

# Covid, the Curriculum and Christopher

**Dr. Christopher Hui, Rutherford, Class of 1994, is a specialist in Respiratory & Critical Care Medicine. He was awarded an MBE by the Queen in 2021 for Services to Health, and for his role as a leading Covid-Task Force advisor during the first and second peaks of the Covid-pandemic in early 2020. During our conversation Christopher referenced the core skills at the heart of Island School's curriculum: creativity, communication, critical-thinking, problem-solving and collaboration.**

## Christopher Hui

### Collaboration

"In 2013, I was offered a very interesting opportunity as the Chief of Service for Respiratory Medicine at the new HKU Hospital in Shenzhen. It was a bold move, and as a young consultant physician, I was given the task of building-out the new hospital and taking medical reforms from zero-to-one with a capital budget of over 3.8 billion RMB in Phase I. It [the project] included: infrastructure, hardware, clinical software, and all standard operating procedures."

"Later, in January 2020, I was head of department, when we found ourselves confronted with what was to become one of the largest Covid epicentres outside of the Hubei Province."

"We rapidly realised that this was a series of seminal events. In those early days, from 10-20 January, we worked non-stop, around the clock, and without sleep. We collected all the samples, data, and clinical details from the earliest Covid- patients arriving at our hospital. We cultured and sent everything for testing! We were in a unique position to be the first group in the world to reference this against our extensive library of SARS viruses at HKU Virology."

"Many people don't know this but Covid is actually labelled, HKU-Shenzhen 001 to 007c (or 2019-nCoV HKU-SZ-001 2020 to 007c 2020). This was because of our early research! We became the first in the world to prove the full genealogy of the virus, as well as the human-to-human transmission. And after many late night phone calls we were the first to be published in the international journal, The Lancet. This was largely possible because of our close collaborative efforts with the Editor-in-Chief, Dr. Richard Horton who was an ex-colleague, friend and mentor of mine while at the Royal Free Hospital in London."

### Creativity

"On 16 March 2020, I got a series of calls from the Ministry for Public Health and NHS England. I was invited to pack my bags and go to the airport. At that time Italy, Spain and the U.K. were facing the first wave of [Covid] cases. As I landed in London the first series of international lockdowns began."

"I ended up working at some of the key centres in London, which were tracking points for the various local Covid Task Forces."

**You are encouraged to think you can do it or you should try and do it. I got that from school and I think that is something worth investing in.**

"I was involved with large projects such as the Nightingale Hospital in East London (a temporary hospitals set up during the COVID-19 pandemic). We upgraded critical oxygen supply systems from the 1970's for use with our ICUs and ventilators." "At the beginning of the pandemic we could not obtain reliable supplies of personal protective equipment (PPE), so we had to be creative. Our office staff helped the doctors to make face shields. We used standard foam strips from packing boxes, and cut apart clear-plastic folders and added an elastic band around the top. Whilst these were not perfect, we had to find solutions to immediate problems."

"We also found ways to use resources more efficiently as we foresaw some of the problems coming. For example, we found better ways to administer oxygen efficiently with venturi flow- valves so we never had a shortage of this life-saving gas."

### Communications

"Some of my morning calls were with Downing Street. I would be speaking with the Chief Medical Officer, Professor Chris Whitty, and the UK government's Chief Scientific Adviser, Sir Patrick Vallance. If our call was scheduled for 7:00am, then I would see them on the BBC at 8:00am!" "During the second and third rounds of Covid-infection, we found that our teams within the hospitals were much better organised, and always extremely dedicated to what they were doing. I was highly impressed with our group of young doctors and nurses. They really bore so much. And of course we became much better organised over time."

"The ability for the entire team to communicate effectively at our daily morning Sit-Rep reports was one of the things that impressed me most. Everyone would listen, take turns, and provide only the most efficiently curated and on-point information every morning. We were all on exactly the same wavelength, and I felt this was very important to our overall effectiveness as a team."

### Critical Thinking

Life often occurs by happenstance, or serendipity. One cannot plan to be in the right place at the right time (or, the wrong place at the wrong time)! But this is where I found myself at the beginning of 2020. I was one of the very few local clinicians at HKU operating at a senior level, with my own division, collecting data in China at the time."

"Our network of international collaboration was absolutely critical. One person cannot achieve much by themselves. But by the time I landed in London, we had organised into strong teams, with around 200 doctors to work with us at all different levels. We got into a very well-rehearsed organisation-wide 'grid'. We tasked people directly to lead on key 'pillars' such as HR and Management, Staffing Rotas, Education & Training, Governance, Infrastructure, Operations, Comms, IT and Staff Well-Being etc. We had teams for literally everything!"

### Problem Solving

"Different parts of the world have all taken different approaches to social-distancing, inter-personal hygiene and lockdowns to control the pandemic. Initially, when we were still tracking and tracing cases of the virus in Hong Kong and Mainland China, it was variously called: draconian, unfair, even a civil infringement, and lots of other things. But in reality, it was the only method that we had to immediately protect a very dense and vulnerable local population." "Hong Kong is not like most other places. If you drop Covid into a densely populated area like Mong Kok or Sham Shui Po where people live shoulder-to-shoulder, one needs to understand that it is almost exactly like going into a room with an incendiary device. It just 'blows up' and everyone is at risk of becoming infected. So block-by-block, buildings were closed down for public testing, health and security. infected. So block-by-block, buildings were closed down for

public testing, health and security. If you close people off for 14-days in quarantine, you need to supply them with food, water and waste management etc. Everything needs to be taken care of, and this is where strong social-contracts, trust and governance structures are required." "I understand lockdowns are very difficult but many of us still feel it was necessary at the time to provide early security for everyone in the face of a highly-transmissible vector. If it spreads rapidly from one population to the next, then as doctors we are only 'playing catch up'. There is basically nothing else we can do to control the spread of infection once we continue to feed the fire."

### Island School

"At school I was happy to stay out of the limelight. We all develop at different stages -- I was just happy to get on with my work and studies. I remember ending my school days quite happy that I got a great education, with a lot of pastoral-learning and support that went along with good grades."

"There is a strong culture of positivity and learning embedded in Island School that I like. You are encouraged to think "you can do it" or "you should try to learn and do it for yourself." I got that from school, and I think that is something worth investing in. Since I became a doctor there have been times when I needed to 'step forward' -- such as when I took my post in Shenzhen. Many said it was a brave move. I am always glad I had the opportunity to step forward when others may have con-sidered stepping back."