

## Feature: Interview with Dr Jason Yam

Dr Jason Cheuk-sing Yam is an Associate Professor at the Department of Ophthalmology & Visual Sciences, Chinese University of Hong Kong. Dr Yam is also a young Fellow of the Academy and a member of the newly elected Young Fellows Chapter Governing Council, and for this issue of **academyfocus**, we interviewed him about his work.



Among his many awards and achievements, including the Gold Prize of the Academy's first Best Original Research by Young Fellows Award, Dr Yam was most recently selected for the 2019 Ten Outstanding Young Person Hong Kong, for eligible persons from 21 years to 40 years of age. The award is organised by the Junior Chamber International Hong Kong, and is now in its 50th year. The award is based on two main criteria, and nominees are expected not only to be very outstanding in terms of your professional development and achievements, but also to have made significant impact or contribution to society.

*"I'm truly honoured to get this award."*

Dr Yam says he found the interview and selection process very humbling, because it requires the applicant to look back on their entire 10- or 20-year career, and present themselves to explain how they accomplished their achievements. The process includes two stages. The first step is carried out by an auditing firm that screens nominees through an interview and thorough background research to verify that all nominees meet the basic two criteria. For shortlisted candidates, the second step is an interview with a panel of judges that includes senior professionals and previous awardees of the Ten Outstanding Young Person.

In the case of Dr Yam, the professional achievement requirement was fulfilled by the work of his team working on low-dose atropine for myopia progression (LAMP) in children, and he feels very grateful to be able to represent that group. For the contribution to society, Dr Yam does outstanding work providing eyecare on a large scale to children in the Hong Kong community. Dr Yam reiterates that the award is not only his personal achievement but, more importantly, recognition for the work that the whole team has been doing in the past 6 years. He also feels that this award is an excellent platform to promote awareness in the community, and to connect people to work collectively for the benefit of children and children's eyecare in the Hong Kong society.

The LAMP study, now in its 5th year, was the first placebo-controlled randomised controlled trial on using low-concentration atropine to reduce myopia progression. "The study had several important findings," explained Dr Yam. "Firstly, we established that low-concentration atropine works for myopia control, reducing myopia progression by up to 67%. Secondly, we found the optimal concentration of 0.05% atropine that achieves the best balance between adverse drug effects and efficacy." These results are not only important in Hong Kong; this is one of the most important studies on the use of low-concentration atropine and the most effective dose, leading to changes in the management of myopia worldwide.

Dr Yam is confident that myopia can be not only controlled, but also prevented in future, and this is the focus of the LAMP 2 study. In addition to medical interventions, Dr Yam also points out that education is important. Children spending two hours or more outdoors each day can help prevent myopia, and it is important to work with schools to improve children's lifestyle, and sustainably improve not only their eyecare, but also their whole healthcare.

*"The vision of every child is a basic right. They should be able to see."*

Unfortunately, for children from lower-income families, because of lower parental awareness or affordability, eyecare may be less than optimal, leading to delayed diagnosis of eye diseases and poorer vision. During the first 8 years, children's vision is still developing. If abnormalities are not detected early during this critical window, children can develop lazy eye or other permanent damage to the visual system. On the other hand, abnormalities detected earlier may be treatable and restore 100% of the child's vision. It is very important to invest in children's eyecare, because it can impact their lives for the rest of their lifetime. Children that do not have good enough vision may also not develop well, in terms of their academic achievement. Dr Yam, coming from a "grassroots and not well off background", has witnessed this first-hand. "I have this passion and conviction," he says, "that every child should have an equal opportunity to see."

Starting the Hong Kong Children Eye Care Programme at the clinic on the 3rd floor of the Hong Kong Eye Hospital was not without difficulties. Inviting children to the clinic during weekdays was difficult because children need to go to school, and conducting examinations at schools was also not optimal because of the difficulty with some procedures and the lack of equipment. Thus, with help from the Department of Ophthalmology and Visual Sciences, the Programme was launched on a Saturday, 7 March 2015, a day that Dr Yam will never forget. 100 children and their families were invited to the clinic. Because there were not many resources available at first, the Programme relied on support from volunteers.

In 2018, after helping around 5000 children, and thanks to a generous donation from the Hong Kong Jockey Club, the Programme was expanded to also operate on Sundays. At the newly renamed CUHK Jockey Club Hong Kong Children Eye Care Programme, now 200 children are invited to receive thorough eye examinations, including where necessary pupil dilation, imaging and scans, and check for strabismus. The HKJC funding also allows the provision of spectacles up to HK\$1500 for free to children from low-income families.

The Programme could not succeed without the kind support of volunteers. Dr Yam says he feels very privileged to because eye doctors in Hong Kong are very passionate and willing to serve; from about 300 eye doctors in Hong Kong, more than 120 have assisted with the Programme over the years, sacrificing family time to help. In addition, 500 medical students and 200 nursing students from the universities and about 2000 secondary school students have come to help out. Various other members of the community have also contacted the team to volunteer, helping out looking after and entertaining the waiting children, or assisting the doctors with various tasks and simple examinations. Dr Yam finds the whole community spirit quite touching, with younger doctors learning from more senior doctors, medical students learning from doctors. In turn, the medical students inspire high school students, who are also helping the primary school students. He finds great reward and pride in providing the Programme that brings these different generations together to serve the underprivileged children.

The Programme has now served about 20,000 children, not to mention their families, over the past 5 years. In addition, around 200 health talks have been given, to increase awareness of children's eyecare among teachers, social worker, and parents.

