Health and Medical Research Fund (HMRF)

What do you need to have in your application?

HMRF Grant Skills Training Workshop

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2.6 Assessment Criteria

2.6.1 Applications will undergo peer review process and be assessed according to the following criteria –

Health and medical research projects

(a) Originality of the research topic
(b) Relevance to the scope of funding and thematic priorities
(c) Significance of the research question
(d) Quality of scientific content
(e) Credibility for study design and method
(f) Feasibility of the intended project
(g) Research ethics
(h) Translational potential/value
(i) Past performance and track records of applicants
(j) Research capacity of the administering institution
(k) Justification of requested budget
(l) Value for money

Health promotion projects

(a) Relevance to the scope of funding and thematic priorities
(b) Innovation and potential impact in response to the health needs of the target local community
(c) Scientific evidence of effectiveness of the proposed health promotion activities
(d) Feasibility of the proposal

Work Flow of Grant Review Process

1. scientific merit
2. local relevance and translational potential/value of the proposals capacity of the administering institutions
3. sustainability of health promotion projects
4. track record of applicants
5. value for money of the proposals research ethics, where applicable

Referee Panel
- Reviewed by external reviewer

Grant Review Board (GRB)
- Discussed in GRB meeting

1. scientific merit
2. local relevance and translational potential/value of the proposals capacity of the administering institutions
3. sustainability of health promotion projects
4. track record of applicants
5. value for money of the proposals research ethics, where applicable

Result

Score of 4
- recommended for support

Score of 3
- recommended for support subject to clarifications / amendments

Score of 2
- not recommended for support at present

Score of 1
- not supported

- Reply to comments
- Reviewed by GRB

Maybe resubmit next round

Assessment criteria (HMR)

- **Originality**
- **Relevance** to the fund and thematic priorities
- **Significance** of the research questions
- **Quality** of scientific content
- **Credibility** of design and methods
- **Feasibility** of project
- **Research ethics**
- **Translational potential**/ value
- Past performance and **track records** of applicants
- **Research capacity** of the administering institution
- **Justification** of requested budget
- **Value for money**

Assessment criteria (HP)

- **Relevance** to the fund and thematic priorities
- **Innovation and potential impact** in response to the health needs of the target local community
- **Scientific evidence of effectiveness** of the proposed health promotion activities
- **Feasibility** of the proposal
- **Evaluation** plan of programme effectiveness
- **Track records** of applicants and administering institution
- **Cross-sector collaboration,** e.g. NGO & tertiary institutions
- **Justification** of requested budget
- **Sustainability** of the programme
- **Potential** to build community capacity in health promotion
- **Value** for money

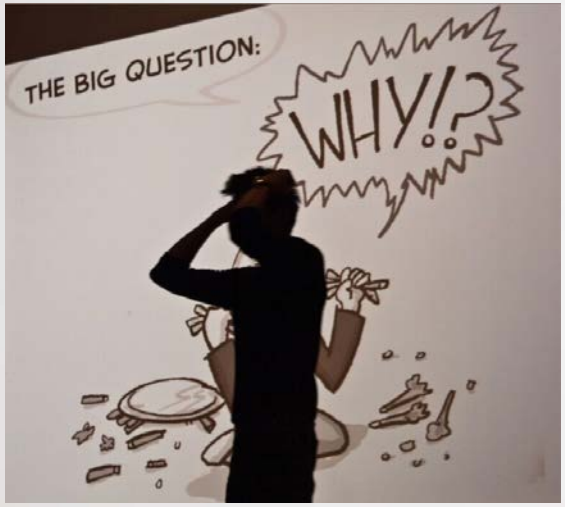
Relevance to scope of funding

- within the scope of the fund and the thematic priorities
  a) Infectious diseases;
  b) Non-communicable diseases;
  c) Primary healthcare;
  d) Preventive medicine;
  e) Telehealth and advanced technology
  f) Implementation science

Examples of Thematic Priorities (2022)

- Infectious Diseases
  - Respiratory pathogens
  - Antimicrobial resistance
  - Preparedness and response to pandemic & epidemic
- Non-communicable Diseases
  - Detection, treatment and management
  - Ageing and elderly care
  - Mental health
- Primary Healthcare
- Preventive Medicine
  - Tobacco control
  - Healthy lifestyle
  - Patient empowerment
- Telehealth and Advanced Technology
- Implementation Science

Significance of research question
Why fund this proposal?



