

**TIGP Bio 2020 Fall Syllabus**  
**Basic Molecular Biology I (B1)**

**Place:** Room 107, New Building of the Institute of Information Science, Academia Sinica.

**Time:** Tuesday 09:00-12:00

**Chair:** Dr. Chuan-Hsiung Chang (cchang@ym.edu.tw)

**Aim:** understanding the key concepts in molecular and cell biology and their experimental underpinnings

**Outline:**

**Textbook:** (Required)

1. Molecular Cell Biology, 7th edition, by Harvey Lodish et al. Publisher: W. H. Freeman. International Edition (13 Aug, 2012). ISBN-13: 9781464109812.

Local book store: <http://www.yihscient.com.tw/front/bin/ptdetail.phtml?Part=06585>

Reference: (Recommended but not required)

1. Molecular Biology of the Cell, 6th edition, 2014.

<http://www.yihscient.com.tw/front/bin/ptdetail.phtml?Part=06595&Rcg=53601>

2. Molecular Biology : Principles of Genome Function, 2nd edition, 2014.

<http://www.yihscient.com.tw/front/bin/ptdetail.phtml?Part=06594&Rcg=52559>

3. Biochemistry: A Short Course, 2nd edition, by Lubert Stryer et al. Publisher: W. H. Freeman (December 23, 2011). ISBN-10: 1429283602, ISBN-13: 978-1429283601.

**Lecturers:** Dr. Chuan-Hsiung Chang, Dr. Ueng-Cheng Yang, Dr. Ho-Ming Chen, Dr. Jung-Hsin Lin, Dr. Wailap Victor Ng, Dr. Yuh-Shan Jou, Dr. Jie-Rong Huang, Dr. An-Chi Wei

**TA:** N/A (Please refers to the lectures respectively shall you have any questions of each class)

**E-mail:**

**Office hours:** N/A

**Grades:** Midterm exam 50%. Final exam 50%.

For the most up-to-date syllabus, please visit <https://tigbbp.iis.sinica.edu.tw/tigbbio/index.html>

Week	Date	Topics/Brief Description	Lecturers
1	2020/09/15 @N101	Molecules, Cells, and Evolution	Dr. Chuan-Hsiung Chang changed to Dr. Ueng-Cheng Yang
2	2020/09/22 Moved from 12/16	Cancer	Dr. Yuh-Shan Jou
3	2020/09/29 @N101	Protein Structure and Function	Dr. Jie-Rong Huang
4	2020/10/06	Transcriptional Control of Gene Expression	Dr. An-Chi Wei
5	2020/10/13 @N101	Basic Molecular Genetic Mechanisms	Dr. Ueng-Cheng Yang
6	2020/10/20	Post-Transcriptional Gene Control	Dr. Ho-Ming Chen
7	2020/10/27	Molecular Genetic Techniques	Dr. Ueng-Cheng Yang
8	2020/11/03	Review Week (no class)	---
9	2020/11/10 @O108	Midterm Exam	---
10	2020/11/17	Genes, Genomics, and Chromosomes	Dr. Chuan-Hsiung Chang changed to Dr. Ueng-Cheng Yang
11	2020/11/24	Biomembrane Structure and Transport	Dr. Jung-Hsin Lin
12	2020/12/01	Cellular Energetics	Dr. Ueng-Cheng Yang
13	2020/12/08	Signal Transduction and G Protein–Coupled Receptors	Dr. Wailap Victor Ng
13	2020/12/09(Wed)	Signaling Pathways That Control Gene Expression	Dr. Wailap Victor Ng
14	2020/12/15	The Eukaryotic Cell Cycle	Dr. An-Chi Wei
14	2020/12/16(Wed) Moved to 09/22	--	--
15	2020/12/22	Review Week (no class)	---
16	2020/12/29	Final Exam	---

## TIGP Bio 2020 Fall Syllabus

### Biological Computing (C1)

**Place:** Room 107, New Building of the Institute of Information Science, Academia Sinica

**Time:** Friday 14:00-17:00

**Chair:** Dr. Yu Tsao (yu.tsao@citi.sinica.edu.tw)

**Aim:** The aim of the course is to link issues in computer science to biology and thus capture the interest of students in both areas. It is expected that students will acquire and retain important knowledge about computational biology

**Outline:** The course provides an introduction to the basic computational concepts and methods used in molecular biology and genetics. It covers classic algorithmic techniques (for examples: divide and conquer algorithm, dynamic programming ...), data structures (e.g. queue, tree...), and common computational problems in biology (such as motif finding, sequence alignment ...). In addition, Bioinformatics approaches for next generation sequencing and the most up-to-date technology will be addressed as well.

