pick easy-to-read **layout & font** (≥11)
  I do suggest not to use a weird font

- Use **headings** & leave some **white space**

- Refrain from **abbreviations** & field **acronyms**, especially abstract/summary/synopsis

- **Edit & format meticulously** & beware of **'copy & paste'**
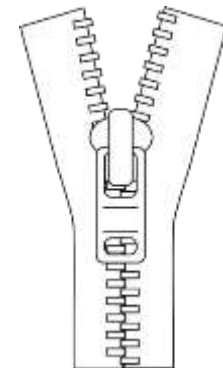
STEP 4: Write the funding proposal

- Don't use **capital letters**
  IT IS ALSO VERY ANNOYING AND HARD TO READ,
  EVEN IF IT IS ONLY USED IN THE TITLE OF YOUR PROPOSAL
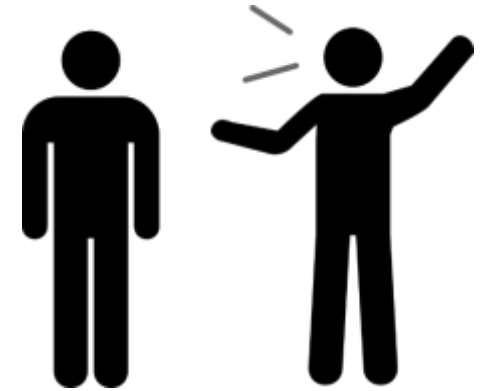
- Use **flow charts** to simplify

- Use your **spell & grammar checker**
  (Don't be branded 'sloppy' / 'not showing interest' /
  'not being serious')
  UK / South African English vs American English

STEP 4: Write the funding proposal

- There will mostly be a **template**

- Structure your proposal in a **logical** and **systematic** manner

- Give **context** of bigger project if grant application only covers limited objectives / phase / section of longer-term project
  (Call it a Pilot study if applicable) BE CREATIVE

- **REMEMBER: Market/sell** yourself & your project

STEP 4: Write the funding proposal

AIM

- **Objective**
  - **Methods / Work plan / steps**
    - **Timeline & Who** → **Budget needs**
    - **Timeline & Who** → **Budget needs**
    - **Timeline & Who** → **Budget needs**
- **Objective**
  - **Methods / Work plan / steps**
    - **Timeline & Who** → **Budget needs**
    - **Timeline & Who** → **Budget needs**

How long should the proposal be ?
Let the space allowed or character limits guide you...

FUNDING PROPOSAL TEMPLATE

Section B: Case for support

1. Problem identification (brief description of the problem and research question(s) to be addressed).

2. Rationale and motivation (background and scientific rationale for the research; significance and relevance for health).

3. Research aims and objectives (outline the main aim(s) of the proposed research and specify the research objectives to be achieved).

4. Research design and methods (detailed account of the overall research approach; specific research design; research methods and/or experimental techniques; data collection and analysis including statistical treatment /analysis of data; responsibilities and timelines).

5. Team membership (details of the membership of the project team with respect to their names, titles, highest qualification, area of expertise, affiliation, specific role in the project and duration of involvement)

Surname	Initial	Title	
Highest qualification	Specialist area		Position
Affiliation			
Role in project			
Duration of involvement			
Telephone (w)	Fax	E-mail address	

EXAMPLE

FUNDING PROPOSAL TEMPLATE

6. Expected outputs, outcomes and impact (outline the expected direct and indirect outputs/outcomes/impact of the research on the advancement of scientific/health knowledge or what contributions the research will make to improvements in either health or health outcomes).

7. Research capacity development (indication of how the execution of the research project will contribute to the training of postgraduate students, junior research/academic staff, health personnel or community members where the research will be undertaken).

8. Institutional research environment (description of the research environment at the host institution in terms of complimentary research expertise, structural support, infrastructure and facilities available and how these will/may be mobilized to ensure the success of the proposed research).

9. Dissemination of research results (indication of the main avenues through which the results of the research will be disseminated to the scientific/academic and public audiences).

10. Ethics approval (please indicate, either by attachment and by giving a reference number below, whether or not the proposed research has been approved by the Ethics, Bioethics or other authorized body within your institution in respect of ethical conduct of research). Although the NHLS Research Trust will accept applications whose application for ethics approval is in process, the grant will be cancelled if proof of ethics approval is not received within 6 months of notification of the award. Ethics approval should not have been awarded more than 2 years ago.

