HMRF 2023 OPEN CALL
BRIEFING SESSION FOR GRANT APPLICATIONS

Sharing of experience

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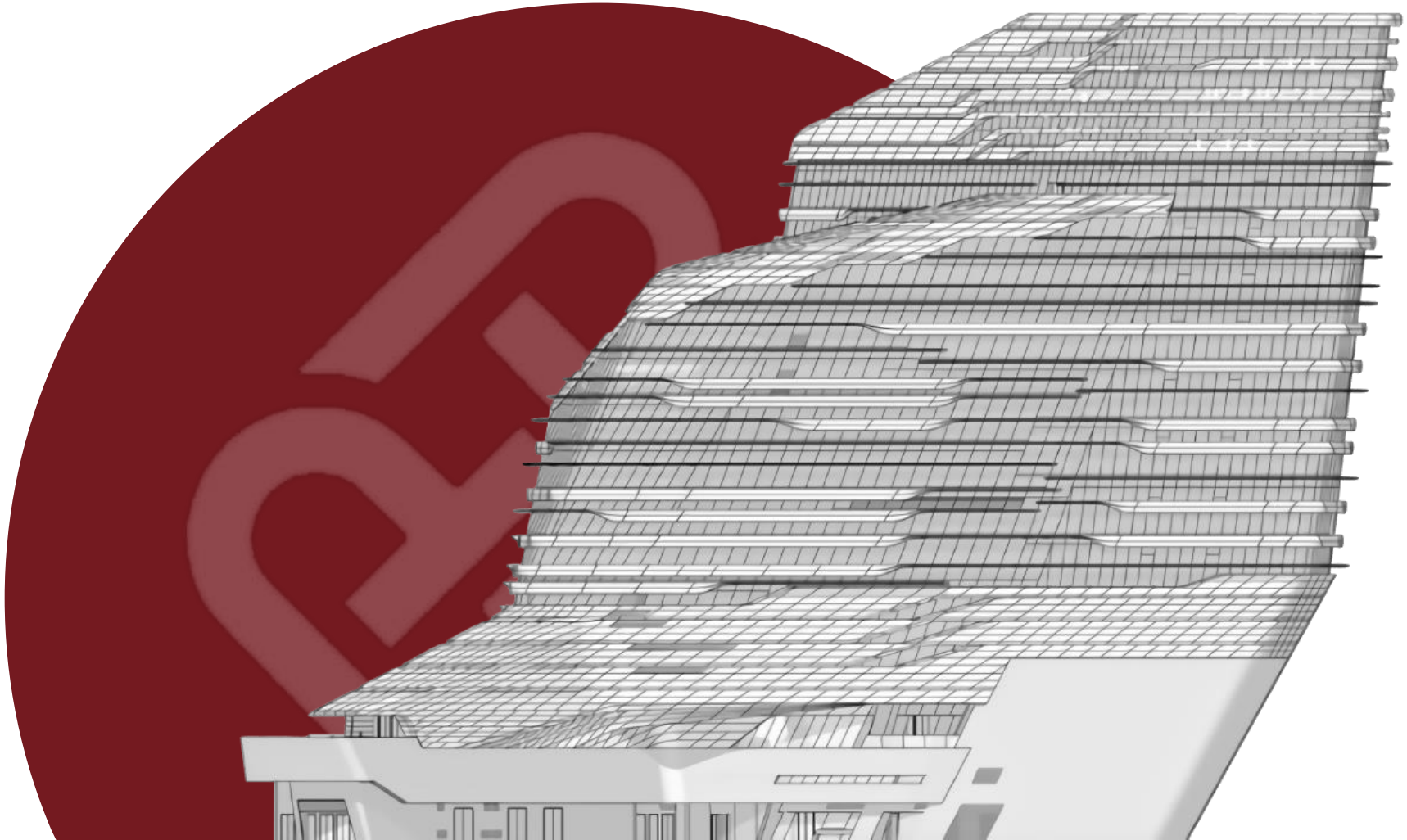

Outstanding Grant Applicant

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Outstanding Grant Recipient

I failed the first two rounds of application!!