**Lecturers:** Dr. Wen-Lian Hsu, Dr. Yu-Jung Chang, Dr. Kai-Chun Liu, Dr. Huai-Kuang Tsai, Dr. Jinn-Jy Lin, Dr. Ting-Yi Sung, Dr. Hsin-Nan Lin, Dr. Chen-Hsin Yu, Dr. Ching-Tai Chen, Dr. Jung-Hsin Lin

**Textbook:**

**Reference book:**

**TA:** Yu-Hsiang Chen 陳煜翔 **Email:** s871818@gmail.com

**Office hours:** Wednesday 10:00 am-12:00 pm

**Office location:** Room 103, Old Building of the Institute of Information Science, Academia Sinica

**Grades:** Midterm exam 50%. Final exam 50%.

For the most up-to-date syllabus, please visit <https://tigppb.iis.sinica.edu.tw/tigppbio/index.html>

Week	Date	Topics/Brief Description	Lecturers
1	2020/09/18	Analysis of Algorithms	Dr. Wen-Lian Hsu
2	2020/09/25	Recurrence	Dr. Wen-Lian Hsu
3	2020/10/02 (Holiday) -> 09/30 (Wed)	Introduction to Data Structure (I)	Dr. Yu-Jung Chang
4	2020/10/09 (Holiday) -> 10/07 (Wed)	Introduction to Data Structure (II)	Dr. Yu-Jung Chang
5	2020/10/16	Algorithmic Techniques	Dr. Wen-Lian Hsu
6	2020/10/23	Databases: An Overview	Dr. Meng-Chang Chen changed to Dr. Kai-Chun Liu
7	2020/10/30	Introduction to Data Mining	Dr. Meng-Chang Chen

			changed to Dr. Kai-Chun Liu
8	2020/11/06	Review Week (no class)	
9	2020/11/13	Midterm Exam	
10	2020/11/18 (Wed)	Sequence alignment	Dr. Huai-Kuang Tsai
10	2020/11/20	Fundamentals of Molecular Evolution and Phylogenetic Tree Construction	Dr. Jinn-Jy Lin
<del>11</del>	2020/11/25 (Wed) -> Cancelled	Motif finding	----
11	2020/11/27	The Analysis of Next Generation Sequencing Data	Dr. Hsin-Nan Lin
12	2020/12/04	ChIP-seq	Dr. Chen-Hsin Yu
13	2020/12/11	Computational Proteomics	Dr. Ching-Tai Chen
14	2020/12/18	Fundamentals in Structural Bioinformatics	Dr. Jung-Hsin Lin
15	2020/12/25	Review Week (no class)	
16	2020/01/01(Holiday) -> <del>01/04(Mon)</del> -> 01/08(Fri)	Final Exam	

**TIGP Bio 2020 Fall Syllabus**  
**Fundamental Statistical Methods in Bioinformatics (S1)**

**Place:** Room 107, New Building of the Institute of Information Science, Academia Sinica.

**Time:** Thursday 09:00-12:00

**Chair:** Dr. Shinsheng Yuan (shinshengyuan@gmail.com)

**Outline:** This course covers the fundamentals of statistics and basic tools for bioinformatics analysis. In the first part students will learn basic statistical concepts and methods, including probability, random variables and distributions, parameter estimation, hypothesis testing, regression analysis, and categorical data analysis. In the second part several commonly used methods in bioinformatics will be introduced, including statistical meta analysis, survival analysis, clustering, classification, and nonparametric statistics.