Think of a **research question** that is…

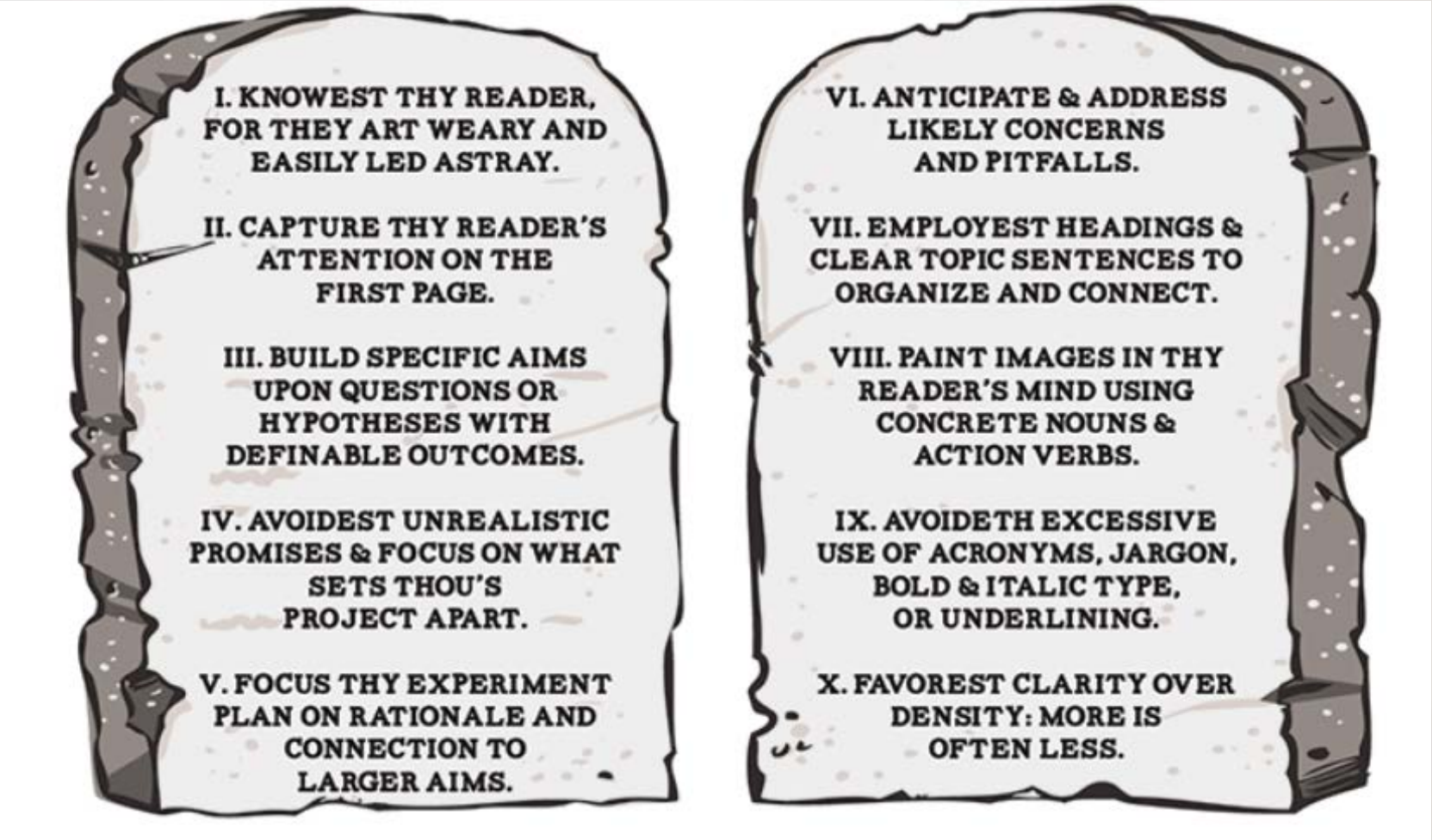
- filling **a gap in the current literature** of the topic (thus, need a review on the topic) or anticipate major breakthrough on research
- very **clear** and with important **implications & translational value**
- simple, not the more the better
- +/- with some **pilot work**