Would I get fired?

Success rate of HMRF Proposals

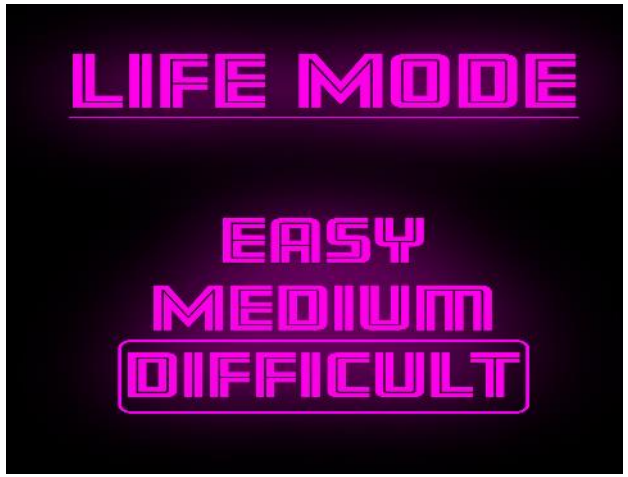
Number of Proposals

- Total: ~ 700 to ~800
- AMR>HHS>>ID>>HP

AMR : Advanced Medical Research
HHS : Health & Health Services
ID : Infectious Disease
HP : Health Promotion

Successful rate

- HMRF (2022 open call) : ~**24%**
- GRF 23/24: ~ 33.31%
- ECS 23/24: ~ 35.62%
- GRF/ECS (Biology and Medicine Panel) : 25.81%



NOT an easy game at all!!

Step 1: Don't get disqualified – Study the project scope

HMRF emphasizes the importance of translational potential of research findings

Only clinical research and research on infectious diseases with public health implications will be supported.

Research proposals on infectious diseases should focus on those diseases which **are prevalent in** or **pose threat to Hong Kong and neighbouring regions** or areas in which the Hong Kong academic community has a competitive edge.
Research proposals on infectious diseases (i) with **public health implications** from bench to bedside and at community level, **and** (ii) with **translational value** are supported.

Step 2: Know the rules – Two-tier review system

First-tier

- External reviewers (ERs): Overseas, 2 for full proposals, 1 for seed grants
- Full proposals with single-low ER rating (e.g. 1) will not be carried forward for the second-tier review
- Seed grants with ER rating of 1 or 2: Not reviewed in the second-tier

Second-tier

- Local speakers together with a few oversea experts in some panel meetings
- First speaker reviews the proposal and present the case in the panel meeting
- Second speaker usually submits written comments
- Final decision by consensus in the panel meeting (NOT by voting)

Step 2: Know the rules – Referee's assessment form

Both external reviewers and local speakers have to fill in the assessment form (with 9 items)

- Originality and Impact
- Research questions, aims and hypothesis
- Subjects and Study Methodology
- Outcomes and data analysis
- Research capability
- Budget
- Ethical and safety consideration
- Overall comments and conclusion (Strengths and Weaknesses)
- Confidential Comments to the Research Council

Step 3: Be strategic – Draft your proposal based on these items

Unlike publications, proposal will only be read by 3-4 people

- Senior researchers in the field – May not be an expert in your topic
- Grant assessment is an extra duty, taking up their personal time (and unpaid!)

Tailor-made a proposal for them!!

- Highlight these items in your proposal
- E.g. Use subheadings in the introduction to state clearly (i) Originality, (ii) clinical impact of your project
- Help the ERs/Speakers to find the answers for the assessment forms

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Originality and Impact

What is the importance of the proposed research in terms of its **originality** and potential impact in the area under study?