In addition to these projects, Dr Yam feels privileged to work with the Hong Kong Eye Hospital, in collaboration with the Children's Cancer Foundation and the Department of Health, to promote awareness of retinoblastoma (children's eye cancer) among parents. If retinoblastoma is not caught early, it can lead to loss of vision, loss of the eye, or even death. This city-wide children's eye cancer awareness campaign aims to promote awareness of leukocoria (unusual, usually white, appearance of the retina through the pupil), which is often an early sign if the disease. The campaign targets maternal care centres in Hong Kong, and parents are advised to go to the doctor early if they see signs of leukocoria, to save their child's life, eyes, and vision.

*"Corrective treatment for myopia does not reduce risk factors for more serious complications; myopia control at an early age can."*

Dr Yam's motivation to become a doctor stems from his high school days, reading about early British missionaries to mainland China who aimed to bring not only religion, but also Western medicine to the Chinese population. This inspired Dr Yam to serve as a doctor, to change the lives and save the lives and improve healthcare for the public. Later, in his second year of medical school, Dr Yam read about Dr Nim-chung Chan (<https://www.hkmj.org/system/files/hkm1208p354.pdf>), an ophthalmologist who volunteered in Afghanistan. This further inspired him because of the portability he perceived in ophthalmology – the ability to take this care to the people who need it most, with the most impact. An early experience of a 6-year-old boy with incurable cone dystrophy highlighted the limitations of doctors for Dr Yam, and this eventually led him to research, teaching, and children's eye care in particular. "Adults with severe myopia over 6 diopters are at higher risk for various sight-threatening conditions, such as glaucoma and macular degeneration," says Dr Yam. "These days you can

get corrective treatment such as laser refractive surgery for myopia. You do not need to wear spectacles, but the risk for more serious complications will never change. Children's eye care is not only for children, it is for their whole life. I hope that my team and I can contribute to this global issue."

*"I am just a representative of the team, and I could not have achieved so much alone."*

In addition to the Ten Outstanding Young Person Award, Dr Yam is humble to have been awarded several other local and international awards. Locally, he was the gold winner of the Academy's first Best Original Research by young Fellows award in 2019, and also the winner of the College of Ophthalmologists of Hong Kong's first Distinguished Young Fellow in 2013. Internationally, he received the Asia-Pacific Academy of Ophthalmology (APAO) Nakajima Award, awarded every 2 years to recognise an individual's outstanding accomplishments – the first time the award has gone to work on paediatric ophthalmology, underscoring the growing recognition of importance of children's eye care. Proudly representing Hong Kong, Dr Yam has also been awarded the APAO Prevention of Blindness Award and the APAO Distinguished Service Award in recognition of contributions to Hong Kong and the wider region.

"These awards are important recognition and encouragement not only for myself but for the whole team," emphasises Dr Yam, "I am just a representative of the team, and I could not have achieved so much alone." He goes on to say he feels particularly fortunate and thankful for the support from his family. His wife has unconditionally supported his pursuit of their shared dream to work for the benefit of children. He is also very grateful to his co-worker, Ms Mandy Ng, nurse manager of his department, to support all these works since the beginning. He is deeply indebted to four individuals he considers his mentors: Dr Simon Ko, his first boss in Tung Wah Eastern Hospital, who inspired him to serve in children's eye care; Professor Calvin Pang, immediate past chair of his department, and Professor Clement Tham, current chair of his department, both of whom guided him into academia and inspired and encouraged him to think and to dream big and to work for Hong Kong and the whole Asia Pacific region; and Professor Dennis Lam, a former chair of his department who laid many foundations in the department that current work builds on, as well as providing further support and encouragement.

Because he does not have a lot of time to spend with them, enjoying quality family time with his wife and two kids is important for Dr Yam. He also enjoys long-distance running alone, as a time to reflect and review, as well as to refresh himself. "It is also a time to build perseverance and resilience," says Dr Yam. "Running faster or for a longer time and pushing your limit I think can be very helpful to me."

*"Always follow your passion"*

Through teaching at the Chinese University of Hong Kong, and his other community programmes, Dr Yam often works with younger aspiring or trainee doctors. He understands the importance of job prospects, but urges students to consider not only current, but also future prospects. He advises young people to follow their passion and the specialty or branch of medicine that interests them most. "Of course, just like prospects, your interests may change over time," he explains. "But if you always follow your passion, you will never regret it." He points out that many young people aspiring to become doctors may not know much about the different opportunities, and may not have developed a passion, and that is fine: there are plenty of opportunities for junior doctors to get broad exposure and find their passion. Becoming a doctor is not just a job or way to make a living for Dr Yam. "I think that people choose to become doctors," he says, "to serve the community, to make an impact or change, or to improve the healthcare of the people."

*"It is extremely joyful when all your hard work pays off."*

Recalling his very first publication in a journal, from when he was still a medical student, Dr Yam explains the sense of achievement and reward: "It was like having a baby. Because you have done a lot of hard work for many months and finally it's published and you can see your name in PubMed. It is extremely joyful when all your hard work pays off."

Dr Yam always encourages his trainees and students, even though they are clinicians, to do a little academic work, because research and publications are important. The teamwork, the recognition, and of course the improvements in healthcare resulting from the work are all incredibly rewarding and worthy. He also notes that these days publication is an integral part of the development of trainee doctors.

In terms of publication, Dr Yam says that the choosing a journal that is most relevant for your target audience is the most important factor – more so than the prestige or impact of the Journal. For studies that have implications for the local population or important updates for local doctors, choosing a local journal such as the *Hong Kong Medical Journal* is more appropriate, so that your work will reach the correct audience.