EXAMPLE

FUNDING PROPOSAL TEMPLATE

Section C:					

1. **Budget** (itemized list of financial requirements to carry out the research successfully, with a substantive motivation for the listed requirements or levels of funding). The NHLS Research Trust will support projects to a maximum of R500 000 for the duration of the project or a maximum of 3 years (whichever comes first). Proposals requesting more than the stipulated amount will be rejected at point of receipt.
2. NB. Expenditure on salaries / bursaries is limited to 50% of the budget.
3. Expenditure on travel / conference attendance is limited to 20% of the budget.
4. Expenditure on small items of critical research equipment is limited to 10% of the budget.

Item	Description	Unit cost	No. of Units	Total cost	Amount requested from the NHLS RESEARCH TRUST
Consumables					
1. materials and supplies					
2. laboratory/field costs					
3. specialized services					
4. office supplies, printing & reproduction					
5. *ad hoc* research support					
6. bursaries					
Research travel					
1. travel to sites					
2. participant /patient transport					
3. other, specify					
Salaries					
Research assistantship					
Equipment					
Conference attendance					
TOTAL					

2. **Motivation for budget** (Please provide detailed motivation and basis for the requests made above). Outline details and status of any funding that has been received, applied for or committed to the currently proposed project.
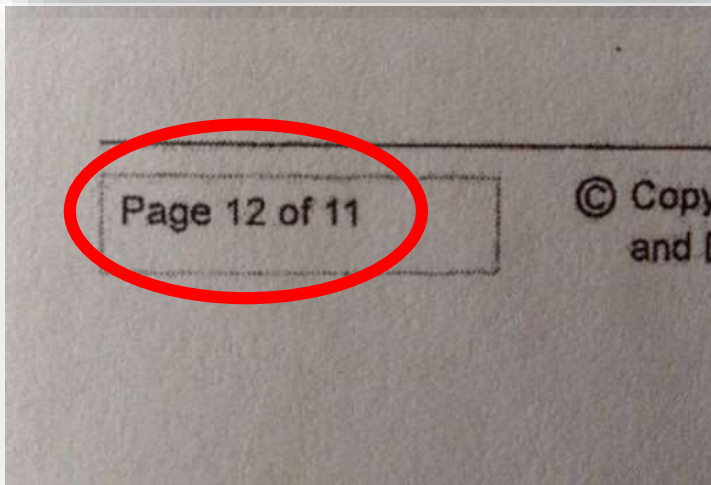
Steps in funding proposal writing

1. Identify appropriate funder(s) & funding opportunitie(s)

2. Prepare a **research protocol**

3. **Study** the **GUIDELINES**

4. **Write the proposal** in conjunction with role players

5. **Proofread:** Let someone else read through it for objective comments & edit
(not the day before the deadline ☹)

6. **Sign:** Get all required signatures in time…

7. **Submit** <u>before</u>/by the **DEADLINE**

STEP 5: Proofread, proofread, proofread

DO NOT TOUCH BREAD WITH HANDS
PLEASE USE TONGUE

Page 12 of 11

© Copy
and [

SANDWICH

EGGS & CHEESE
Including vegetables

TUNA SANDWITCH
Tuna with mayonnaise and vegetables

CHICKEN & CHEESE
Chicken With cheese, mayonnaise & vege

"This study attempts to shade the light on…"
"Double blond RCT"
"…planning and implantation…"
"…medical imagining…"

STEP 5: Proofread, proofread, proofread

I like cooking my family and my pets.

STEPS 6 & 7: Sign & submit the proposal

STEPS 6 & 7: Sign & submit the proposal

- Submit a **complete** application & by **deadline**
- Get all **signatures** & supporting documents safely ahead of deadline

- In format requested
  e.g. **hard copy** and/or **e-submission**

- May have to **submit via institution** to external funder (allow time for signatures and/or pre-approvals)

- **REMEMBER:** Be **responsive** to funder (or no review)

QUESTION:
Should you add attachments?

