

LegCo Panel on Health Services

Establishment of Research Fund for the Control of Infectious Diseases

PURPOSE

This paper seeks members' view on the Administration's proposal to create under the Health, Welfare and Food Bureau (HWFB) a commitment of \$450 million for financing research projects on controlling infectious diseases, with particular emphasis on emerging infectious disease such as Severe Acute Respiratory Syndrome (SARS).

OBJECTIVE OF THE PROPOSED FUND

2. The objective of the proposed fund is to support research projects on the prevention, treatment and control of infectious diseases, in particular emerging infectious diseases such as SARS, in the territory.

JUSTIFICATIONS

3. Although infectious diseases have not been the major cause of death in Hong Kong and many developed countries for many years, the recent outbreak of SARS has highlighted the devastating nature of new infectious diseases and the adverse social and economic impact of an epidemic on the local as well as the global community.

4. Despite the unprecedented progress made by the local and international scientific community, much remains unknown about SARS. More research is needed to unravel the mystery of this new variant of coronavirus and to gain more knowledge about the new disease. Other than SARS, there is also the possibility that other infectious diseases might show up in Hong Kong in the future. Therefore, it is necessary for the territory to build up and strengthen its

knowledge base with regards to infectious diseases so as to prevent and control the spread of SARS and other infectious diseases.

BENEFITS

5. The knowledge and best practice protocol generated through research will be applicable to both the local and global community, leading to the following benefits –

- (a) enhanced prevention and control of the spread of infectious disease and emerging infectious diseases, such as SARS
- (b) strengthened knowledge base for surveillance and treatment of infectious diseases
- (c) facilitated sharing of evidence-based knowledge amongst researchers of local community and mainland China.
- (d) enhanced local research capacity in the field of infectious diseases

SCOPE

6. The scope of projects to be supported through the proposed fund includes but not limited to research-oriented investigations of anticipated or unanticipated outbreaks or epidemics of infectious diseases and evaluation of new diagnostic, therapeutic, or pilot studies. The projects could cover research on the etiology, surveillance and epidemiology of infectious diseases, public health, basic, clinical and health service research, and funding of institutions to enhance research infrastructure.

7. The following are examples of research projects that could be supported by the proposed fund:-

Etiology, Epidemiology, Surveillance and Public Health

- Detection and identification of emerging infectious diseases
- Studies of natural history of SARS, possible animal reservoirs
- Investigation of host susceptibility to emerging or re-emerging pathogens

- Research on ecological and environmental factors influencing disease emergence and transmission
- Studies on people's behavior towards hygienic community and healthy living
- Modification of environmental factors to prevent outbreaks of similar diseases in the territory.

Basic Research

- Development and validation of diagnostic tools
- Pathogenesis and immunologic characteristics of SARS
- Genomic sequencing, proteomics and informatics of pathogens causing SARS
- Elucidate the immunopathology of SARS to identify existing antiviral drug and development of novel treatment for SARS

Clinical and Health Service Research

- Clinical trials to evaluate the safety and efficacy of therapeutics, in particular, antiviral drug and other immune-based therapy in patients with SARS
- Investigate the role and efficacy of Chinese medicine in treating SARS
- Evaluate control measures to ameliorate disease impact at hospital level
- Develop treatment regime to improve management of patients with specific infectious disease
- Rational drug discovery in partnership with others to identify candidate drugs for treating infectious diseases

Enhancement of Research Infrastructure

- Develop sophisticated research equipments
- Develop software support systems

RESEARCH OUTPUT

8. The output in terms of number of research projects to be funded can be benchmarked on local experience. The average grant awards by local

fundings amount to about HK\$0.93m per research projects. Based on this benchmark, the output for the research fund is estimated to be about 450 projects.

ELIGIBILITY

9. The proposed fund will be opened to researchers and research institutes from the public, private and academic sectors in Hong Kong. Eligible applicants must have a track record of conducting research on the prevention, treatment and control of emerging infectious diseases in the territory. Researchers collaborating with mainland China and overseas institutions may also apply for the Fund.

10. It is anticipated that the research efforts would produce scientific advances and best practices as a result of multi-disciplinary cooperation and collaboration. To be eligible for a grant, the proposed research project must demonstrate high scientific merits and of local application. All research applications will undergo a two-tiered peer review process, first by the Referee Panel and second by the Grant Review Board.

ADMINISTRATION OF THE FUND

11. It is proposed that the fund be overseen by a Research Council, which would make recommendation to HWFB for allocation of research fund. The Research Council is supported by a secretariat and two working committees, namely the Grant Review Board and the Referee Panel. The secretariat will be housed under the Health, Welfare and Food Bureau supported by staff at non-directorate level either through recruitment on a non-civil service contract terms for two years or through hiring of professional services from local universities. It is estimated staff cost would take up about 0.5% per year of the total fund.

