

THE UNIVERSITY OF HONG KONG
FACULTY OF MEDICINE

**Report on the Faculty Research Retreat
held on June 2 – 3, 2001**

Introduction

A Faculty Research Retreat was held on Saturday, June 2 to Sunday, June 3, 2001 at the Gold Coast Hotel. The theme of this vision, mission and strategic planning meeting was on how to organize research, with special reference to programme-based rather than traditional department-based research. The objective was to effect, via a facilitated process and talks by both local and overseas speakers, a cultural change so as to reach an agreed agenda for research developments.

2. There were 121 participants at the Retreat, including 12 members from the Queen Mary Hospital. Eminent overseas and local speakers were invited to give talks to provide stimulating and inspiring ideas. The programme was organized around invited talks and group discussion sessions, and the Hong Kong Management Association had offered three experts to help run the programme on an honorary basis. A copy of the programme is at Annex I.

Presentations by speakers

3. The presentation materials of the following speakers are attached:

Annex	Speaker	Title
II	Professor CF Lee Pro- Vice-Chancellor (Research)	Towards strategic planning in research
III	Professor SK Lam Dean	Biomedical research: vision, mission and strategy
IV	Professor John Mattick Professor of Molecular Biology and Co-Director of Institute for Molecular Bioscience The University of Queensland, Australia	Genomics and the transition to integrative research – Interdisciplinary co-operation and strategic planning
V	Dr Bernie Bressler Vice President Research, Vancouver Hospital & Health Sciences Centre and Assistant Dean Research, Faculty of Medicine University of British Columbia, Canada	A competitive research culture for the 21 st century medical school
VI	Dr Clayton W Naeve Director, Hartwell Center for Bioinformatics and Biotechnology St Jude Children's Research Hospital, USA	Supporting high-throughput biotechnologies in today's research environment
VII	Professor Victor Li Managing Director Versitech Ltd	Technology transfer strategies of Versitech Ltd, HKU Technology Transfer Company
VIII	Dr V Wong HCE, Queen Mary Hospital	Communication and Collaboration – HKU and HA

4. In his officiating address, Professor CF Lee reviewed the current position of the University's research, our strengths and competitive edge, as well as possible areas of interdisciplinary research.

5. The Dean presented a vision on a quantum jump in the growth of the Faculty, and highlighted the trend for multi-disciplinary programmes in both clinical services and research. The strategic direction was to undertake projects at the SAR, national and regional level with HKU as the base.

6. Professor John Mattick shared his strategic vision in this "genomics era" with the members. According to Professor Mattick, the prospects for the future were two-fold: firstly, there was an opportunity to vastly improve health care for patients that would become more individually tailored and focused; and secondly, new industries would spring up for manufacturing new products in therapeutic, diagnostic and other advances in patient care. Hong Kong was in a strong position of excellence in medical research and clinical practice, and faced a unique opportunity if the community and government could recognize the importance of strategic support for such research now. It would be important to convince the political leaders that what we were doing in research would contribute to the society, and create a vision in the research of the future to gain support from the community.

7. In his presentation, Dr Bernie Bressler highlighted the importance of establishing a culture that would promote and facilitate a research continuum from "bedside to molecule to bedside", as well as the current trends in medical schools and teaching hospitals. He shared with the members his experience in developing the strategic research plan of the Vancouver Hospital and Health Sciences Centre, which emphasized the importance of relevance, synergy and teamwork, recognition of excellence, high ethical standards and scholarly integrity. A research-intensive faculty should aim to attract and retain the best researchers and health care specialists, and translate their work into results in clinical practice.

8. Dr Clayton W Naeve shared the success story of the Hartwell Center for Bioinformatics and Biotechnology as a core facility. According to Dr Naeve, the Hartwell Center did not have its own core programmes, and services were provided on a first-come-first-served basis, though some exceptional urgent requests would be entertained. A research medical faculty should have a mechanism for the provision of state-of-the-art biotechnological and bioinformatics support facilities. These technologies included DNA microarrays, proteomics and computing resources, which were indispensable and basic tools for discovery in this era. Investment on establishing these capabilities would generate immediate, medium and long-term positive impacts on scientific discovery and commercial productivity.