Curriculum vitae (CV) for funders

- **Abbreviated** (stick to page limits!) & adapted

- **Biosketch** format / narrative section helpful

- Must show your **competency** as PI
  for **THIS particular project**,
  e.g.
  - relevant qualifications
  - relevant research experience & skills
  - publication & presentation record in field
    (1st author papers are important)
  - (project) management experience
  - postgraduate supervision experience
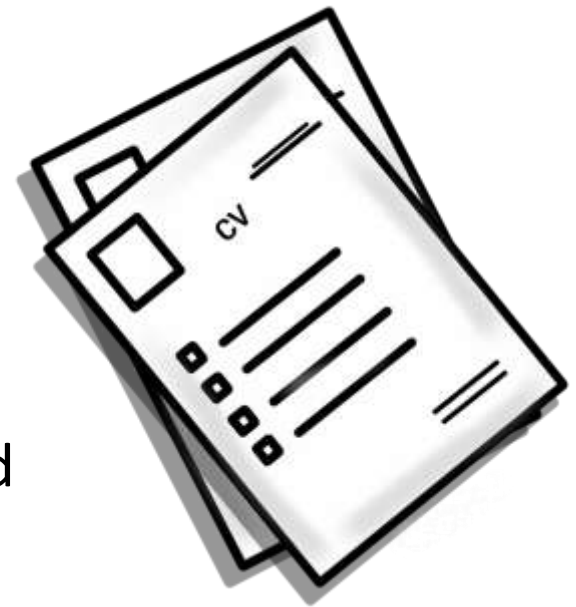
Funding proposal review criteria

Funding call (advertisement)

Funding proposal

Deadline

Review

Source: penman-winton.com

Funding award

Funding proposal review criteria

Sell your project & satisfy the reviewers:

(1) Are the research **objectives** clear?
(2) Is the **methodology** used appropriate
    and explained in sufficient detail?
(3) Is the project and timeframe **feasible**?
(4) Will the project have an **impact** on health research?
(5) Is the **budget** realistic?
(6) Is the **research team** comprehensive and likely to
    complete the project successfully (track record)?
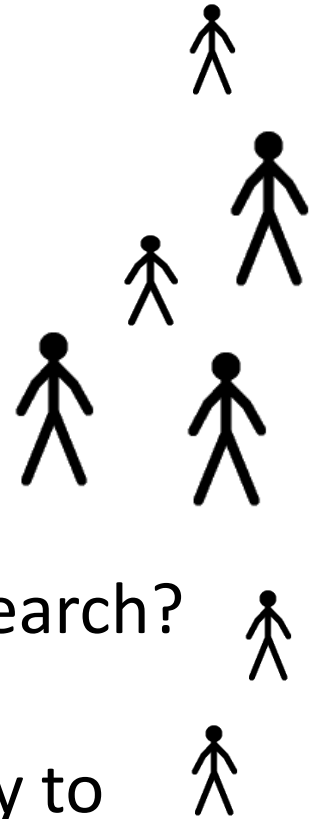
Funding proposal review criteria

WHAT DO REVIEWERS LOOK FOR?

- Is the **research question** valid?

- Evidence to support gap in knowledge?

- Is the **research area/field** of merit and a priority at this point in time?

- Are the aim(s) and **specific objectives** clear, <u>specific and feasible</u>?

- Are the **objectives** linked to the **aim**?

Funding proposal review criteria

- Are the objectives flowing **logically**?

- Are the objectives **not dependent** on each other?

- Are the objectives **feasible** for the proposed <u>timeframe and scope</u>
  - also for degrees: Hons, MSc, MMed, MPhil or PhD (if applicable)?

- Is the **study design** the most appropriate to answer research question?

Funding proposal review criteria

- Is the **methodology** to be used **appropriate, clear** & explained in sufficient **detail**?

- Is the **budget** realistic?

- Is the **impact** of the project significant? Thus clinical/health relevance?

- Does the researcher and/or supervisor(s) have a good **track record**? Are they qualified to **succeed** in executing this project?