**Textbook:** Fundamentals of Biostatistics (author: Bernard Rosner), Cengage Learning.

**Reference book:** Pattern Recognition (author: Richard O. Duda, Peter E. Hart, and David G. Stork), Wiley.

**Lecturers:** Chen-Hsiang Yeang, Hsin-Chou Yang, Shinsheng Yuan, Grace Shieh, Hsuan-Yu Chen, and Wei-Chung Liu

**TA:** Erickson Erigio Fajiculary 艾瑞克 **Email:** efajiculy@yahoo.com

**TA Office hours:** Tuesday 16:00 pm-18:00 pm

**TA Office location:** Room 304, Old Building of the Institute of Information Science, Academia Sinica

**Grades:** Midterm exam 50%. Final exam 50%.

For the most up-to-date syllabus, please visit <https://tigbbp.iis.sinica.edu.tw/tigpbio/index.html>

Week	Date	Topics/Brief Description	Sub-topics/ Detailed Description	Lecturers
1	2020/09/16(Wed)	Descriptive Statistics, Genomic Data Analysis	(1) Introduction to statistics (2) Descriptive statistics (3) Fundamental of molecular biology (4) Genomic data analysis	Dr. Chen-Hsiang Yeang
1	2020/09/17 @N106	Probability	(1) Applications in statistical genetics (2) Combinatorial analysis (3) Axioms of probabilities (4) Conditional probability and independence (5) Random variable and distribution function	Dr. Hsin-Chou Yang
2	2020/09/24	Discrete Distributions and Contingency Tables	(1) An application in pharmacogenetic study (2) Discrete/continuous/mixed distributions (3) Joint/marginal/conditional distributions (4) Special discrete distributions (5) Introduction to contingency table	Dr. Hsin-Chou Yang
4	2020/10/01(Holiday) -> 10/08	Continuous Distributions, Expectations and Basic Statistics	(1) Continuous random variable (2) Expectation (3) Basic statistics (4) Limit theorems (optional)	Dr. Hsin-Chou Yang
5	2020/10/15	Parameter Estimation and Confidence Interval	(1) Unbiasedness (2) Point estimation (substitution principles, least square estimate, maximum likelihood)	Dr. Shinsheng Yuan

			estimate) (3) Interval estimation	
6	2020/10/22	Hypothesis Testing, P-value and False Discovery Rate	(1) Hypothesis testing (2) Type I error and type II error (3) P-value (4) One-sample and two-sample z-tests (5) One-sample, two-sample, and paired t-tests (6) Bonferroni adjustment, false discovery rate, and q value	Dr. Grace Shieh
7	2020/10/29 @O108 ->Moved to 12/16(Wed)	--	--	--
8	2020/11/05	Review Week (no class)		
9	2020/11/12	Midterm Exam		
10	2020/11/19	Correlation, Regression Analysis and ANOVA	(1) Linear regression with one independent variable (2) Inference in regression analysis (3) Diagnostic and remedial measures (4) Simultaneous inferences and other topics (5) Matrix approach to simple linear regression (6) Multiple linear regression (7) Building the regression model (8) Qualitative predictor variables (9) Analysis of variance	Dr. Grace Shieh
11	2020/11/25(Wed) ->Moved to 12/01 (Tues)	--	--	--
11	2020/11/26	Survival Data Analysis	(1) Mantel-Haenszel test (2) Survival and hazard functions (3) Kaplan Meier estimate (4) Log-rank test (5) Proportional-hazards model (6) Lung cancer study	Dr. Hsuan-Yu Chen
12	2020/12/01(Tues) 14:00-17:00 (Moved from 11/25)	Logistic Regression and Statistical Meta Analysis	(1) Logistic regression (2) Meta analysis (effect size, precision, study weights, summary effect, heterogeneity, fixed-effect model, random-effect model, software)	Dr. Shinsheng Yuan
12	2020/12/02(Wed) ->12/03	Clustering	(1) Clustering by geometry (K-means, EM algorithm, hierarchical clustering, self-organizing map, principal component analysis, independent component analysis) (2) Clustering on graphs (Basic concepts, max flow – min	Dr. Chen-Hsiang Yeang