Quality of scientific content

- Background; what is known (critically evaluate the literature), what is not known (current gaps), and why is it essential to find out (relevance and significance).
- Do you have a clear, concise and testable hypothesis ?
- Are your objectives and aims coming into focus ?
- Preliminary evidence/pilot findings?

- Grantsmanship is very important!

Grantsmanship: Example: The 10 commandments of grantsmanship



https://www.asbmb.org/asbmb-today/careers/010119/the-10-commandments-of-grantsmanship

Credibility of study design and method & feasibility of the intended project

- Use of literature review/systematic review and pilot data if available
- Decide on the appropriate study design and its respective requirements
  - E.g. if RCT, use CONSORT
- Think of feasibility of study and sample size
- Pilot? Preliminary evidence?
- Sample size feasible given the time frame?

- *Enhancing the QUAlity and Transparency Of health Research (***EQUATOR**)

  - website *http://www.equator-network.org/*

Reporting guidelines for main study types

Randomised trials	CONSORT	Extensions	Other
Observational studies	STROBE	Extensions	Other
Systematic reviews	PRISMA	Extensions	Other
Case reports	CARE	Extensions	Other
Qualitative research	SRQR	COREQ	Other
Diagnostic / prognostic studies	STARD	TRIPOD	Other
Quality improvement studies	SQUIRE		Other
Economic evaluations	CHEERS		Other
Animal pre-clinical studies	ARRIVE		Other
Study protocols	SPIRIT	PRISMA-P	Other

How this research project will be carried out?

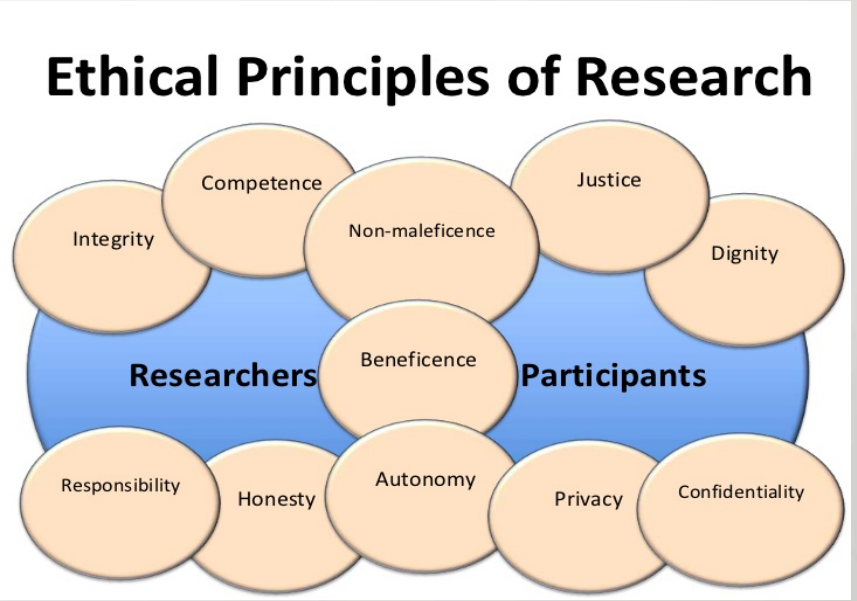
- Who will be the participants?
- How will they be recruited?
  - collaborating institution/clinics/centers/NGOs/etc.
  - communities: ads/posters/etc.
  - onsite/referral/telephone/online/etc.
- Is there any **pilot work**?
- Do you have any **letter of collaboration** to support recruitment/conducting the study?