Funding proposal review criteria

Ethical considerations

Scientific merit of proposal

Alignment with research priority areas

Significance of proposed research

Research design & methods

Research capacity development

Track record & suitability of PI
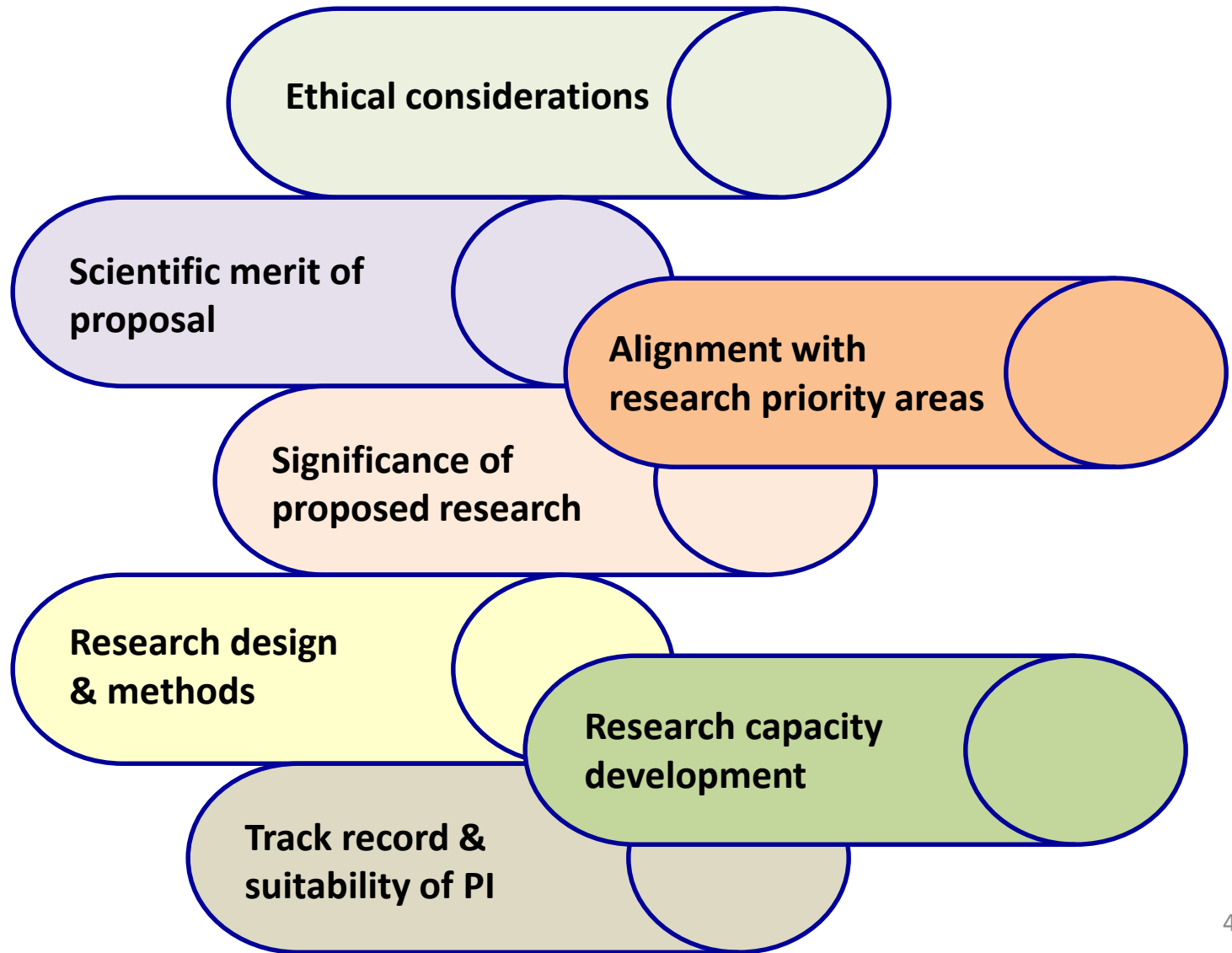
Unique grant proposal features

