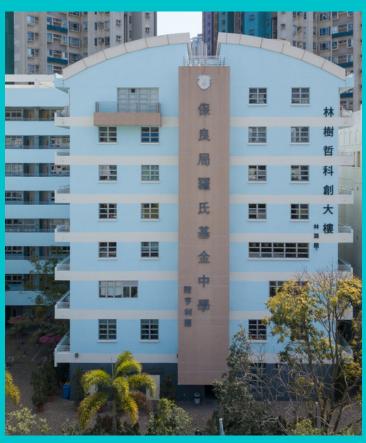


## LAM SHU CHIT SCIENCE AND INNOVATION COMPLEX SO SAU LIN LECTURE THEATRE cum VIDEO CONFERENCE CENTRE SO SIU LING COMPLEX





保良局 羅氏基金中學 綜合大樓及演講廳 命名典禮 香港特別行政區政府 教育局局長 楊潤雄先生**, JP** 

Speech state

BY THE HONOURABLE KEVIN YEUNG YUN-HUNG, JP SECRETARY FOR EDUCATION OF HKSAR

PLK LAWS FOUNDATION COLLEGE DEDICATION CEREMONY OF THE COMPLEX AND LECTURE THEATRE



保良局羅氏基金中學綜合大樓及演講廳於2022年3月舉行命名儀式,在此謹向保良局仝人及學校全體師生衷心致賀。

保良局是服務多元化的慈善機構,歷史悠久,一直以「育才扶幼 照遍香江」爲宗旨,開辦不同類型的 非牟利學校,對香港教育貢獻良多。保良局羅氏基金中學是一所直接資助計劃學校,秉承「保赤安 良」的精神,用心培育莘莘學子,竭力提供優質教育服務,真正做到「延展愛心」、「造福社群」。

保良局羅氏基金中學自2004年創校以來,一直致力優化校舍設施,爲學生提供更完備的學習環境。是次命名的「林樹哲科創大樓」,設有高端器材實驗室,包括「幹細胞科學實驗室」、「羅焯生態實驗室」等。學生可在這裏研習細胞培植、基因編輯,以及環境保育等課題,盡情享受探究科學知識的樂趣。此外,大樓還設有藏書豐富的圖書館及多元化的學習設施,有助提升學生的學習興趣與自學能力。

是次命名的設施還有「蘇少玲樓」及樓內的「蘇秀蓮演講廳暨視像會議中心」和「蘇少玲禮堂」。 「蘇秀蓮演講廳暨視像會議中心」是訓練學生演說和舉行學術會議的理想場地,學校曾在這裏與多所境外學校進行視像會議,讓學生拓寬眼界;「蘇少玲禮堂」則提供寬敞的場地,可用作舉辦聯校活動,讓學生互相觀摩交流。

二十一世紀是創科年代,創新及科技是推動經濟增長和提升產業競爭力的重要元素。行政長官在《2021年施政報告》中提出多項有關創新科技的措施,強調特區政府會充分利用香港自身優勢,把握國家「十四五」規劃和大灣區建設帶來的黃金機遇,全力全速發展創科,爲打造香港成爲國際創新科技中心作好準備,而其中一項重點是「推動研發、匯聚人才」。教育局深明培育創科人才的重要性,因此積極推動STEM教育,提升學生對學習科學及科技的興趣,同時培養他們對創新科技的正面價值觀和態度。

保良局羅氏基金中學推動STEM教育不遺餘力,近年在學與教中加入不少創科元素,規劃了一系列常規及跨學科的校本課程和活動。學校更把生物科技科發展爲獨立科目,並積極尋求社區資源,開拓優質的學習機會,例如與海洋公園合作,支援學生研究中華白海豚骨架和瀕臨絕種的馬蹄蟹;以及與大學合作,讓學生探究幹細胞及神經系統等專門課題。學生在科研方面表現出色,曾在國際基因工程生物機械競賽獲獎。我在此感謝學校對培養創新科技人才的努力,並寄願學校能繼續在校園營造創科氛圍,啓迪學生的創意潛能,爲香港培育高瞻遠矚,並同時具有國家觀念、香港情懷和國際視野的優秀人才。