Originality (Novelty)

State clearly in the introduction

- Indicate the problem to be addressed
- The pitfalls of the current practice (**Research gap**)
- Is the method you are proposing entirely novel?
- If not, how is your proposed study design different from the previous studies

  E.g. Relevance to Hong Kong context

  [**Important for convincing ERs**]

Funded HMRF project (2020): Establishment of clinical workflow for rapid identification of pathogens and antimicrobial resistance from infected body fluids – Metagenomic vs targeted amplicon sequencing approach

Originality and Impact

What is the importance of the proposed research in terms of its originality and potential **impact** in the area under study?

How will the research findings **benefit patients and/or the healthcare system**?

Will the research findings **improve patient care**, **population health**, **influence clinical practice** and/or **health services management**, or **inform health policy** in Hong Kong and elsewhere?

Have the potential facilitators and barriers to this impact being achieved been identified?

Impact (The spirit of HMRF)

State clearly in the introduction and the last paragraph of proposal

- Benefit the healthcare system – Addressing a major health problem / diseases prevalent in Hong Kong
- Improve patient care – Clinically effective /better treatment outcome
- Influence clinical practice – More cost-effective and shorter TAT
- Inform health policy – actionable and supported by government departments

Likely failed HMRF project

Establishment of clinical workflow for rapid identification of pathogens and antimicrobial resistance from infected Urine– Metagenomic vs targeted amplicon sequencing approach

Research questions, aims and hypothesis

How specific, clearly expressed and realistic are the research questions, aims and hypotheses?

Recommended for support HMRF project (2022)

Aims and Hypotheses to be tested

- Emphasize the major **research questions**
- **One project aim**, **3-4 objectives** to achieve the project aim
- List out the objectives in **point forms (subheading)** to ensure that the reviewers will be able to see them and tick off from their checklist.
- State clearly the **hypotheses** and the **primary and secondary outcomes** for each objective
- Be realistic

Subjects and Study Methodology

Is the proposed **design and methodology appropriate** for the study?

Are **sample sizes** clear, justified, adequate and realistic??

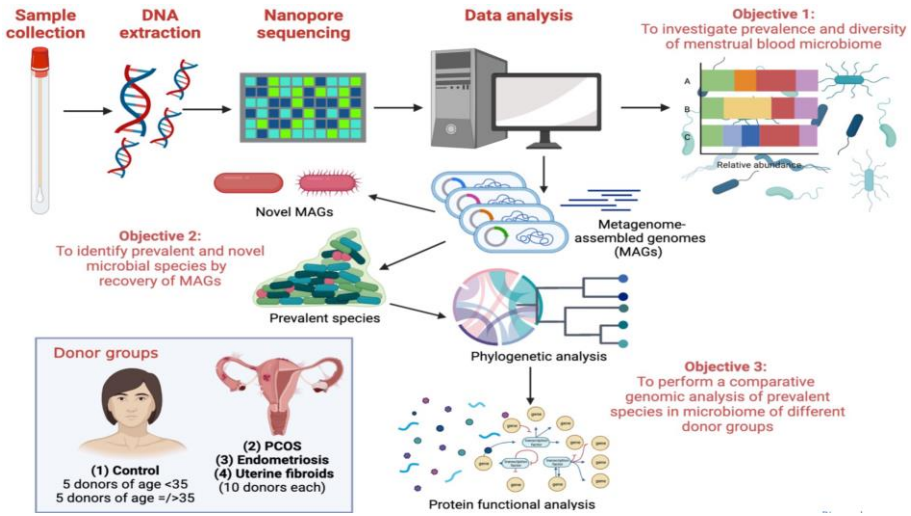
Are any **preliminary data** available?

How feasible is the proposed **timeframe**?

CRITICAL comments mainly found here!

Study Design – Can it answer the research questions?

- A schematic figure to summarize the study design



Sample size – Seek help from statistician if you are not familiar

- Cite the references for the calculation method
- If each objective necessitates different subjects, calculate the sample size for each objective separately.

Subjects and Study Methodology

Is the proposed **design and methodology appropriate** for the study?

Are **sample sizes** clear, justified, adequate and realistic??

Are any **preliminary data** available?

How feasible is the proposed **timeframe**?

Most CRITICAL comments found here!