			cut, normal cuts, spectral clustering, and community detection) (3) Advanced topics (Chinese restaurant process and affinity propagation)	
12	2020/12/03 ->Moved to 12/24	--	--	--
13	2020/12/10	Nonparametric Statistics (I)	(1) Bootstrap (2) One-sample sign test (3) One-sample Wilcoxon signed-rank test (4) Wilcoxon rank-sum test (Mann-Whitney U test) (5) Sign test for paired data (6) Wilcoxon signed-rank test for paired data	Dr. Wei-Chung Liu
14	2020/12/16(Wed) (Moved from 10/29)	Analysis of Categorical Data, Chisq and Multinomial	(1) Incidence proportion and odds ratio (2) Two-sample test for binomial proportions (3) Contingency-table approach (4) Fisher's exact test (5) McNemar's test (6) Kappa statistic	Dr. Hsuan-Yu Chen
14	2020/12/17	Nonparametric Statistics (II)	(1) Kruskal-Wallis test (2) Randomization/permutation test for two-way ANOVA (3) The product-moment correlation coefficient (4) Spearman rank correlation (5) Kendall's coefficient of rank correlation	Dr. Wei-Chung Liu
15	2020/12/24 (Moved from 12/03)	<del>Review Week (no class)</del> -> Classification	(1) Binary classifications (Bayesian detection theory, naïve Bayes and other generative models, non-parametric methods, Fisher linear discriminant, support vector machines and kernel techniques, artificial neural networks, and boosting) (1) Advanced topics in supervised learning (multi-class classification, feature selection, semi-supervised learning, active learning)	Dr. Chen-Hsiang Yeang
16	2020/12/31	Final Exam		

## TIGP Bio 2020 Fall Syllabus

### Programming (Python) (P1)

**Place:** Room 108, Old Building of the Institute of Information Science, Academia Sinica.

**Time:** Friday, 10:00am-12:00pm

**Chair:** Dr. Wang, John (johnwang@gate.sinica.edu.tw)

**Outline:**

This course introduces basic aspects of programming language and its application in bioinformatics. First, fundamental programming techniques in Python are introduced. After that, this course focuses on the practical implementation of programs to analyze various biological data. The use of existing available resources from the Internet is also incorporated. Finally, the students implement bioinformatics projects (i.e., motif finding, pattern matching, sequence alignment, biomedical database analysis, etc.)

**Lecturers:** Dr. John Wang, Dr. Li Su, Dr. Te-Chuan Chiu, Dr. Ching-Fen Chang, Dr. An-Chi Wei, Dr. Guan-Shuo Mai, Dr. Yu-Lun Hsieh

**Textbook:** Python for Biologists: A complete programming course for beginners

Advanced Python for Biologists

(Reference) Python for Everybody - Exploring Data In Python 3

**TA:** Chayanika Goswami 祁雅卡 **Email:** chayabinf@gmail.com

**Office hours:** Wednesday, 14:00pm-16:00pm

**Office location:** Room 304, Old Building of the Institute of Information Science, Academia Sinica

**TA (GSB):** Cheng-Kuo Lai 賴政國 **Email:** lihowfun@gmail.com

**Office hours:** Wednesday, 14:00pm-16:00pm

**Office location:** B303, Interdisciplinary Research Building, Academia Sinica

Grades: Midterm exam 25%. Final exam 30%. Homework 35%. Class performance (10%)

For the most up-to-date syllabus, please visit <https://tigpbp.iis.sinica.edu.tw/tigpbio/index.html>

Week	Date	Topics/Brief Description	Lecturers
1	2020/09/18	Introduction to Python	Dr. John Wang
2	2020/09/23(Wed)	Basic Elements of Python I	Dr. Li Su
2	2020/09/25	Basic Elements of Python II	Dr. Li Su
3	2020/10/02(Holiday) -> 09/30(Wed)	Basic statements I: branching programs and inputs	Dr. John Wang
4	2020/10/09(Holiday) -> 10/07(Wed)	Basic statements II: iterative programs	Dr. John Wang
5	2020/10/16	Functions: scope rules and passing arguments	Dr. John Wang
6	2020/10/23	Modules, Files, and Structured Types	Dr. Te-Chuan Chiu
7	2020/10/30	Exception handling	Dr. Te-Chuan Chiu
8	2020/11/06	Review week (No Class)	
9	2020/11/13	Midterm exam	
10	2020/11/18(Wed)	Introduction to Biopython	Dr. Ching-Fen Chang
10	2020/11/20 -> Moved to 12/02	--	--
11	2020/11/27	Object-oriented programming: classes	Dr. Li Su
12	2020/12/02(Wed) (Moved from 11/20)	Regular expressions	Dr. Ching-Fen Chang
12	2020/12/04	Data analysis toolbox: NumPy, Pandas, Matplotlib	Dr. An-Chi Wei
13	2020/12/11	Machine learning I: scikit-learn	Mr. Guan-Shuo Mai
14	2020/12/18	Machine learning II: scikit-learn & keras	Dr. Yu-Lun Hsieh
15	2020/12/25	Review week (No Class)	
16	2020/12/30(Wed)	Final exam	