最後,祝願保良局羅氏基金中學在堅實穩固的基礎上,承前啓後,繼往開來;亦祝各位同學能夠開拓 潛能,盡展所長,多謝各位。 保良局 羅氏基金中學 綜合大樓及演講廳 命名典禮 林潞主席 兼屬校總校監

献辭 Opec

> BY MR L LAM CHAIRMAN OF PO LEUNG KUK & PO LEUNG KUK SCHOOLS' SUPERVISORS COMMITTEE

PLK LAWS
FOUNDATION
COLLEGE
DEDICATION
CEREMONY OF
THE COMPLEX
AND LECTURE
THEATRE

我一直堅信,教育能夠帶來希望,能夠改變個人命運,因此我很重視與青年相關的工作,真心樂意能為下一代的教育略盡自己一分綿薄之力。

我是二零零九年加入保良局,至今屈指十三春秋,我秉持「施惠勿念,受恩莫忘,敝力而無憾」的座右銘來服務社群,其間旣有辛勞的汗水,也有喜悅的淚水。這次我以保良局主席兼屬校總校監的身份,對羅氏基金中學作出捐贈,身體力行參與羅氏基金中學的發展,實在別具意義。我以家父母以及祖母名義來作爲命名,眞誠感激他們對我的養育教誨,祖母年輕時爲人師表,對教育充滿熱誠,桃李滿天下,家父和家母亦一向熱心公益,虔誠回饋社會,我希望能夠將家人「惠澤社群、樂善好施」的情懷分享給羅氏基金中學的每一位師生。

新冠肺炎疫情持續超過兩年,疫症肆虐全球,世界對疫苗及藥物的需求日亟,益顯科研的重要性。羅氏基金中學創科及數理發展卓有成就,課程專業創新,鼓勵同學放眼世界,積極參與國際學術交流,在多項國際比賽中,取得優異成績,令人無比欣慰。我特別認同陳榮光校長鼓勵探索、力求卓越的教學理念,希望此次捐贈能夠爲學校添置更多先進的儀器設備,襄助同學們未來的研究實驗,不停探索,精進學養,爲社會貢獻聰明睿智,造福人類!

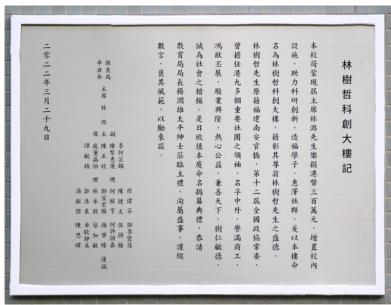
新冠疫情波及社會方方面面,衝擊之大、之廣、之深,堪稱前所未有,衷心祝願老師同學們能够身心 康泰,調節適應,迎難而上,篤行「愛、敬、勤、誠」的保良校訓,自強不息,繼續在新常態下努力 學習,日新其德,爭取更大進步!

I always believe that education can bring hope and change fate. Thus, I attach great importance to youth-related work and gladly devote myself to empowering the younger generations for the sake of giving back to the society.

Since I joined Po Leung Kuk in 2009, for the past 13 years, I have always adhered to my motto in charity work - "Never expect rewards when we give; never forget when we receive; never spare effort so as not to regret". During the course, there were both sweat and tears. As the Chairman of Po Leung Kuk & Po Leung Kuk Schools' Supervisors Committee, I made this donation to PLK Laws Foundation College to get actively involved in its development. This is of special significance because I can make a contribution on behalf of my parents and grandmother to express my deepest gratitude to them. My grandmother was a teacher when she was young. She was full of enthusiasm for education and her students are all over the world. Similarly, my father and mother have always been keen on public welfare and they graciously give back to the society with kindness. Therefore, I want to pass on my family's belief of "giving back to the community and devoting to charitable deeds" to all members of Laws Foundation College.