What will be the outcomes & analysis

- Primary outcome
- Secondary outcomes
  - **Outcome (primary and secondary)**: An outcome variable of interest in the trial (also called an end point). Differences between groups in the outcome variable(s) are believed to be the result of the differing interventions. The primary outcome is the outcome of greatest importance. Data on secondary outcomes are used to evaluate additional effects of the intervention.
  - **Example:** "The primary endpoint with respect to efficacy in psoriasis was the proportion of patients achieving a 75% improvement in psoriasis activity from baseline to 12 weeks as measured by the PASI [psoriasis area and severity index] Additional analyses were done on the percentage change in PASI scores and improvement in target psoriasis lesions."
- Statistical/analytical design appropriate and clearly explained?
  - **What statistical analysis should I use?** http://www.ats.ucla.edu/stat/mult_pkg/whatstat/default.htm
- Potential confounders addressed?

Research ethics

- does the study comply with Chapter 340-Animals (Control of Experiments) Ordinance
- does the study comply with Chapter 486-Personal Data (Privacy) Ordinance
- any potential harms? Consent?



Translational potential/ value

- How will positive results be translated into improved health services, changes in clinical practice, informed health policy?
- Reviewers (overseas and local) often comment on the translational value of the proposal, especially given the new focus on non-academic impact in HK and the UK
- HMRF research should be “useful” as well as “interesting”
- Identify who are the research end users before you write the proposal and work with them (they may have insights into healthcare needs, subject recruitment, applicability of the findings)
- Involve research end users during the project
- Inform research end users after completion (prepare a comprehensive dissemination plan – not just peer-reviewed publication, also consider workshops for frontline staff, newspapers/ radio/ TV/ internet
- Who are the decision-makers in your field and how will you inform them about these findings?

Track records of the applicants

- Likelihood the proposed study can be accomplished by the investigators
- Previous successfully completed grants and research output
- Co-investigators to complement each other strengths


Research capacity of the administering institution

– Physical space, facilities and equipment, qualified research staff, support/administrative staff

Justification of budget & value for money

- Budget ceiling: $1.5M for full grant and $0.5M for pilot studies
- Most applicants request the maximum amount
- Consider smaller scale studies (e.g. $0.25M - $0.5M), esp. for pilot studies, to test unusual hypotheses, or if PA is a young / inexperienced researcher
- Justify needs in detail
  - Manpower: number of staff, pay scale, duration, % effort
  - Other expenses (“consumables”): itemise in detail
  - Equipment: can you share department resources; do you really need a new computer?
- GRB will trim unnecessary or redundant work / manpower / consumables / equipment and reduce budgets accordingly
- Calculate sample sizes clearly and state a feasible plan to obtain them
  - You will be queried about any shortfall;
  - Projects have been terminated due to failure to recruit sufficient sample size;
  - Part of the grant may need to be returned if the shortfall is not justified / explained satisfactorily

Common Feedbacks

Introduction, objectives

- The literature is incomplete (some well known studies not referenced/unaware local studies or other relevant studies)
- Something similar has been done
- Objectives are not clear, not specific, or too many, not achievable
- The study is over ambitious, no pilot data
- Inappropriate study design to carry out the study

Common Feedbacks

Methods & analysis plan

- Study design inappropriate
- Sampling not feasible or representative
- Some important confounders missing
- The scales have not been validated
- The questionnaire is too long
- The intervention is not clear (too complicated, not feasible…)
- Sample size calculated incorrectly or use wrong reference
- Statistical method incorrect
- Not clear how the results can be used in services
- Lack of pilot studies for feasibility

Rating a Grant Application

A score ranging from 4 (Recommended for support) to 1 (Not worthy of support) will be assigned by the referees to indicate the scientific merit under each heading in the Referee's Assessment Form. The overall rating for each application will be discussed and finalised in the Grant Review Board meeting. The overall rating is defined as follows:

Score	Explanation
4 - Recommended for support	Nil or very minor issues to address only
3 - Recommended for support subject to clarifications/ amendments	Minor revision and clarification required for a successful delivery
2 - Not recommended for support at present	Major revision required for significant improvement
1 - Not supported	Minimal impact on research / flaw in methodology/ incomplete application/ out of scope of the fund

After you have written your proposal

- Prepare early……
- Leave your draft for a few days and read it again - does it still make sense?
- Proposal reviewed by your colleagues and others
- Does it need further editing? Have you checked the references etc.?


