

# THE CHINESE UNIVERSITY OF HONG KONG

## Micro-Module Courseware Development Grant

### Scheme 1: Basic Scheme

#### Interim Report (2017-18)

Report due 31 May 2018.

Please return by email to mmcd@cuhk.edu.hk

#### PART I

Project title: Development of Virtual Labs on Frontiers in Biochemistry

Principal supervisor: Au Wing Ngor Shannon

Department / Unit: School of Life Sciences

Project duration: From December 2017 to October 2018

Date report submitted: 6 June 2018

#### **1. Project objectives**

*Is the project on track to meet its objectives?*

- *No. There is some delay in our progress. However, materials for the generation of 3 micromodules are ready.*

*Have the objectives been changed as a result of the experience of working on your MMCDG project?*

- *No. The objectives remain the same as stated in our proposal.*

#### **2. Progress on process, outcomes or deliverables**

*What have been accomplished so far?*

- *1) A working team has been formed. This includes a part-time research assistant and 10 undergraduate students. The students are divided into four groups each work on a focus topic while the research assistant helps coordinate and oversee the project.*
- *Four group meetings with the students have been scheduled to discuss the content and design of the micromodules. We have also met Mr. Ray Lee from ITSC about the animation/video work needed.*
- *Currently, contents for 3 micro modules are well prepared and forwarded to Ray in ITSC.*

*Have any obstacles been encountered and what are the remaining tasks to be finished?*

- *The content and design of this project is student-oriented, and therefore collection of student input is critical. The major obstacle is then to fix various schedules to discuss with the student groups, and at the same time to ensure this project do not interrupt their study. As such, there was a lag during the mid-term and final exam period. In addition, we under-estimated the time needed for the animation/video taking, most of the effort we spent in the past few months were on information search and content preparation. Only*

*until recently, we got the storyboard ready for ITSC to produce the animation/video.*

*Is the project still on time for completion (which includes preparation of the final report) on or before the grant expiry date?*

- *With the current workflow, it is anticipated that 4 micromodules will be generated by early Oct.*

*Provide a listing of project outputs to date.*

- *Overall content of the 4 micromodules have been set. Each micromodule will contain an introduction, Timeline to indicate major discoveries, virtual lab in the format of animation/lab video, and self-test.*
- *Materials for 3 micromodule RNA, Cancer and Metabolic disease are well prepared and forwarded to ITSC for animation/video production.*

### **3. Evaluation Plan**

*Have you altered your evaluation plans?*

- *No*

*Does your evaluation indicate that you have achieved your objectives?*

- *The evaluation process has not been started. However, through various group meetings, discussion for the content materials between the four working groups of students have been made.*

### **4. Dissemination Activities (reports, websites, video links, products, etc.)**

*Provide a listing of dissemination activities to date.*

- *With the support from a part-time research assistant and 10 student helpers, the content of 4 virtual labs on Frontiers in Biochemistry is well set. The students are divided into 4 focus groups and each group works on a specific micromodule. They are RNA, Cancer, Metabolic disease and Stem Cells. Each micromodule includes an Introduction, Timeline to display key discoveries, virtual labs presented in animation/video format and a short exercise. This MMCD project is basically student oriented. All student helpers have taken the Yr-2 course BCHE2000 and some of them are in their final year. Therefore, the content and design of the micromodules integrate not only different aspects of knowledge, but also their learning experience in BCHE2000 and in other senior courses, especially those involve research experiments. Students also interviewed the respective teachers to ensure that the contents align with the course syllabus.*

*Currently, materials for 3 micromodules have been prepared and forwarded to ITSC for the construction of animations and websites. Materials for the remaining 1 micromodule is in progress, and will be ready by end June. It is anticipated that all 4 micromodules will be available for evaluation by early Oct.*