

SHAPING OUR FUTURE: How Math Award Winners are Revolutionizing the World for a Better Tomorrow

Once upon a time, in a world where numbers rule and equations solve the world's greatest problems, a research-based competition called Hang Lung Mathematics Awards (HLMA) was founded. This biennial event, dedicated to recognizing the significance of mathematics, showcases the brilliance of Hong Kong secondary school students and their potential to shape the future.

Since its inception in 2004, HLMA has provided a platform for young minds to explore the wonders of mathematics and the sciences. More than just a competition, it was a journey of self-discovery, challenging students to develop their own research questions and embark on a year-long quest for knowledge and answers.



The stories of HLMA winners over the past 20 years speak of determination, innovation, and the power of mathematics to revolutionize the world. Take the case of Dr. Kero Lau, a Bronze Award winner in 2004. He is now an Assistant Professor at Simon Fraser University in Canada, focusing on theoretical quantum optics and quantum information research. Dr. Lau believes that research is not a solitary pursuit; rather, it is about collaboration and effective communication. "A responsible researcher cannot work alone merely to satisfy his or her curiosity," he emphasizes. "Communicating the results effectively and raising the interests of others are just as important too."



Then there is Dr. Yin-tat Lee, who secured the Silver Award in 2008. Driven by his love for mathematics, he pursued his doctorate at the prestigious Massachusetts Institute of Technology. Today, he is an Associate Professor at the School of Computer Science and Engineering at the University of Washington. His work in optimization problems, rooted in mathematical principles, has the potential to impact future research aimed at improving people's lives.



The transformative power of HLMA extends far beyond academia. Mr. Toby Ng and Mr. Darren Wan, both members of the S.K.H. Tsang Shiu Tim Secondary School team that won the Bronze Award in 2008, exemplify this point. Toby is the Vice President of CIB Equity Technology at J.P. Morgan, while Darren is an insurance actuary at AIA. They credit their participation in HLMA for reinforcing their mathematical skills and mindset, ultimately propelling them towards successful career paths.



Collaboration and inspiration abound within the HLMA community. Dr. Jun-hou Fung, another 2008 HLMA winner, earned his PhD from Harvard University and currently works at Columbia University, conducting genomics-related research. He believes that HLMA provides secondary students with a unique opportunity to collaborate, exchange ideas, and fight towards a common goal. According to him, deriving inspiration from their peers is a powerful motivation that propels innovation.



Dr. Brian Chung, the Silver Award winner in 2010, was a postdoctoral research fellow at the esteemed Einstein Institute of Mathematics. Now working in the finance industry, he attributes his passion for mathematics to his experience with HLMA. It set him on a profound academic journey, leading him to discover new horizons.



Mr. Anson Chung, who also won in 2010, has chosen to ignite the minds of future generations as a secondary school mathematics teacher. He encourages his students to persevere and approach problems from different perspectives, emphasizing the importance of teamwork and collaboration in finding innovative solutions.



Ms. Ewina Pun, the Bronze Award winner in 2012, epitomizes the transformative potential of HLMA. Currently a PhD student at Brown University, her research focuses on developing a chip that can be implanted into the brains of paralyzed patients. This remarkable device allows computers to decode brain signals, translating them into movement. Ewina's work has the potential to revolutionize the lives of countless individuals, offering hope and a chance at a better future.



How does new technologies and mathematics relate? Mr. Alan Fong, who won the Gold Award in 2014, believes that technology and mathematics are inseparable entities. Citing cryptocurrencies as an example, he emphasizes the need for perseverance and meticulousness in research. He affirms that success is not achieved in a single stroke but through dedication, determination, and attention to detail.



Ms. Dorothy Cheng, the Bronze Award winner in 2016, serves as an inspiration to current and future participants. She is now a PhD fellow at the European Molecular Biology Laboratory in Heidelberg, Germany. Dorothy advises HLMA participants to focus on doing what they love and to embrace the challenges. Overcoming obstacles and successfully solving self-established problems, she assures them, brings endless joy and fulfillment.



Hang Lung Mathematics Awards continues to inspire and empower young minds to unleash their creativity and pave the way for a better future. It is important to remember that solutions to many challenges we face can be found through the

power of mathematics and the ingenuity of young minds. By nurturing a passion for mathematics and encouraging collaboration and innovation, HLMA is shaping future leaders who can change the world for the better.