The Covid-19 pandemic has lasted for more than two years and has ravaged the world. The demand for vaccines and drugs in many countries has continued to increase, which highlights the importance of scientific research. Laws Foundation College has always made great achievements in innovation and science. Their curriculum is innovative and professional. The school also encourages its students to actively participate in international competitions and academic exchanges, widening their perspectives. Laws students have repeatedly achieved good results in many international competitions, which is truly encouraging. I very much agree with Principal CHAN Wing-kwong's teaching philosophy of inspiring exploration and striving for excellence. I hope this donation will support students' academic research in the future, and at the same time furnish the school with more advanced laboratory equipment, so students can continue to improve their studies, keep their exploration, and become outstanding talents of our society to benefit mankind!

This pandemic has brought unprecedented impact on every corner of the society. I sincerely wish the teachers and students to be healthy physically and mentally, to be able to adjust and adapt swiftly, as well as to face challenges bravely. Let's always bear in mind the Po Leung Kuk school motto of "Compassion, Respect, Diligence and Integrity" to improve ourselves unremittingly, so that we are able to study hard under the new normal, develop new virtues every day, and strive for greater progress!















Ever since our school opened in 2004, this Science and Innovation Complex has enabled our students to participate in seven international conferences of neuroscience and won important prizes in two of the top competitions in science namely the China Adolescents Science and Technology Innovation Contest and the International Genetically Engineered Machine (iGEM) competition. In addition, our school is developing a school-based Stem Cell Science curriculum for all S.1- S.3 students, which is the first in Hong Kong to enrich students' stem cell science knowledge.

LAM SHU CHIT SCIENCE AND INNOVATION COMPLEX



## 尖端設備 培育未來孩子

林樹哲科創大樓內設有全港首個中學的生物科技 實驗室。本校的校本生物科技課程應用尖端的設 備,讓學生不僅可以進行分子生物學實驗,包括 對 DNA、RNA 和蛋白質的研究,還可以研究與 各種細胞反應相關的基因表現。借助細胞培養設 施,學生還能夠培養腦細胞,以研究針對認知障 礙症和帕金遜症等疾病的新藥物。

本校自2004年創校以來,科創大樓優良的學習環境,促使我校學生參加了七次國際神經科學會議,並在中國靑少年科技創新大賽和國際遺傳工程機器設計競賽(iGEM)兩項頂級科學競賽中獲得了重要的獎項。此外,本校正爲全港中一至中三級學生開發嶄新的校本幹細胞科學課程,以豐富中學生的幹細胞科學知識。



林樹哲科創大樓

Naming of Lau Chan Siu Po Library of Po Leung Kuk Laws Foundation College



First-time Participation in Youth Conference of Caretakers of the Environment International in 2006, followed by 2009-2017 annually



Our Principal was appointed as an honorary fellow in Hong Kong Education Institute.



Grand Opening of Law Cheuk Ecology Laboratory



Dr. Suen Ka Chun, Ms. Lin Mei Yu and Mr. Li Man Ho were given the Chief Executive's Award for Teaching **Excellence 2016/2017.** 



Our research topic "A Novel Gout Therapeutic Approach" won the Gold Medal Award at iGEM 2019.



Grand Opening of Lam Shu Chit Science and Innovation Complex, So Siu Ling Complex, So Sau Lin Lecture Theatre cum Video **Conference Centre** 



2004 2006

2014

2016

2017 2019



The School Dedication Ceremony was officiated by Mr. Anthony S.K. Wong, J.P. Commissioner for Information and Technology, HKSAR Government.



Participation in the International Geography Olympiad on behalf of Hong Kong

First-time Participation in the Annual

Meeting of the Society for Neuroscience

in 2006, followed by 2008, 2010, 2013,

2015, 2017 and 2019



Hong Kong Green School Award -**Green Roof Project** 



Meeting with the Chief Executive in the Government House to explain our space science project



Grand Opening of DiagCor Biotechnology Laboratory



Grand Opening of Chu Lee Yuet Wah Academic Building



Science Laboratory funded by Quality **Education Fund** 



Our school was honored to receive Po Leung Kuk Outstanding School Award in 2011, 2013, 2017, 2018 and 2020.