Ethical considerations

Scientific merit of proposal

Alignment with research priority areas

Significance of proposed research

Research design & methods

Research capacity development

Track record & suitability of PI
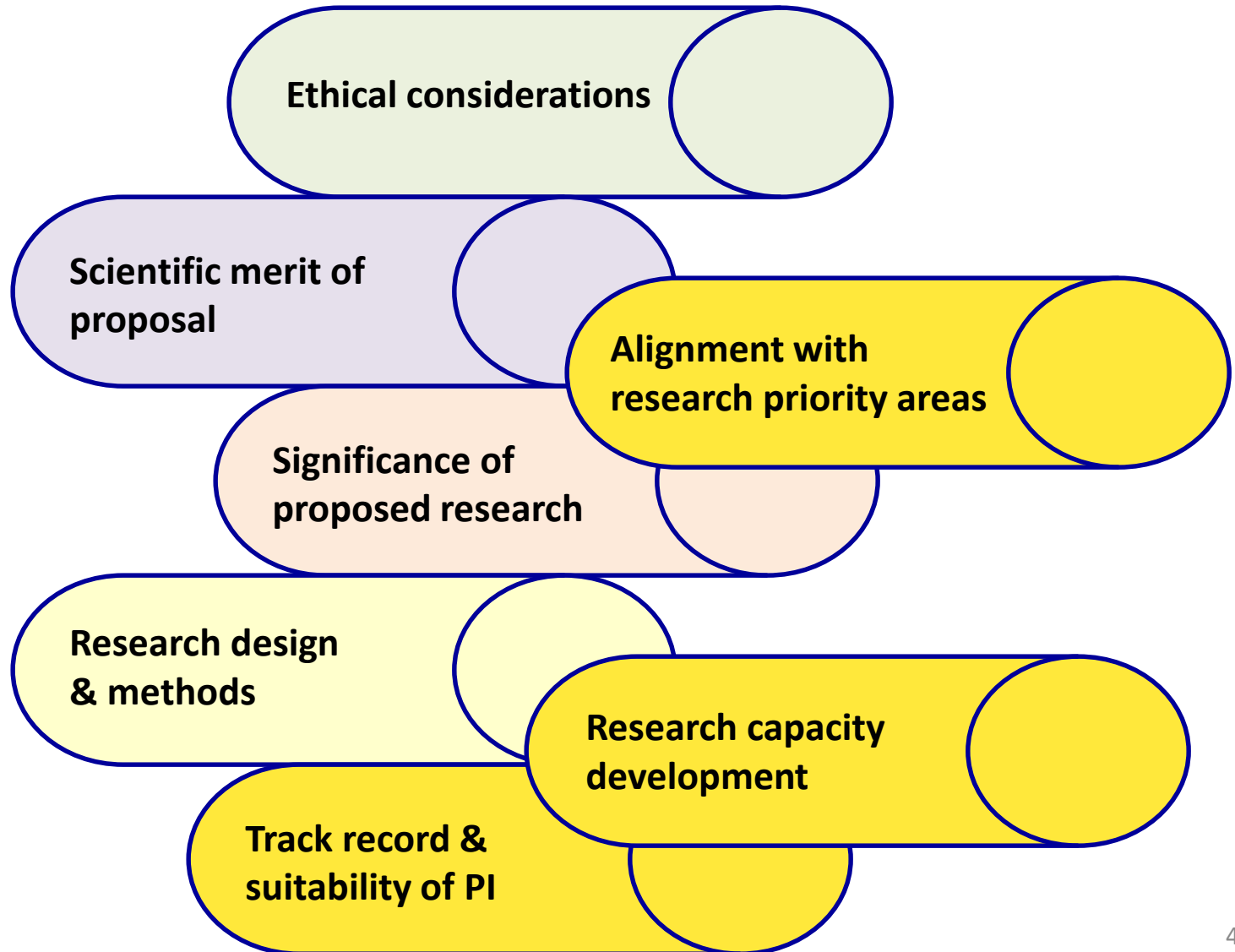
When your pipe dream crashes...

Overall merit

Significance of proposed research

Ethical considerations

Research design & methods

Investigator(s)

