In 2019 I attempted to summit Mt Kilimanjaro. During this attempt, I came close to losing my life due to the rapid onset of a particularly serious form of high-altitude illness – High Altitude Pulmonary Edema (HAPE). I subsequently spent time researching various forms of high-altitude illnesses and found that not many climbers return to altitude after suffering from HAPE. With the help of the expedition fund, I wanted to repeat my trip with an alternative approach to climbing that included additional medication and extensive simulated altitude training to assess the impact on my response to the mountain.

The summit of Mt Kilimanjaro stands at 5,895m. Altitude can be divided into high (1,500-3,500m), very high (3,500-5,500m) and extreme (>5,500m) so returning to 5,895m posed some risk given the research suggests that the chance of HAPE recurrence can be as high as 60% in those who have a previous diagnosis. This risk increases as the height increases. My ascent of Kilimanjaro was due to be faster than the recommended 500m per day as we were ascending >1,000m on summit night.

The extensive preparation for this trip began three weeks before I started climbing. I committed to 50+ hours in a simulated altitude chamber at The Altitude Centre in London. Here I was put through my paces up to heights of 6,200m to trigger physiological adaptations in my body that would reduce my risk of developing HAPE. These include an increase in the number of red blood cells and an increased uptake of oxygen by muscles. High-altitude illnesses are triggered by a reduction in the partial pressure of oxygen as you ascend. By replicating these conditions at the relative safety of sea level, you can prime the body to have an improved response once on the mountain.

Having done as much UK training as possible, I arrived in Tanzania to meet the 14 other trekkers on my trip and the team of 60 local guides and porters that would make our climb possible. The relationships formed on the mountain go a long way to contribute to morale – crucial for pushing through the toughest of summits.
The initial few days of climbing are focused on grunt work – long days (sometimes over 11 hours) of walking to reach some significant altitude and begin the acclimatisation process. Days 1-2 involve an increase in altitude of 1,600m (from 2,100m to 3,800m) and while this exceeds the recommended 500m/day increase, the relatively low altitude means that none of our group experienced any symptoms of altitude sickness. The change in landscape is rapid and breathtaking. Starting in the jungle/mountain forest which is filled with dense vegetation, moss, and monkeys, it quickly changes to moorland with towering heathers and only insects and birds for company.

Day 3 involves a tough ascent to 4,600m in just a few hours to act as an acclimatisation assault on your body, triggering many of the physiological responses that I had trained for back in the UK. This is where I started to notice the training pay off. By this point during my first attempt, I was nauseous to the point where I couldn’t contemplate any meals while the second time around, I found I was symptom-free and full of energy and excitement at this height! At 4,600m, the climate is classed as alpine desert and it really shows. Only the hardiest of shrubs survive this high along with the ravens who feast on the scraps left by climbers. It’s a barren landscape and yet, as you climb above the clouds, it provides a stunning (if eerie) backdrop to the relentless hours of walking. Most climbing guidelines recommend a climb high, sleep low approach to improve acclimatisation. This was the tactic we used to some extent most days but day 3 was the extreme. Having reached 4,600m, we descended to 3,900m overnight to give our bodies the best chance of recovery.

Day 4 involves a small altitude gain to 3,995m and followed by a last big push to 4,900m on day 5 in preparation for the summit attempt. I was again pleasantly surprised by my ability to adapt to these altitudes. Throughout the trip I had been monitoring my oxygen saturation, heart rate and (with the help of the team doctor) my lung sounds. On my initial trip, all of these presented significant problems at the higher altitudes but this time around, they exceeded all expectations, and I remained safe to continue climbing.

At 23:30 on day 5, we set off for the summit. By this point I was wearing all the clothes I’d packed on the trip and had never experienced such penetrating cold as I did
that night! We hiked through the night to reach Stella Point at 5,756m. This is the initial marker for the start of the summit, and it leads to around to Uhuru Peak at 5,895m – I reached the peak at 06:30 on day 6 as the sun came up.

By this point, a lot of the group was experiencing significant effects of being at such altitude – the symptoms included insomnia, headaches, and nausea. I experienced all of these on my first trip but, yet again, my prior training in the UK had kept all of these at bay.

The best treatment for any form of altitude sickness is to rapidly descend. This is adopted as the descent profile of most trips and so, having taken 5.5 days to summit, we reached the end point of our trek in just 1.5 days with 100% of participants in our group reaching the peak.

This trip was incredibly important to me for two reasons. Having not reached the summit in 2019, returning to finish the climb was high on my priorities so that I could tick it off my bucket list! Additionally, the limited research on returning to altitude following HAPE meant that my decision to return could help future climbers who may be required to reach high altitude for work. I would like to thank QMUL for helping me achieve both goals!