# LFC News Archive

**Articles Published in Various** Local Newspapers about our Science and Innovation Programmes

「微重力狀態下雙擺運動的混沌性質」

質。原來他們設想過生物實驗方案難度會更高, 故一開始便由物理學着手,非常有策略性。同學們

更希望實驗成果可以裨益太空機械製造的發展。

同學們計劃於太空研究雙擺運動的混沌性

季軍:保良局羅氏基金中學 -



2022年3月29日

羅氏日報:保良局羅氏基金中學綜合大樓及演講廳命 名指款



2020年6月26日

經濟日報:羅氏特設生物科技科 培養未來科學尖子 突破考試框架



2016年10月19日

明報:羅氏學牛實驗隨神舟上太空



2020年6月26日

星島日報:家居消毒引發好奇心 羅氏初中生做實驗解 課團



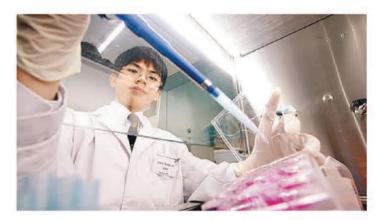
2020年1月4日

東方日報:新技術治痛風羅氏學生揚威國際



2015年12月18日

文匯報:羅氏推科研 設實驗室研細胞基因



2015年3月17日

太陽報:羅氏中學生研中藥抗腦癌



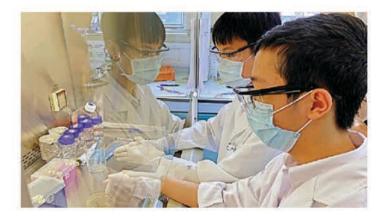
2018年3月28日

香港經濟日報:羅氏初中設生物科 8成畢業生入大



2020年6月26日

香港01:羅氏學生做實驗考究推翻漂白水用法

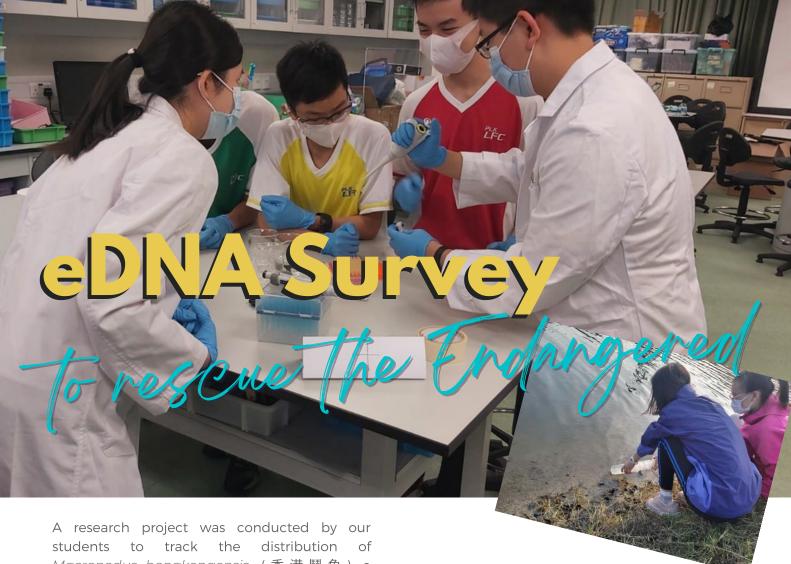


2020年6月26日

大公報:疫情變羅氏STEM探究題材



For more news updates, scan QR code



A research project was conducted by our students to track the distribution of *Macropodus hongkongensis*, (香港鬥魚), a threatened freshwater fish in Hong Kong. The fish is regarded as a Species of Conservation Concern under the AFCD's assessment.

Students extracted DNA in water samples and amplified the DNA using polymerase chain reaction (PCR). They analyzed the DNA sequence and mapped the distribution of *M. hongkongensis* in the New Territories.

The conventional way to monitor endangered species by manual observation is time consuming and labor-intensive. The novel approach of analysing DNA proposed by our students can be considered as the most convenient and effective method to examine the status of threatened species in Hong Kong by far and represents a promising possibility to be widely adopted in the future.