CRASH!
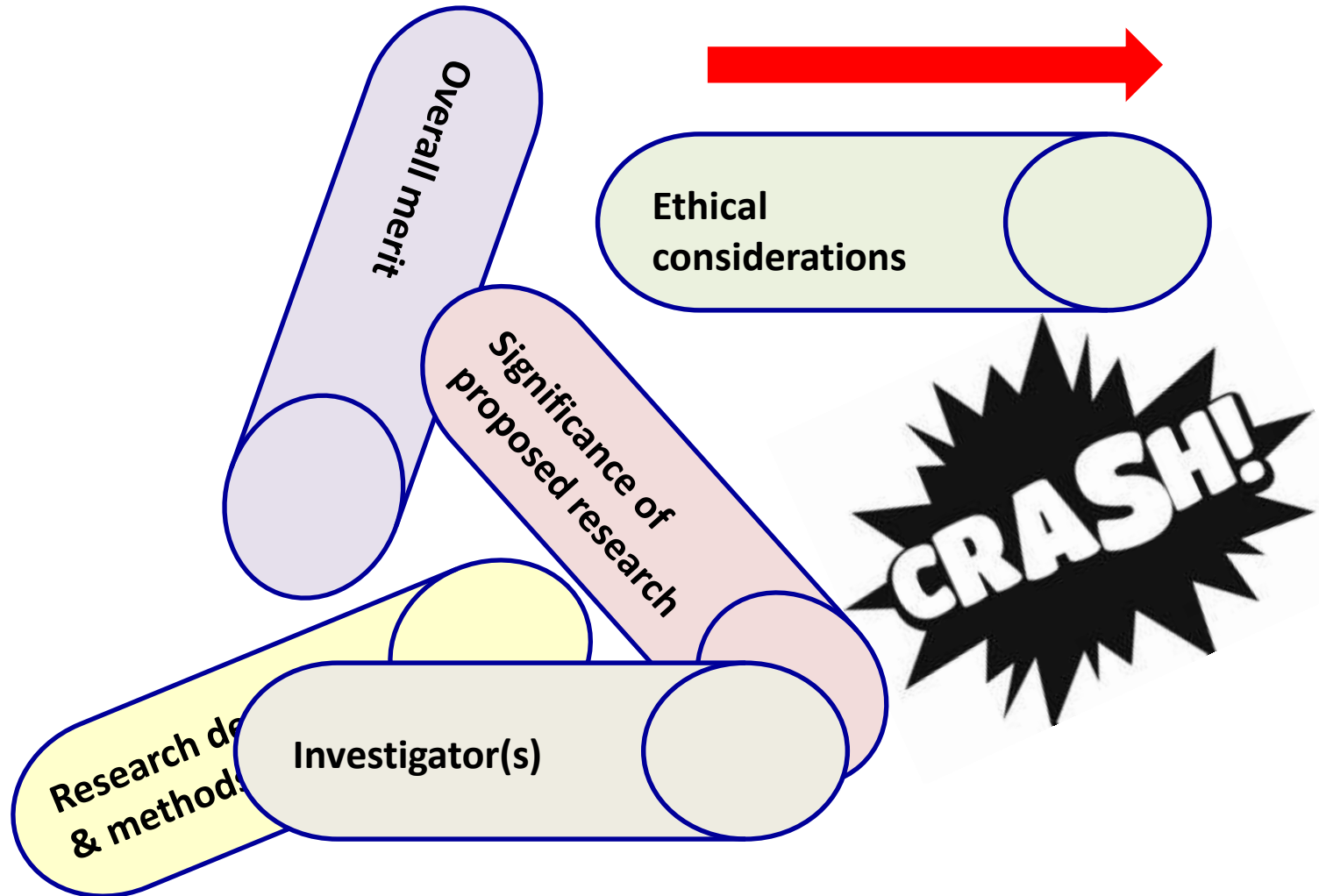
MRC SIR reviewer scoring

RECOMMENDATION	SCORE RANGE	POTENTIAL FUNDING SUCCESS
Exceptionally high quality research, high impact in field internationally & highly significant scientific/health question or challenge	10	**YES!**
Excellent quality research, forefront in field internationally, likely high impact outcomes	9	**YES!**
Very good quality research, forefront nationally (possibly internationally), important question, tangible outcomes	8	**MOST PROBABLY!**
Average to good quality research, important question, modest impact on science and health	5 – 7 *(reviewer must select one)*	**MAYBE… BUDGET PERMITTING**
Poor quality research, major conceptual frameworks / design / methods OR technically flawless research but minimal significance / innovation / interest	1 – 4	**yOu'VE doNe soMethiNg VeRY wRonG or it'S a VeRY baD IdeA!**