## TIGP Bio 2020 Fall Syllabus

### Seminar

**Place:** Room 101, New Building of the Institute of Information Science, Academia Sinica.

**Time:** Thursday 14:00-15:20

**Chair:** Academia Sinica: Dr. Chun-Yen Lin (Informatics), Dr. Chien-Ling Lin (Biology), Dr. Wei-Chung Liu (Statistic)

**Remarks:** Attend any 2 none-BP Seminars (either on campus or off campus is fine) and submit a report for each seminar to advisor/lab professor (Format: 1 page A4, 12pts font, single space) and send the report to BP office after grading is completed by the professor by the end of the semester. Please download the report form from BP web-page

**Grades:** attendance 100%.

For the most up-to-date syllabus, please visit <https://tigppb.iis.sinica.edu.tw/tigppbio/index.html>

Week	Date	Topics/Brief Description	Speaker / Host
1	2020/09/17	Billiard Ball Therapy - Toward a Rational Repurposing of FDA Drugs that Target Multiple Sites in a Disease-Relevant Protein	Dr. Lee-Wei Yang Host: Chayanika Goswami
2	2020/09/24	The Roles of Endogenous Ligand for Aryl Hydrocarbon Receptor in Neural Development and Tumorigenesis of Neuroblastoma	Dr. Hsin-Yu Lee Host: Yueh-Hua Tu
3	2020/10/01	Mid-Autumn Festival (No class)	----
4	2020/10/08	A Simple Approach for Quantifying Node Importance in Signed and Directed Networks	Dr. Wei-Chung Liu Host: Yu-Hsin Chen, changed to Jen-Hung Wang
5	2020/10/15	Noises and Dynamics in Cells: Mathematical Modeling in Systems Biology	Dr. Chao-Ping Hsu Host: Yu-Hsiang Chen
6	2020/10/22	AI in Drug Discovery	Dr. Y. Jane Tseng Host: Yu-Ching Hsu
7	2020/10/29	Viral Protease Drug Discovery using Pharmacophore Anchors	Dr. Nikhil Pathak Host: Jen-Hung Wang
8	2020/11/05	Review Week (No class)	----
9	2020/11/12	Midterm Week (No class)	----
10	2020/11/19	Beetle-Inspired Technology for Drug Screening and Healable Electronics	Dr. Ching-Te Kuo Host: Hsin-Han Lee
11	2020/11/26	Toward Variant Peptide Identification in Proteogenomic Analysis	Dr. Ting-Yi Sung Host: Jia-Ying Su
12	2020/12/03	Epigenetic marks on Paralogous Genes Indicate Underappreciated Universality of Active Histone Codes utilized by Metazoans	Dr. Ben Yang Liao Host: Samarth Gupta, Changed to Po-Yuan Chen
13	2020/12/10	Chasing Coral Bacteria	Dr. Sen-Lin Tang Host: Erickson Erigio Fajiculary
14	2020/12/17	Comparative transcriptomics of parasitic nematodes	<b>Dr. Isheng Jason Tsai</b> (Changed from Dr. Wen-Hsiung Li) Host: Yu-Chun Huang



15	2020/12/24	Review Week (No class)	----
16	2020/12/31	Final Exam (No class)	----

## TIGP Bio 2020 Fall Syllabus

### Student Presentation

**Place:** Room 101, New Building of the Institute of Information Science, Academia Sinica

**Time:** Thursday, 15:30-17:00

**Chair:** Dr. Chuan-Hsiung Chang, Dr. Chen-Ching Lin

\*Effective from 2014 Fall semester, all TIGP-BP students are required to present once a semester in seminar.

\*Students are required to submit the topics by **Sep 3, 2020** (First Year Students: The paper will be assigned by your lab professor)

\*The following schedule is confirmed and will not be changed. Please contact Dr. Chuan-Hsiung Chang if you do have a difficulty on the assigned date.

\*The presenter shall introduce the host and attended professors in the beginning of each seminar.