Our school also collaborated with Dr. Cheang Chi Chiu from the Education University of Hong Kong, an expert in the field of biotechnology and environmental science. Researchers from EdUHK held lectures and workshops to teach our students about DNA analysis. Students learnt basic knowledge and skills for doing DNA research.





Facilitated by advanced and sophisticated facilities in our school laboratories, our students are engaged to do scientific research and inquiry related to diseases and drug discovery on the campus.

In the past 17 years, the traditional Chinese Medicine and herbs published by our students in their studies included *Gentiana scabra* (龍膽), whole-seed extract of *Fortunella margarita* (金桔核提取物), *Dendrobium huoshanense* (霍山石斛), *Arisaema erubescens* (天南星), *Angelica dahurica* 



第三十届全国青少年科技创新大赛

#### 十佳青少年科技创意之星

兹发给十佳青少年科技创意之星获得者,以资鼓励.

香港特別行政区保良局羅氏基金中學 周柏臻、洪英展

全国青少年科技创新大赛首席荣誉科学顺问 第二件 被



主办单位: 中国科协、教育部、科技部、环境保护部、体育总局、共青团中央、全国妇联、自然科学基金委、香港特别行政区政府

(白芷), Alisma Orientalis (澤瀉), Caulis Spatholobi (雞血藤), Salvia officinalis (鼠尾草) and Mentha citrata (檸檬薄荷), Allium fistulosum (青蔥), Clitoria ternatea (蝶豆花), Hibiscus sabdariffa (洛神花) and Sterculia lychnophora (胖大海).

In 2015, our students were awarded three prestigious prizes in the 30th China Adolescents Science and Technology Innovation Contest (第三十屆全國青少年科技創新大賽).

The project was "The neuroprotective effects of the whole-seed extract of Fortunella margarita [金桔核提取物的腦神經保護作用]. The students of this project were awarded 十佳科技創意之星、青少年科技創意作品一等獎、香港賽馬會創新科技獎嘉許獎.

Our school was the only team from Hong Kong to receive 十佳科技創意之星. Other awarded projects came from 吉林省長春市十一高中、浙江省寧波大學、四川大學、吉林大學附屬中學、福建省廈門大學、江蘇省東海縣第二中學、北京景山學校、河北省香河縣第一中學、陝西省西安交通大學.



With strong passion and creativity in science discovery, our students studied space science and joined the Space Science Experiment Design Competition for Hong Kong Secondary School Students jointly organized by the Home Affairs Bureau of the Hong Kong Special Administrative Region Government and China Manned Space Agency in 2014.

The students initiated an innovative space project titled "Chaotic or Predictable? Oscillation of a Double Pendulum Under Weightlessness Condition".

They studied chaos and undertook detailed inquiry on the following formula in their project:

$$\Delta x(t) \approx \Delta x(t_0)(1 + \lambda t + \frac{(\lambda t)^2}{2!} + \frac{(\lambda t)^3}{3!} + \dots)$$

Under the guidance of Ms. HUANG Weifen, Deputy Chief Designer, Astronaut Center of China, the students finalized

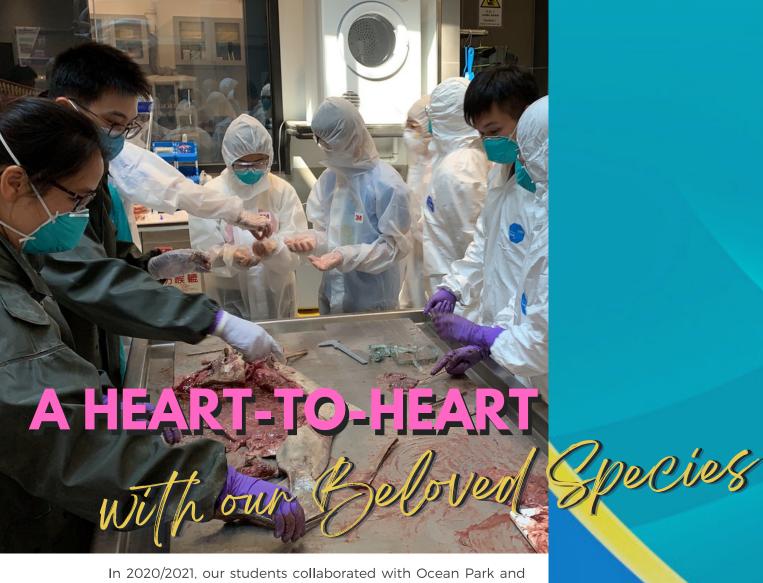
their experimental model for the space science competition.