Preliminary data – Groundwork and **pilot study**

Groundwork data

- Demonstrate that you are working on this topic.
- Better to be some published studies
- Describe in the introduction section

Recommended to support HMRF project (2022): Risk assessment and surveillance of the transmission of foodborne antimicrobial resistance in Hong Kong

Subjects and Study Methodology

Is the proposed **design and methodology appropriate** for the study?

Are **sample sizes** clear, justified, adequate and realistic??

Are any **preliminary data** available?

How feasible is the proposed **timeframe**?

Most CRITICAL comments found here!

Preliminary data – Groundwork and **pilot study**

Pilot study

- Prove the feasibility of the proposed methodologies
- Better to have pilot data for each objective
- But not too much
- Why additional grant money is needed

Recommended to support HMRF project (2022): Risk assessment and surveillance of the transmission of foodborne antimicrobial resistance in Hong Kong

Outcomes and data analysis

Are the primary and secondary outcomes clearly defined?

Have potential problems been anticipated and addressed?

Is the statistical/analytical design appropriate and clearly explained?

Funded HMRF project (2020): Establishment of clinical workflow for rapid identification of pathogens and antimicrobial resistance from infected body fluids – Metagenomic vs targeted amplicon sequencing approach

Most proposals did not state clearly the outcomes

Outcomes

- Align the primary and secondary outcomes with the research questions and objectives in the Aims section
- Help the reviewers to catch them!

Potential problems

- Leave a place in the proposal (e.g at end of each objective) to specifically mention potential problems, e.g., subject recruitment and bias
- Suggest possible solutions , i.e. contingent methods

Analysis

- Define what parameters you will measures
- Provides details on your analysis method
- Include statisticians or bioinformatians as co-A

Research capability

Comment on (i) the research team's expertise and track record (incl. principal investigator / project team members / collaborators) ?

Comment on the existing facilities of the Institution where the research will be conducted.

Define the roles of the Co-A of the research team

Determine what expertise are needed for the project

- Clinical partners in appropriate speciality (Physicians for subject recruitment; Pathologists for lab data etc.)
- Statisticians or bioinformatians for data analysis
- If you are junior researcher, good to have senior colleagues with relevant track records
- BUT **define the role** of each co-A clearly
- Avoid adding many Co-As with overlapping expertise

Supporting letter

- For public health study that can inform health policy, it is **crucial to have supporting letter** or any written evidence to show that you are supported by relevant **Government Departments**

Budget

Is the request for research personnel, consumables, equipment and overall budget justified and reasonable?

Be reasonable

Make the budget breakdown carefully

- E.g. calculate how many tests will be conducted in each year, and how much is the unit cost?
- How many manpower (FT + PT) required in each year?
- For lab consumables, no need to specify the brands
- Application of change request is needed for budget allocation

Ethical and safety consideration

Is the proposed research ethically sound?

Outline any safety or ethical issues that arise from the proposed research and comment on whether these have been adequately addressed in the proposal. Has ethical approval been sought?

Apply as soon as possible

- For projects involved invasive specimen collection which is not a routine medical procedure, better to obtained ethical approval before grant application.

- Take longer time to get centralized HA IRB approval

Overall comments and conclusion (Strengths and Weaknesses)

What are the specific strengths and weaknesses of this proposal?

Highlight the strengths of your proposed study at the end

- Try to leave one paragraph at the last pages to conclude the innovation, uniqueness and impact of your proposed study

Funded HMRF project (2020): Establishment of clinical workflow for rapid identification of pathogens and antimicrobial resistance from infected body fluids – Metagenomic vs targeted amplicon sequencing approach

Step 4: Response to reviewers' comments

If your project is rated 3 or 4,

- You will have **3 week** to address the comments and revise the proposal
- **Point by point** response to **ALL comments** from **GRB** and **ALL reviewers**
  (Just like how you respond to reviewers' comments in a point-by point manner during manuscript submission)
- Revise the proposal accordingly and indicate where and what you have amended in the response to reviewers' comments

THANK YOU

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