Who will be awarded grants?
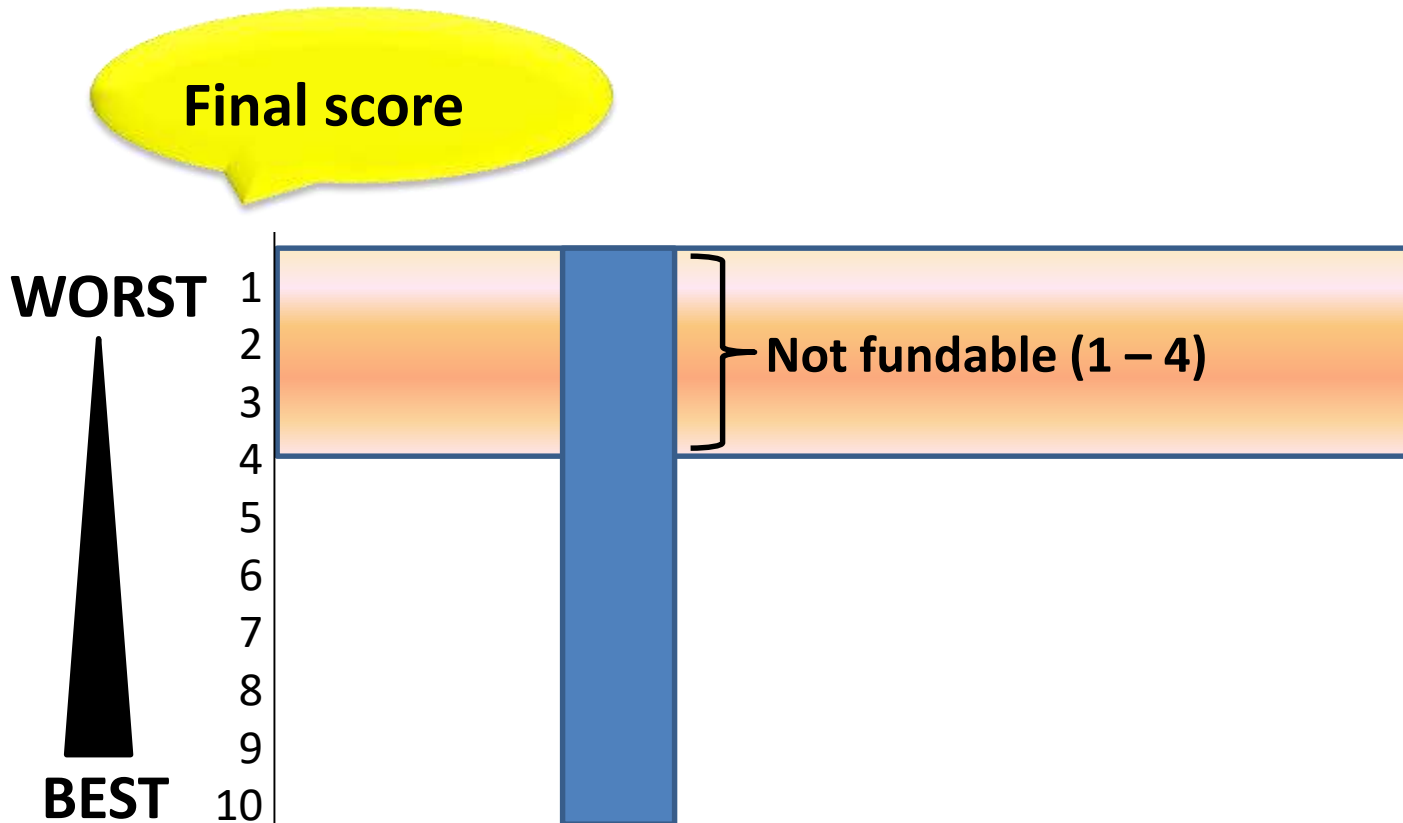
Who will be awarded grants?
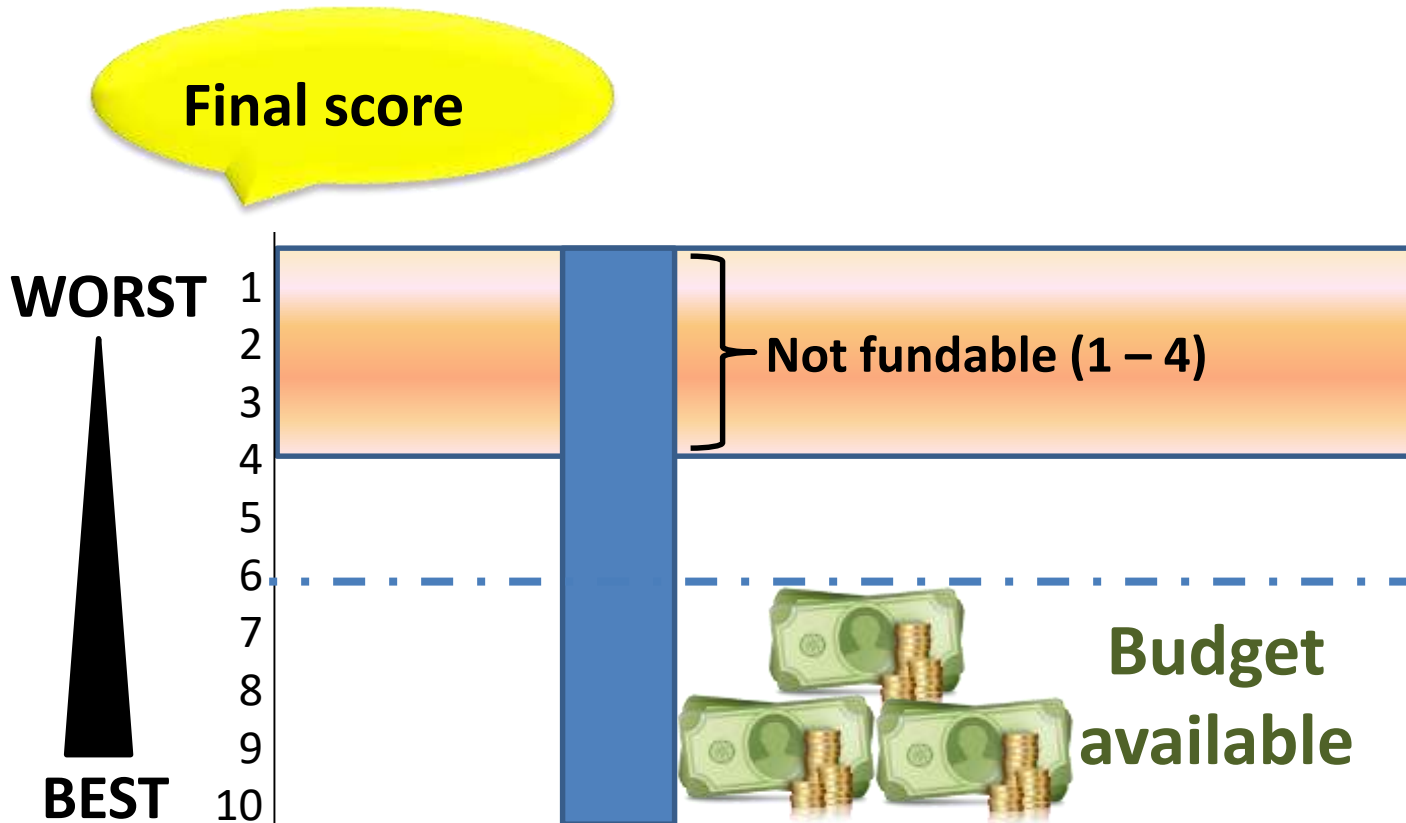
Some common mistakes