Our students' space science project was awarded a prestigious prize and their research project was then carried onboard Tiangong-2 on 15 September 2016.

The students presented their project to Mr. Leung Chun-ying, the third Chief Executive of Hong Kong, in Government House on 2 October 2016.



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In 2020/2021, our students collaborated with Ocean Park and were invited to be job-shadow dolphin researchers where they assisted the dissections of stranded dolphins. Recently, with the support of Ocean Park and Agriculture, Fisheries and Conservation Department, our students were given the opportunity to articulate a set of Chinese White Dolphin skeleton. Not only does this once-in-a-lifetime experience anchor students' knowledge on the structure of this marine species, but it also encourages their inquiry into the significance of endangered species conservation.

Thanks to the considerable support from local institutes including City University of Hong Kong for the nursery of horseshoe crabs and Hong Kong University of Science and Technology for a study on campus air quality, our students were selected to present their research findings in various international conferences in Indonesia (2010), China (2011), Singapore (2011), Japan (2015), Denmark (2016) and Thailand (2017).

UNDERSTANDING THE ENVIRONMENT THROUGH FIRST-HAND EXPERIENCE



# Genetic Engineering Daves Way for Drug Research

chool of Life Sciences he Chinese University of Hong Kong

KIT WILL



The International General Tengineered Machine (iGEM) Engineered Machine (iGEM) competition is a worldwide synthetic biology competition originated from Massachusetts Institute of Technology in 2004.





professor Chan and our students were invited to professor Chan and our students were invited to the public on SCA3 to the public introduce the project on SCA3 to Adwiser.

Through a RTHK radio programme—Adwiser.

Our students volunteered in a workshop organised by Hong Kong Spinocerebellar Ataxia Association (HKSCAA) in Ho Chuen Yiu College.



One genuine belief all scientists hold is that science and technology is a cornerstone for a better world and our school is proud to have nurtured a group of youths who share the same vision. Besides striving for academic excellence, they are also eager to devote their time and effort on putting the scientific knowledge they acquire from textbooks into practice and, above all, contribute to society.

A lack of resources and medication availability for patients suffering from the rare disease of spinocerebellar ataxia is what stimulated our students to approach the disease. With the motivation in mind, our students participated in iGEM Competition for the first time in 2018, competing against over 3000 teams comprising hiah renowned overseas schools universities. The event is a worldwide synthetic biology competition aiming at promoting the open and transparent development tools for engineering biology to construct a society that can productively and safely apply biological technology. The objective of our research and investigation was to design a self-assembled DNA tweezer nanomachine to explore a new approach for the diagnosis of SCA3 based on the density of genes in blood in correlation to clinical case studies. This diagnostic approach is seen as a giant leap forward as it allows

doctors to have early intervention in the treatment of spinocerebellar ataxia and the efforts of our students were rewarded with a bronze medal in the competition.

Encouraged by the triumphal experience in iGEM 2018, our youths challenged themselves by pursuing another science inquiry into the area of uric acid and taking part in iGEM 2019. This time, the research focused on investigating the possibility of producing capsules to aid the decomposition and excretion of uric acid with the aim of maintaining a desirable level of uric acid in the human body. Having conducted numerous laboratory experiments, our student scientists drew the conclusion that the use of E.coli can synthesise a specific gene and hence produce a protein to reduce uric acid content in the body. With this impressive discovery, they brought home a gold medal in the competition which was comparable to the prize given to the University of Oxford and Massachusetts Institute of Technology in terms of the assessment criteria.

Holding on to the beliefs that curiosity is the lust of the mind and the pursuit of knowledge is never-ending, our students are ready for their next task - an investigation into a speedy test based on genetic engineering for plant pathology.

