

Fellowship Application: What do you need to know?

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Agenda

- 1. Assessment Criteria
- 2. Tips for Preparing Your Application
- 3. Common Weaknesses in Applications
- 4. Q&A



Assessment Criteria

- Fellowship Applicant's Capability (30%)
- Training Proposal (35%)
- Research Proposal (35%)



Note:

Applications will be assessed by the Research Fellowship Assessment Panel (RFAP). Recommendations will be made after the interview with shortlisted applicants.

Fellowship Applicant's Capability (30%)

Applicant's research potential and capability, including -

- applicant's qualifications
- track record in research & training



Training Proposal (35%)

Importance of the training to health care development

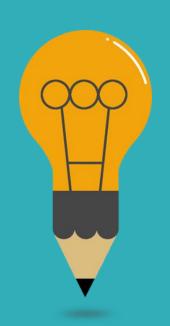
Relevance of the training to the research proposal



Research Proposal (35%)

Scientific merits of the research proposal

 Translational potential/value of research proposal to public health or health services in Hong Kong



Tips for Preparing Your Application



Research in context

1. Two questions to be addressed:

- (i) What is the existing evidence before this study based on an up-to-date literature search? State clearly whether research on a similar topic has been / is being carried out. Outline the research approaches in other studies and highlight their deficiencies and the research gap.
- (ii) How will this study add value to existing evidence to improve patient care, population health, influence clinical practice and/or health services management, or inform health policy in Hong Kong and elsewhere?
- Elaborate details with reference in "Introduction"



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



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!



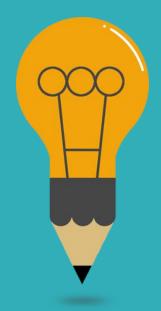
Aims, Objectives & Hypotheses

- 1. State the aims and objectives clearly (specific and realistic)
 - Please limit the research objectives to no more than three.
- Stated objective will contribute to new knowledge or needed understanding of the subject
- 3. If hypotheses are applicable:
 - Clearly and appropriately cited
 - Be consistent with the cited research objectives



Study Design

- 1. Study design has to be scientifically sound
- 2. Use of appropriate type of investigation to answer the research questions and attain the objectives (e.g. prospective / retrospective; cohort / cross-sectional / randomised controlled trial)
- 3. Study design described in sufficient detail to allow
 - Assessment of workload
 - Timetable
 - Experiments, observations to be made, randomisation method where relevant, and the use of controls





Reporting guidelines for main study types

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

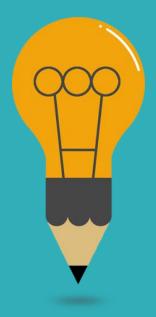


Methods & Subjects

- Clearly describe the sampling and recruitment procedures (e.g. inclusion/exclusion criteria, intervention/control groups, target population, etc)
- 2. Adequate sample size to establish:
 - prevalence/incidence or other such rates or estimates within acceptable bounds of precision; or
 - statistical power for hypothesis tests?



Justification for sample size shall be provided in <u>ALL APPLICATIONS</u> including pilot/proof of concept studies



Outcomes & Data Analysis

- 1. Define primary outcome
 - Addresses the most important objective
 - Basis for sample size calculation
- 2. Secondary outcomes relevant to the objectives
- 3. Confounding variables to be measured
- 4. Specific statistical tests to answer each specific objective & test specific hypothesis
- 5. Sufficient details on qualitative data analysis/other complex analysis, e.g. Cost-Effectiveness Analysis



Common Weaknesses in Applications: Research Plan

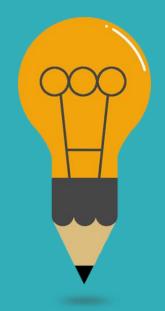
- Low translational potential of research findings
 Note: only clinical research and research on infectious disease with public health implications will be supported.
- Improper use of data from CMS/ CDARS <u>Note</u>: Proper consent/approval from Hospital Authority (HA) must be sought if HA data will be used
- Sample size estimation is not justified or provided
- Over ambitious study design leading to question on feasibility
- Lack of technical details or demonstration of competence to execute the proposed research



Common Weaknesses in Applications: Research Plan

 Not aware that ethics/safety approvals and/or consent for access to third-party data is needed before project commencement

 Study design/analytic plan is inadequate for the research purpose



Common Weaknesses in Applications: Research Plan

Introduction, objectives

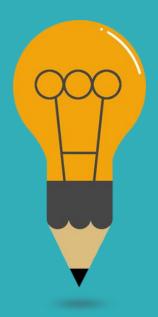
- The literature is incomplete (some well known studies not referenced/unaware local studies or other relevant studies)
- Something similar has been done
- Objectives are not clear, not specific, or too many, not achievable
- The study is over ambitious, no pilot data
- Inappropriate study design to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



Common Weaknesses in Applications: Research Plan

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



Common Weaknesses in Applications: Training Plan

- Overseas training programme is insufficiently detailed for assessment
- Associations between the knowledge/skills to be acquired from the training programme and the research plan are poorly stated
- Training courses or structured mentorship activities are not specifically described
- Proposed training is not relevant to the research plan



Seek guidance from your Mentor!



Wish You Success!