12. Other administrative cost will include remuneration for overseas referees, publication of research dissemination reports and maintenance of webpage. It is estimated that this would take up about 1.2% of the total fund.

13. The fund will support studies initiated by individual investigators as well as those commissioned by the Bureau to address specific health problems, fill scientific gaps and respond to public health threats or needs. All research proposals shall be subject to the extensive, two-tiered peer review process to ensure scientific credibility and for ethical considerations. The proposed role and responsibility, composition, and the term of reference of the Council, Grant Review Board and Referee Panel are set out in paragraphs 14 to 19 below.

Research Council

Role and responsibility

14. The Research Council assumes fiduciary responsibility for all aspects of the administration of the proposed fund and the allocation of funds for approved grants. The Council appoints members to the Grant Review Board and the Referee Panel.

Composition

15. The Council comprises representatives from the Health, Welfare, and Food Bureau; public institutes and bodies; as well as members from the academic arena and private sector to be appointed by the Secretary for Health, Welfare and Food. The term of service of appointed members is normally two years.

Terms of reference

- Determine research agenda and funding control mechanism of the proposed fund.
- Approve procedures for inviting, and criteria for vetting research applications.
- Approve standard terms and conditions for grant-holders.
- Recommend HWFB on allocation of funding.
- Approve processes for the ongoing monitoring and evaluation of approved research projects.

- Set up Grant Review Board, Referee Panel, and any other sub-committees as and when necessary to carry out the work of the Council.
- Report periodically to the Secretary for Health, Welfare and Food on the work of the Council and its ancillary bodies including the financial status of the proposed fund.
- Disseminate key findings of funded projects.

Grant Review Board

Role and Responsibility

16. The Grant Review Board acts as the scientific advisor to the Council and makes recommendations with regard to initial funding, requests for additional funds and assesses the outcomes of funded research. It is through the Grant Review Board that all applications as well as final and dissemination reports for funded grants are subject to peer review for their scientific merit and compliance with the funding principle and ethical considerations.

Composition

17. Members are appointed by the Council and are expected to be academia and other local or overseas experts versed in the research of infectious diseases. Potential members are identified through established network, publications, scientific roles and committee meetings or collaborative work. The Secretary for Health, Welfare and Food nominates the Chairman of the Grant Review Board.

Terms of Reference

- Set policies and procedures for the grant submission and review process, and the assessment and dissemination of final reports.
- Distribute guidelines for the formulation of research proposals, grant applications, and the submission of interim, final and dissemination reports.
- Review and assess applications and recommend projects for funding.

- Evaluate the quality of critical appraisals done by the Referee Panel
- Review and assess final, interim and dissemination reports.
- Monitor the progress of approved projects.
- Monitor the financial performance of approved projects.

Referee Panel

Role and Responsibility

18. Individual members of the Referee Panel, according to their specific area of expertise, are invited to review grant applications for funding and assess the outcomes of funded projects.

Composition

19. Individual members of the Panel will be identified through a variety of sources including through existing network, recommendation of the Grant Review Board members, bibliographic sources such as Medline, the reference section of the grant proposal or through internet contacts particularly in evidence-based health and health services literature.

Terms of Reference

- Assess the scientific merit and ethical considerations of submitted proposals
- Assess the relevance of the proposal to the funding principle and the applicability of the research to the local context.
- Assess the ‘value for money’ as presented in the final and dissemination report.

Mechanism to Prevent Duplicate Funding

20. The two-tiered peer review process will not only provide comments on the relevance by the experts, but also advice on any duplication with on-going projects based on their most updated knowledge of research projects. Duplication will be rejected. Besides, in line with prevailing international practice, all grants applicants will be required to declare whether

their research proposals are also being considered by other funding agencies. Cross-checking with these organizations will be performed. The absolute standard is that no single project will be funded twice.

Monitoring of Funded Projects

21. All successful applicants and host institutions shall be required to keep an audit trail of budget spent and submit periodic progress reports as well as a final report of the project. The results of their research are also to be disseminated in a medium or channel to be determined by the Research Council.

Reporting Mechanism

22. HWFB will report to LegCo on a regular basis on the funding position and the research project so supported.

FINANCIAL IMPLICATION

23. SHWF proposes a commitment of \$450 million for financing research projects to control infectious diseases. It is planned that the commitment will be spent to sustain research projects for an initial period of 5 years. The operation of the fund will be reviewed by the end of the period.

ADVICE SOUGHT

24. Members are invited to comment on the proposal to establish the research fund for the control of infectious diseases. Subject to members' views, we shall submit the proposal to the Finance Committee for consideration.

Health, Welfare and Food Bureau
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