Fellowship Application: What do you need to know?

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Agenda

- Assessment Criteria
- Tips for Preparing Your Application
- Common Weaknesses: Research & Training Plans

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.

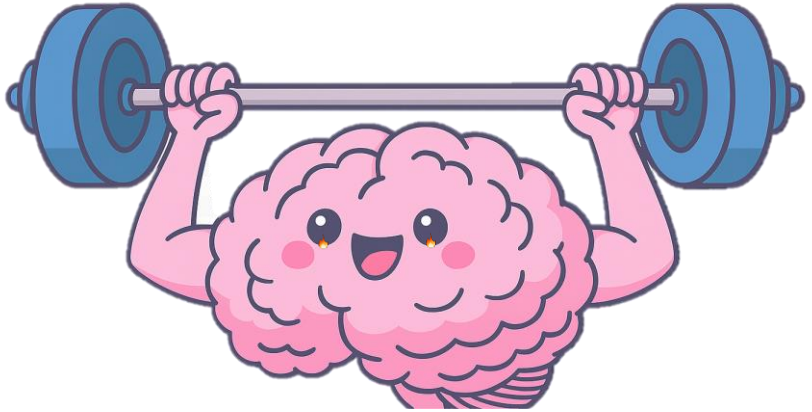
Fellowship Applicant’s Capability (30%)

Applicant’s research potential and capability, including:

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

Training Proposal (35%)

- Importance of the training to healthcare 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

"Is it just me or are these review panels getting a lot tougher?"

Tips for Preparing Your Application

Research in context (in the proposal template)

1. **<u>Two questions to be addressed</u>**:

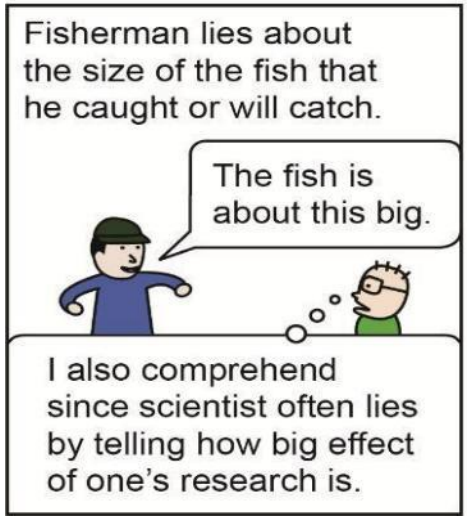
(i) What is the existing evidence before this study based on an up-to-date literature search? State clearly whether research on a similar topic has been / is being carried out. Outline the research approaches in other studies and highlight their deficiencies and the research gap.

(ii) How will this study add value to existing evidence to improve patient care, population health, influence clinical practice and/or healthcare system, or inform health policy in Hong Kong and elsewhere?

Elaborate in detail with reference in "Introduction"!

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

- **applying** the knowledge and skills acquired from the training programme
- **clear** and carries important **implications & translational value** to benefit Hong Kong's public health and health services
- **original** and **straight forward**



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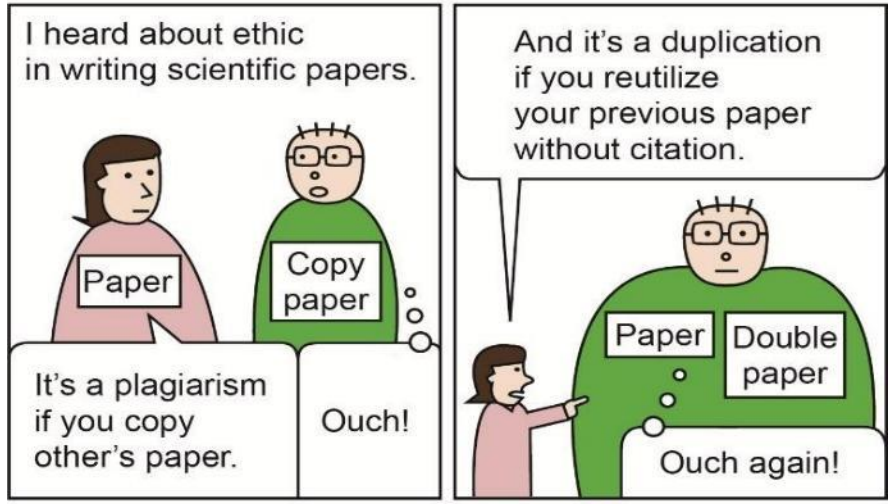

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Quality of scientific content:

- 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?
- Any preliminary evidence/pilot findings?

Aims & Hypotheses

State the aims clearly (specific and realistic)

- No more than three research objectives.

Define how the objective(s) will contribute to new knowledge or a needed understanding of the subject

Should be local relevance

If hypotheses are applicable:

✓Clearly and appropriately cited

✓Be consistent with the cited research objective(s)

Study Design

1. Study design has to be scientifically sound
2. Use of appropriate type of investigation to answer the research question(s) and attain the objective(s) (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, the use of controls…

Methods & Subjects

1. 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 & power analysis must be provided in **ALL APPLICATIONS** 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

Challenges & Contingency Plans

1. Identify potential challenges
   - Outline problems that may encounter during study implementation (e.g. participant recruitment, data collection)

2. Develop contingency plans
   - Propose proactive strategies to address these issues

Common Weaknesses

Research Plan

- Limited translational potential of research findings

  e.g. No local subject/data to demonstrate applicability in Hong Kong
- Overly ambitious study design raising concern on feasibility
- Study design/analytic plan is inadequate/inappropriate to address the research questions
- Sample size estimation is not justified or provided

Research Plan

- Lack of technical details or demonstration of competence to execute the proposed research
- Not aware that ethics/safety approvals and/or consent for access to third-party data is needed before project commencement
- Use of data of another study needs proper approval
  - Use of readily available/secondary data:
    - Can use data from CMS/CDARS ready for analysis?
      (**CMS**: Clinical Management System;
      CDARS: Clinical Data Analysis and Reporting System)
    - Can analysis of publicly available data/information address the research questions?
    - Is the required data available in the datasets? Are the data reliable?

Research Plan

Introduction, objectives

- Incomplete literature review (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, without pilot data
- Inappropriate study design to carry out the study

Research Plan

Methods & analysis plan

- Inappropriate Study design
- Sampling is not feasible or representative
- Some significant confounders omitted
- The measures have not been validated
- The questionnaire is too long
- The intervention is not clear (too complicated, impractical…)
- Sample size calculated incorrectly or use wrong reference
- Incorrect statistical method
- Not clear how the result findings can be translated into health services

Training Plan

- Training programme outside Hong Kong is insufficiently detailed for assessment
- Associations between the knowledge/skills to be gained from the training programme and the research plan are poorly expressed
- Training courses or structured mentorship activities are not specifically described
- Proposed training is not relevant to the research plan
- The proposed training is accessible in Hong Kong

Seek guidance from your Mentor!

Wish You Success!