

THE UNIVERSITY OF HONG KONG
FACULTY OF SCIENCE

To: All Science students

Undergraduate Research Fellowship Programme (URFP) 2020-21

To enhance students' learning experience and to nurture the next generation of researchers/scholars, the 'Undergraduate Research Fellowship Programme' (URFP) was introduced by the University since 2012.

The URFP is a prestigious programme that offers opportunities for academically outstanding students (students who are in the 90th percentile of top students in a study programme or have a cumulative GPA of 3.50 and above) to undertake research under the guidance and supervision of academic staff who have a strong research track record and experience in training research postgraduate students. In 2019-20, 10 Science students participated in the URFP and 3 of them received the summer research internship award to conduct research locally or overseas in summer 2019.

Students enrolled in the URFP are required to undertake a research study in 2020-21 by taking a project/ directed studies course. Research internship for at least 8 weeks in summer 2020 may also form an essential part of such a research study, if determined by the supervisors concerned, and students may receive a research internship awards of up to HK\$40,000 for research internship overseas or up to HK\$15,000 in Hong Kong or the Mainland. As the research internship awards will be funded across the University, competition for such awards may likely to be keen.

The URFP participants are also eligible to enroll in specified postgraduate courses. Successful completion of the URFP will be recorded in the students' transcripts and those perform well will be considered for early admission to research postgraduate programmes of the University.

For details of the URFP, please refer to <https://www.scifac.hku.hk/current/ug/el/research/undergraduate-research-fellowship-programme-urfp> which contains an information leaflet and application forms. Students have to approach prospective supervisors, who are at the rank of assistant professor or above, for research opportunities and recommendations. Application form(s) and relevant documents should be submitted to the Faculty Office by **March 15, 2020 (Sunday)**.

Yours sincerely

(Dr) Thiyagarajan Vengatesen (Rajan)
Assistant Dean (Experiential Learning)
Faculty of Science, HKU

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THE UNIVERSITY OF HONG KONG

Undergraduate Research Fellowship Programme (URFP) 2020-21

Faculty of Science

A. Objective and Overview

The URFP is a prestigious programme aimed to enhance students' learning experience and to nurture the next generation of researchers/scholars. It offers opportunities for academically outstanding students to undertake research under the guidance and supervision of academic staff who have a strong research track record and experience in training research postgraduate students. Students enrolled in the URFP are required to undertake a research study. Research internship may form an essential part of such a research study, if determined by the supervisors concerned.

B. Eligibility Criteria

The following are eligible for participating in the URFP:

- (a) Students who are in the 90th percentile of top students in a study programme;
- or**
- (b) Students who have a cumulative GPA of 3.50 and above.

C. Year of Study

Students generally enroll in the URFP in their final year of study (in 2020-21). Flexibility is provided for cases with strong research interest and potential are identified earlier than the final year.

D. URFP Components and Postgraduate Courses for attendance

Title of study programme: **6901 Bachelor of Science**

Credit-bearing components:

For 4-year curriculum:

Project course (12 credits) or directed studies course (6 credits) in the 3rd or 4th Year in 2020-21:

- BIOC3999 Directed studies in biochemistry
- BIOC4999 Biochemistry project
- BIOL3991 Directed studies in ecology & biodiversity
- BIOL3992 Directed studies in food & nutritional science
- BIOL3993 Directed studies in molecular biology & biotechnology
- BIOL3994 Directed studies in biological sciences
- BIOL4991 Ecology & biodiversity project
- BIOL4992 Food & nutritional science project

- BIOL4993 Molecular biology & biotechnology project
- BIOL4994 Biological sciences project
- CHEM3999 Directed studies in chemistry
- CHEM4999 Chemistry project
- EASC3999 Directed studies in earth sciences
- EASC4999 Earth sciences project
- ENVS3999 Directed studies in environmental science
- ENVS4999 Environmental science project
- MATH3999 Directed studies in mathematics
- MATH4999 Mathematics project
- PHYS3999 Directed studies in physics
- PHYS4999 Physics project
- STAT3799 Directed studies in statistics
- STAT4799 Statistics projects

Non credit-bearing components:

Summer research internship in summer 2020: As determined by the supervisor, student can undertake a research project in the Faculty or in an overseas university/institution under the supervision of a faculty member for at least 8 weeks in summer. Its nature is similar to the Faculty's existing Summer Research Fellowship/ Overseas Research Fellowship Scheme: <https://www.scifac.hku.hk/current/ug/el/research/srf-orf>

Undergraduate Research Colloquium: participate in poster presentation and research colloquium to share the research findings with others

Postgraduate courses and other seminars available for attendance:

STAT7614 Advanced Statistical Modelling
STAT7615 Advanced Quantitative Risk Management and Finance

Title of study programme: **6729 BSc in Actuarial Science**

Credit-bearing components:

For 4-year curriculum:

Project course (6 credit) in the 3rd or 4th Year in 2020-21:

STAT4798 Statistics and actuarial science project

Non credit-bearing components:

Summer research internship in summer 2020: As determined by the supervisor, student can undertake a research project in the Faculty or in an overseas university/institution under the supervision of a faculty member for at least 8 weeks in summer. Its nature is

similar to the Faculty existing Summer Research Fellowship/ Overseas Research Fellowship Scheme: <https://www.scifac.hku.hk/current/ug/el/research/srf-orf>

Undergraduate Research Colloquium: participate in poster presentation and research colloquium to share the research findings with others

Postgraduate courses and other seminars available for attendance :

STAT7614 Advanced Statistical Modelling

STAT7615 Advanced Quantitative Risk Management and Finance

E. Deliverable(s)

All students enrolled in the URFP will be required to produce a research deliverable, e.g. dissertation, research paper, etc., with acknowledgement of funding, for assessment.

Students are required to fulfill the assessment of the course by submitting a report/thesis and give oral presentation/seminar.

Also, students are required to participate in the Undergraduate Research Colloquium by conducting a poster presentation and a research colloquium organised by the Faculty.

F. Supervisory Arrangements

Applicants have to approach prospective supervisors, who are at the rank of assistant professor or above, for research opportunities and recommendations.

G. Responsibilities of Supervisors

A supervisor's responsibilities include helping the student to define the topic of his/her research study; determining whether research internship is to be required for the student's research study and making arrangements for the student to undertake such an internship if required; setting work targets for any internship to be undertaken by the student; arranging regular meetings with the student at which all matters relating to the student's research study can be discussed with the supervisor; and monitoring the student's progress through to completion of his/her research study.

H. Recognition

The fellowship will be recorded in the transcripts of students who have successfully completed the URFP.

I. University Research Internship Awards

Research internship awards under the URFP 2020-21 will be funded by the HKU Foundation with co-funding from Faculties as well as the Joseph Chow Education Fund. They are generally expected to take place during inter-semester breaks, and if there are alternative arrangements, sound justification should be provided. For overseas research internships, the value of an award is up to HK\$40,000 for a period of not less than 8 weeks on a full-time basis to cover economy return airfare and part of overseas accommodation and living costs. For research internships in Hong Kong or the Mainland, the value of an award is HK\$15,000 for the same period as stated above.

To provide more research learning opportunities to students, the University has partnered with the University of Warwick to allow undergraduate students participating in HKU's URFP and Warwick's Undergraduate Research Support Scheme (URSS) to carry out a non-credit bearing summer research project under the guidance of an allocated supervisor at the other university. Each year, HKU can send up to four students to Warwick for a period of 8 to 10 weeks between June and August for an overseas research internship under the URFP.

Samples of research proposal outlines from students in the previous round will be posted on the URFP website (<http://tl.hku.hk/urfp/>) in due course.

(In planning research internship in a Mainland or an overseas university, supervisors and students are advised to take into account the following: international status of the placement university; the availability of suitable academic staff to supervise the student's research internship and research facilities in the placement university; availability of accommodation for the student, and visa requirements for internships of different countries. Please seek the Admissions and Academic Liaison Section's advice on visa requirements, if needed.)

J. Application Procedures and Timetable

Completed application form of URFP countersigned by the prospective supervisor and course coordinator of the project/ directed studies course have to be submitted to Miss Grace Luk of the Faculty Office.

Applicants who would like to undertake research internship in summer 2020 in addition to enrolling in project/ directed studies course should also complete Part A to D of the University Research Internship Awards application form and submit it together with a **recommendation letter** from the internship supervisor, a **research proposal** of not more than 500 words on one A4 size paper and a **plagiarism check report** on your University Research Internship Awards application form with the research proposal.

Application forms are downloadable at

<https://www.scifac.hku.hk/current/ug/el/research/undergraduate-research-fellowship-programme-urfp>. Deadline of application is **March 15, 2020 (Sunday)**.

K. Selection of Participants

Students will be selected based on the eligibility criteria. An interview might also be conducted.

L. Notification of Selection Results

Selection results will be announced by the Working Group on URFP through the Faculty.

M. Contact Person(s)

Please contact the following if you have any enquiries about the URFP:

Name: Ms Susan Leong, Executive Officer

Tel. no.: 3917 8194

Email: suleong@hku.hk