9. Mr Francis Ho, Commissioner for Innovation and Technology of the HKSAR Government, was also invited as a guest speaker. In his talk on "Biomedical research: the public policy and economic dimension", Mr Ho provided insights on the development of biotechnology in Hong Kong, a summary of which is at Annex IX. According to Mr Ho, biotechnology was a science-based discipline and there was a respectable base in Hong Kong, but there was no biotechnology industry as such. The Innovation and Technology Commission would be putting more emphasis on finding a niche that Hong Kong would have a chance of success. Resources would be pooled together for focussed projects of larger scale. Mr Ho encouraged Faculty members to apply for funding under the ITF for projects on Applied Genomics.

10. Professor Victor Li provided an overview of the Versitech's role in commercialization of research products and welcomed more interaction and dialogue with our Faculty members on technology transfer.

11. In her concluding remarks, Dr Vivian Wong looked forward to increased communication and collaboration between Faculty members and HA staff in the various areas like research, teaching, IT and public relations, *etc.*

Group Discussions

12. There were 4 “exercises” for group discussion, with the first two focusing on the research vision of the Faculty and the last two leading to the development of an action plan. Participants were divided into 12 groups randomly and the group with the best performance in each session, as judged by the experts of the HK Management Association, was awarded a prize. The following Faculty members had kindly served as facilitators to assist in the smooth running of the sessions: Professor JST Sham, Dr SL Beh, Dr HKF Yip, Dr MH Sham, Dr RTP Poon, Dr PT Cheung, Professor LC Chan, Dr MG Irwin, Professor CP Lau, Dr JM Nicholls, Professor VCN Wong, Dr KMC Cheung and Dr TP Lam.

(a) The Present: an overview of our research culture

In the first session, the groups were invited to review the present research culture of the Faculty. Participants were invited to reflect under the following 2 broad framework:

- (i) What is the current recipe of the research culture in the Faculty of Medicine?
- (ii) After conducting a SWOT analysis on the Faculty's research, what is the outcome of matching the internal forces of strengths and weaknesses with the external forces of opportunities and threats?

Members generally considered that the Faculty had a good track record in research and talented researchers, but efforts were divided and fragmented with little collaboration. In view of the opportunities offered by the Government's initiatives in biotechnology development, our proximity to the Mainland and the current developments in Chinese Medicine, *etc.*, the Faculty should aim at achieving a comparative advantage in research areas like biotechnology and genomics, and Faculty members should team up for resources towards the endeavours. Recognizing that budget cut and the keen competition from other institutions and the Mainland were the major threats, members considered it important to have collaborative programme-based research, to build up strong core facilities to support research, to focus on research areas which the Faculty had an edge, and to increase efforts in fund raising.

The presentation materials are at Annex X. Group 5 won the prize for this session.

(b) The Future: Research achievements of the Faculty in the year 2010

The second session looked at the future and the groups were invited to present their vision of the research achievements of the Faculty in the year 2010 creatively by talent performance in the form of mime, drama, song/poem, or press conference. Some of the presentation materials are at Annex XI. Group 9 won the prize for this session.

