## **COVID 19 Series: Sweden makes our blood (research)** turn cold

simplyblood.org/2020/05/covid-19-series-sweden-makes-our-blood.html

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In just a few weeks, the Covid-19 situation has tremendously changed people's lives, shaking up our habits and redefining priorities. From the typical hectic rhythm of research life, measures to confront the pandemic has drastically transformed our working routine. In a time where confinement is erected as the best and only shield against the virus, Sweden stands out by its particular management of the crisis situation.

Our lab, the Cell, Tissue and Organ engineering laboratory is located in Lund, in the southern part of Sweden. Lund is a vibrant university town -the second largest in the country, and a particular hub regarding hematopoietic and neuroscience research. Here, we study

how human bones form, function and repair upon trauma. We develop new in vitro and in vivo tools providing advanced models of human bones, towards deciphering their incredible regenerative capacity, but also understanding how they orchestrate the formation of new blood cells.

Of course, like any other lab, our activities have been impacted by the latest pandemic development. However, unlike any other country, Sweden has decided not to impose a strict confinement of the population. The unicity of this policy has been the subject of vivid criticisms, neighboring countries pointing out the hazardous nature of Swedish actions -or rather "inactions"- due to the lack of measures taken by the Swedish government. This is oversimplifying the situation, since Sweden has set a certain number of restrictions, but largely relying on people self-responsibility to apply them. In short, beyond recommended good hygiene practices, everyone is urged to stay at home if demonstrating any symptoms, social distancing is promoted, outland travels banned, inland travels strictly limited, work from home encouraged and visits to elderly people or to hospitals prohibited.

At the university level, teaching activities are now exclusively dispensed online. Seminars, meetings or even graduations are performed remotely. Only the research activities are not completely shut down. Here, each principal investigator defines the degree of practical work to preserve, in consideration of associated risks. As a consequence, some labs are pretty much closed while others have reduced their activities but maintaining essential aspects (e.g. mouse colonies, primary samples analysis). Home-office is encouraged and followed by a substantial number of people. As such, despite the palpable tension, paradoxically the research environment has never sounded as peaceful as now.

The internationality of the research environment drives us comparing our situation here in Sweden with those in other countries. Many employees are originated from China, Italy, Spain, France or the US, all severely affected by the epidemy. As such, whether Sweden is taking the right path is a constant point of discussion. We often perceive it as a dangerous bet, but Swedish citizens seems to largely approve and trust their government decisions. It is true that from the very beginning, Swedish decisions are taken in accordance with a panel of experts, and with full consideration on the social-demographic specificities of Sweden. In that regards, it was rather understandable at first that Sweden does not necessarily copy/paste the strategies adopted by the early-exposed countries. Now, the relative unicity of Sweden also brings an additional degree of uncertainty on how the situation may evolve here. Available predictions and models cannot match with the path Sweden has taken: will our situation get worst? Better? For how long and under what circumstances? Only time will tell. The latest development seems to indicate that Finland, Norway or Denmark better controlled the virus propagation than Sweden, and their daily number of deaths is much lower. On the long run, who knows what would come of it?

To finish on a more positive note, we are all hoping -perhaps very naively- that this crisis may reset the priorities in terms of public expenses. It is obvious to me that research and the healthcare system may be placed back at the forefront, and the Covid-19 crisis may thus be a wake-up call. It is perhaps an essential and inevitable one, considering the already identified challenge to come: the climate change. Fingers crossed!



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