**\*Seminar presentation guidelines for PhD program students\_2020**

For the most up-to-date syllabus, please visit <https://tigbbp.iis.sinica.edu.tw/tigbbio/index.html>

Week	Date	Topic	Student
1	2020/09/17	Integrating Microarray-Based Spatial Transcriptomics and Single-Cell RNA-Seq Reveals Tissue Architecture in Pancreatic Ductal Adenocarcinomas <a href="https://www.nature.com/articles/s41587-019-0392-8">https://www.nature.com/articles/s41587-019-0392-8</a>	Yueh-Hua Tu 杜岳華
2	2020/09/24	Cancelled	Samarth Gupta 山瑪斯
3	2020/10/01	Mid-Autumn Festival (No class)	----
4	2020/10/08	Integrative Pathway Enrichment Analysis of Multivariate Omics Data <a href="https://www.nature.com/articles/s41467-019-13983-9">https://www.nature.com/articles/s41467-019-13983-9</a>	Yu-Ching Hsu 徐于晴
5	2020/10/15	Evolutionary Dynamics of Neoantigens in Growing Tumors <a href="https://www.nature.com/articles/s41588-020-0687-1">https://www.nature.com/articles/s41588-020-0687-1</a>	Po-Yuan Chen 陳柏元
6	2020/10/22	Attention Guided Capsule Networks for Chemical-Protein Interaction Extraction <a href="http://www.shorturl.at/gkqxl">www.shorturl.at/gkqxl</a>	Chung-En Ni 倪崇恩
7	2020/10/29	Interspecies Microbial Fusion and Large-Scale Exchange of Cytoplasmic Proteins and RNA in a Syntrophic Clostridium Coculture <a href="https://mbio.asm.org/content/11/5/e02030-20">https://mbio.asm.org/content/11/5/e02030-20</a>	David Nicola Streuli 施大衛
8	2020/11/05	Review Week (No class)	----
9	2020/11/12	Midterm Week (No class)	----
10	2020/11/19	Quantification of Translation Uncovers the Functions of the Alternative Transcriptome <a href="https://doi.org/10.1038/s41594-020-0450-4">https://doi.org/10.1038/s41594-020-0450-4</a>	Jia-Ying Su 蘇家瑩
11	2020/11/26	Natural Variation in DNA Methylation Homeostasis and the Emergence of Epialleles <a href="https://www.pnas.org/content/117/9/4874">https://www.pnas.org/content/117/9/4874</a>	Yu-Chun Huang 黃郁琿

12	2020/12/03	A Yeast Living Ancestor Reveals the Origin of Genomic Introgressions <a href="https://www.nature.com/articles/s41586-020-2889-1">https://www.nature.com/articles/s41586-020-2889-1</a>	Hsin-Han Lee 李昕翰
13	2020/12/10	Landscape and Function of Multiple Mutations within Individual Oncogenes <a href="https://www.nature.com/articles/s41586-020-2175-2">https://www.nature.com/articles/s41586-020-2175-2</a>	Yi-Chen Yeh 葉奕成
14	2020/12/17	Mediterranean diet intervention alters the gut microbiome in older people reducing frailty and improving health status: the NU-AGE 1-year dietary intervention across five European countries <a href="https://gut.bmj.com/content/69/7/1218">https://gut.bmj.com/content/69/7/1218</a>	Shu-Chuan Chen 陳淑娟
15	2020/12/24	Review Week (No class)	----
16	2020/12/31	Final Exam (No class)	----

<https://www.sciencedirect.com/science/article/abs/pii/S1532046420300204?via%3Dihub>

## Lab Rotation

<b>All 1st year students: Please inform BP office for the laboratory you are rotating (Deadline for 2020 Fall Semester is on 09/30/2020)</b>	
<b>Student</b>	<b>Advisor</b>
Yu-Ching Hsu 徐于晴 (2020)	Dr. Tzu-Pin Lu 盧子彬
Hsin-Han Lee 李昕翰 (2020)	Dr. Isheng Jason Tsai 蔡怡陞
Jia-Ying Su 蘇家瑩 (2020)	Dr. Chien-Ling Lin 林倩伶
Hsin-Ju Hung 洪欣如 (2020)	-----
Yu-Chun Huang 黃郁琿 (2020)	Dr. Pao-Yang Chen 陳柏仰
Po-Yuan Chen 陳柏元 (2020)	Dr. Tai-Ming Ko 柯泰名
David Nicola Streuli 施大衛 (2020)	Dr. James C. Liao 廖俊智院長
Aishwarya Tiwari 艾希雅 (2020)	-----