OUR STUDENTS WERE THRILLED KNOWING THAT THEIR HARD WORK PAID OFF - THEY WERE AWARDED THE GOLD MEDAL IN IGEM 2019



# 雪泥鴻爪

### 延續薪火相傳

如果從學生的角度去看蘇少玲禮堂, 禮堂是什麼? 是歡聲,是笑臉。 要記載的就是, 那些活動反映上述回憶? 如果從學校的角度去看禮堂, 禮堂是什麼? 是重要的歷史事件,是傳承,承先啓後; 是見證學生成長;是學校文化;

是實踐願景和使命。



蘇少玲樓



FOND MEMORIES

Through the eyes of the students, what role does So Siu Ling Hall play in their secondary school lives? It's the place that houses their laughter and joy-filled faces and fond memories of group activities that took place there.

Then in the eyes of our school, what is the significance of our school hall? It's the place which has witnessed our school develop and also where we pass on our collective memories to our future generations. The hall archives all our students' growth and development, achievement and unique culture. It's the place where our missions and visions transform from mere words to actions.





SO SIU LING COMPLEX



蘇秀蓮演講廳暨 視像會議中心

抽象的邏輯思辨,也可建基於持續的 實踐研究。演講廳提供了展示、研討 和交流的平台,讓學生在此演講、辯 論,以致展現各種學習的成果,相互 啓發,砥礪駢進。此外,通過視像會 議,學生曾與境外學校交流,覆蓋面 遍及各大洲和美國太空總署。

創意源自生活,始於想像。學生在實 驗劇場裏,由零開始,馳騁想像,發 揮創意,藉創作關懷自身,及於社 會。實驗劇場講究觀衆參與,重視體 驗性和隨意性。它也開拓了正規課堂 以外的學習形式,讓學生當上學習的 主人。





So Sau Lin Lecture Theatre cum Video Conference Centre plays a crucial role in the exchange of knowledge among learners. One often says the path to acquiring knowledge can be of various forms. It can be as tangible as practical experimenting but also as intangible as through debate and speech. Our lecture theatre provides the optimum platform for exhibiting, researching, and discussing findings and opinions. Through giving speeches and debates, our students are given opportunities to present their findings to their peers which in due time can be inspiration sparks for them to continue on their pursuit of knowledge. Aside from being the platform for students to learn from each other, the lecture hall is also a portal for our students to reach beyond and connect with international schools to undergo exchange. The span of international conferences spreads across continents and even continues to The National Aeronautics and Space Administration (NASA) in the U.S.

Creativity stems from connection with our daily life and develops from imagination. In our theatre, our students let their imagination roam free and start from scratch to create art which promotes self-love and also expresses their love to the society. The theatre places high importance on students' active participation, uniqueness, and the spontaneity of their experience. It also opens up a new mode of knowledge acquisition outside the boundaries of traditional education, enabling students to be the true masters of their learning.

SO SAU LIN LECTURE THEATRE CUM VIDEO CONFERENCE CENTRE



# Vote of Thinks

We would like to extend our heartfelt gratitude to our dear Chairman Lam and his family not only for their generous impetus to our school, but also their passion in education. Holding the same passion in educating our future generations, we are walking hand in hand to make our school a better place for our students to reach further and wider.

### 願景

幼有所育,少有所學,壯有所爲,老有所依, 貧寡孤困殘病者皆有所望

### 使命

成爲最傑出、最具承擔的慈善公益機構, 發揮保良精神,以善心建善業, 致力保赤安良,護老扶弱,助貧健診, 培德育才,揚康樂衆,實踐環保, 承傳文化,造福社群

### 價值觀

秉承傳統 與時並進

以人爲本 關愛感恩

優良管治 務實創新

廉潔奉公 安不忘危

善用資源 注重本益

專業團隊 愛心服務

## 保良精神

相互尊重 團結合力 延展愛心 行善助人 感恩知德

造福社群的奉獻精神

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#### The Kuk's Spirit

**Mutual Respect United Effort** Benevolence Charitable Gratefulness and Recognition Dedication to Serving the Community



### PO LEUNG KUK LAWS FOUNDATION COLLEGE 保良局羅氏基金中學

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