- Not following **guidelines / responsive**

- Last-minute **carelessly prepared** applications

- Scope of project is **too ambitious**, too broad, thus too many objectives

- **Research team** members not match **expertise** required / not known

- Too little detail in **methods**

- Too much **background**

Research funding sources

Undergraduate student

Post-graduate student

Postdoctoral fellow

Early-career researcher

Mid-career researcher

Established researcher

1. Bursary / Fellowship / Salary funding

2. Research project & equipment funding

3. Research-related travel

Where to access research funding opportunities

Current Open Funding Calls

www.sun.ac.za/RDSfunding

Where to access research funding opportunities

Research Capacity Development & Funding

Research Funding Opportunities

www.sun.ac.za/RDSfunding

GUIDELINES FOR NEW RESEARCHERS

Funding opportunities in Health Research

5th Edition
February 2017

Faculty of Medicine and Health Sciences
Stellenbosch University

Funding contacts

Funding by categories

Support offices contact details

Where to access research funding opportunities

- **Custom** search profile

- **Scholarships / bursaries** AND/OR
  Project funding in specific field

- Pre-screened for **eligibility** South Africans & non-South Africans studying at SA universities

https://www.researchprofessional.com

Lizél Kleingbiel
(lizelk@sun.ac.za)

Look out for the next training session or access
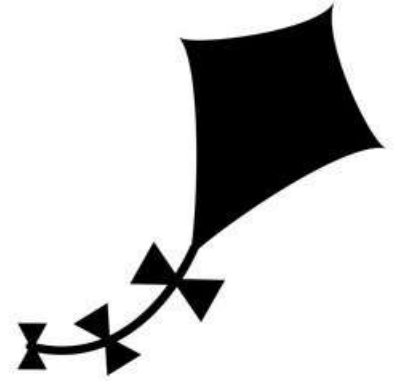**www.sun.ac.za/RDStraining**

Click here for recorded sessions

The Recipe

The funder has money to allocate, which you have to compete for, thus:

1. **Do** something **new, relevant**, which is part of the **funder's priority** and in your & team's area of **expertise**

2. **Complete** the form **accurately, completely & professionally**

3. **Think like a reviewer** and **address** all **potential questions** they may have

QUESTIONS?