UNSUCCESSFUL PEOPLE
SUCCESSFUL PEOPLE
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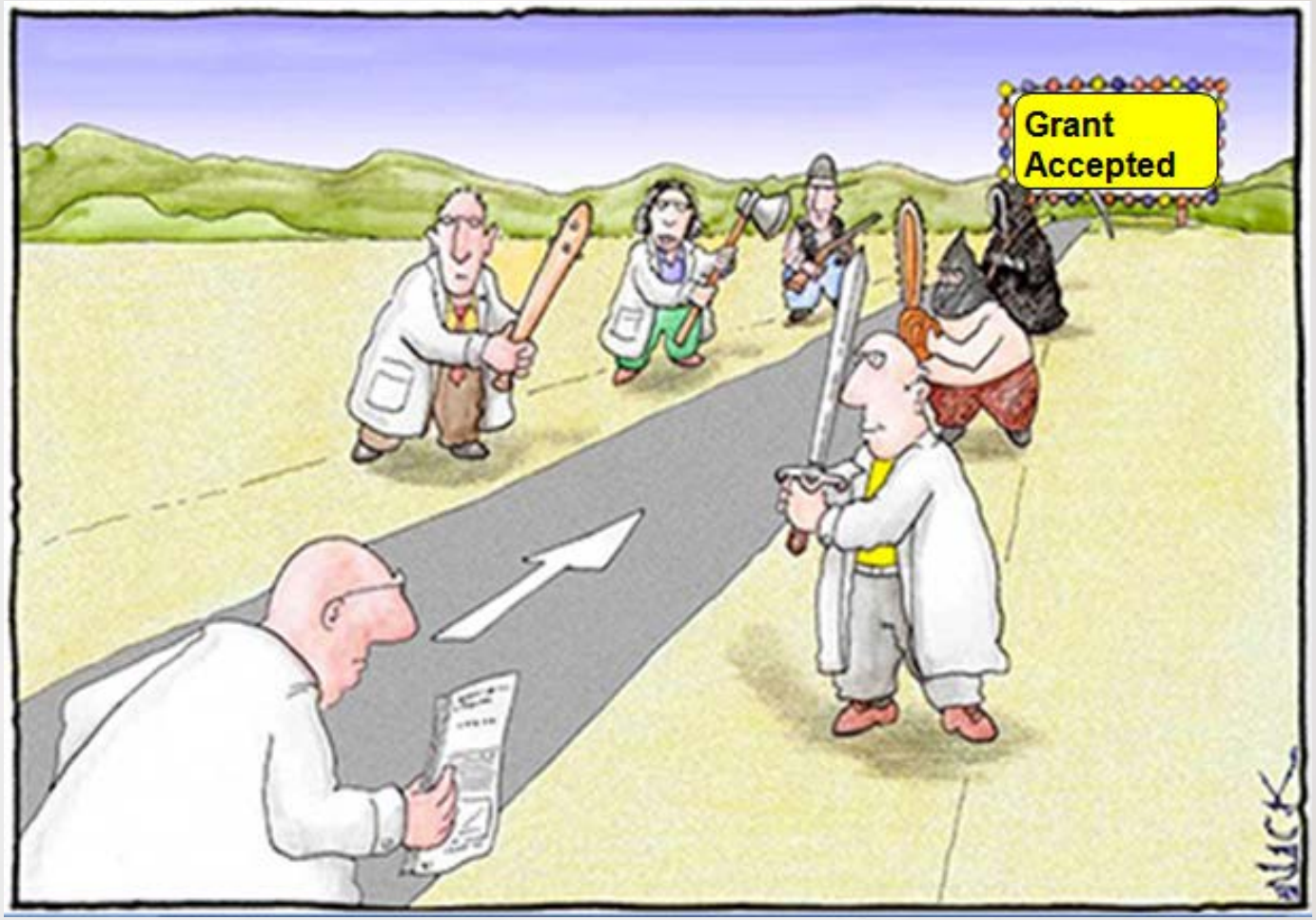

Good luck!

THANK YOU!