(c) How do we get there? Key issues to be addressed

After reviewing the present research culture of the Faculty and looking ahead to the future research achievements of the Faculty in the year 2010, members discussed how to translate vision into operational terms in this session. The 6 topics below were discussed, each by 2 groups:

- (i) Fostering research collaboration
- (ii) To set up core facilities to support programme-based research
- (iii) The Faculty as a whole focus on certain areas of research: Which area(s)? How can this be achieved?
- (iv) To promote research in education
- (v) Use of IT to facilitate
- (vi) To obtain more external research funding

Members identified the critical success factors for each topic and deliberated on the processes and ownership related to the factors. The main points are summarized below:

- (i) To foster research collaboration, the critical success factors were information sharing activities, appropriate infrastructure such as functional groups, core facilities and database on research interests, incentives and additional funding for programme-based research projects, and interface between clinical and basic science departments, *etc.*
- (ii) As mentioned above, the establishment of core facilities was considered as a critical success factor to foster research collaboration. To this end, it was important to consider carefully what kinds of core facilities would be required and how to organize them. The core facilities should be generic, not localized, and with clear objectives. In setting up the core facilities, the needs of specific programmes should be identified, and there should be long-term planning of staff, funding, space, user fee and evaluation system, *etc.*
- (iii) To capitalize on the strengths of the Faculty, “focus” would enable the Faculty to achieve a competitive edge in the research frontiers. It was suggested that the Faculty should focus on locally unique areas in cancer, infection, degeneration and developmental disorders, as well as Chinese medicine, CV endocrinology and neuroscience. The critical success factors to achieve “focus” were effective communication, critical mass, development of “give-and-take” culture, collaborative multi-disciplinary research programmes, allocation of space to support the areas identified, and core facilities with no vested interest, *etc.*
- (iv) To promote research in education, the fundamental factor would be to recognize that research in medical education could be done. To move forward in this area, it would be important to form a core group, to establish rewards for this kind of research, to collaborate with other experts both locally and internationally, to promote within the Faculty and the University, and to increase public awareness.
- (v) It was recognized that IT would be an essential tool to facilitate the setting up of core facilities, research collaboration, integration of clinical and basic science

research, doing more research in the face of dwindling resources, and promotion of research in education. In all these areas, IT would be able to help break up barriers by enhancing communication and information sharing.

- (vi) In view of the budget cut, it would be essential to solicit more external funding to support the research of the Faculty. Concerted efforts from Faculty members would be required to increase the number of successful grant applications such as RGC CERG; to organize more fund-raising activities; to solicit private donations; and to promote the image of the Faculty to facilitate fund-raising.

The presentation materials are attached at Annex XII. Group 8 won the prize for this session.

(d) Drafting an action blueprint: a realistic action plan for implementation

Members were invited to draft an implementation schedule for the recommendations made on the 6 topics at the previous session, based on the principles of SMART, *i.e.* specific, measurable, agreed upon, realistic and time-bound. The presentation materials are attached at Annex XIII. The combined Groups 1 and 8 won the prize for this session.

Research Awards

13. Members were invited to submit research proposals by lunchtime on the second day of the Retreat to bid for the research awards, which were funded by the Faculty and the generous donations from the Department of Medicine and the Department of Surgery. A total of 13 proposals were submitted and reviewed by the 3 overseas speakers. The following 3 teams finally won the awards:

- (a) Dr GSW Tsao (Anatomy), Dr NS Wong (Biochemistry), Dr JM Nicholls (Pathology) and Dr Alan Lau (Paediatrics): “The use of recombinant EBV to study the interaction of LMP1 and LMP2A in the transformation of nasopharyngeal epithelial cells” (award of \$100,000);
- (b) Dr NG Patil (Surgery) and Professor MSM Ip (Medicine): “Has new medical curriculum brought about fundamental change to better ‘tomorrow’s doctors?’” (award of \$50,000); and
- (c) Professor KSE Cheah (Biochemistry) and Dr JD Huang (Biochemistry): “Development of a transgenic biosensor of cell death” (award of \$50,000).

Conclusion

14. There was a consensus reached at the Retreat that in order for the Faculty to achieve excellence in research in the new millennium, it was necessary to put in place a culture of collaborative and team research, and an organized and strategic approach to research. The recommendations made at the Retreat will form the basis of the Faculty’s direction in research. An action group will be formed under the Faculty Research Committee to follow up with the implementation of the recommendations.

FA/
July 21, 2001