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**Milano Ventilatore Meccanico, <https://mvm.care>**

Easter Sunday, 12 Aprile 2020

Cristiano Galbiati, [cris@mvm.care](mailto:cris@mvm.care)

Dear Friends,

Notwithstanding the unexpected circumstances, this is an Easter we will not forget.

I gathered tens of researchers and medical personnel in a non-profit collaboration to develop the “Mechanical Ventilator Milano”, the first of its kind specifically developed for COVID-19 patients. In a very brief span, we developed a ventilator built from few pieces available in large quantities, so that it can be replicated shortly in tens of thousands of units. The design is completely “open source”, cannot be patented, is available on our website, and can be built anywhere by anyone with the necessary know-how.

Thanks to the big heart and generosity of a Lombard entrepreneur, Gabriele Cogliati of Elemaster, Lomagna (LC), we have already built ten machines: two already under advanced testing in Lomagna and at the Monza San Gerardo Hospital in Monza; three on their way to test centers in Canada and in USA; another five soon to be shipped to test centers in Italy, France, and Spain. Thanks to the active support of the US Air Force, we are making progress towards obtaining the most rigorous certification in the international field, the EUA (Emergency Use Authorization) from the U.S. FDA.

We are not alone. Though the project was born in Milan and exploits a production chain based in Lombardy, the speed of execution was made possible by the help of dozens of researchers from the largest Physics Laboratories and the Universities of Italy, Canada, United States, France, Spain, United Kingdom, Poland, and Germany: all at work, night and day, side by side, connected via internet.

Today we celebrate the Holy Easter by going back to work. This afternoon we will assemble the first unit of the serial production: the simplified design will allow the construction of dozens of machines per day starting from Tuesday, if in the meantime we will also find the private funds necessary to start production.

The solidarity, economic and financial, that was denied from the Northern European countries at the moment of direst need, has instead reappeared in its best glory in technological and scientific international cooperation, thanks to the MVM researchers from friendly Countries. We will not forget any of this. Yet, this is not the time for budgets. Now it is the time to show the true heart and characters of the Italians, Lombards, and citizens from all friendly Countries alike: we are different. That same solidarity we were denied, we will give it all out with an open hearth to those desperately in need of our help at this time.

We need your help! Help us to raise thirty million euros, necessary to produce the first ten thousand machines for our hospitals and for those in Ecuador, Bolivia, and other developing countries at the centre of the epidemic.

Cristiano Galbiati  
Founder and Spokesperson, the MVM Collaboration

## Milano Ventilatore Meccanico



**Figure 1:** the five MVM prototype units built on Easter Vigil, April 11, 2020, at Elemaster in Lomagna (LC), Italy. From left to right: Luca Parmeggiano, Sergio Parmeggiano, and Luca Viviani. Photo by Gualtiero Magni.

Press kit (Italian, English, French, Spanish) and pictures:

<http://mvm.care/press-kit-en/>

Videos:

<https://tinyurl.com/rna369g>

Media coverage:

<http://mvm.care/on-the-media-en/>

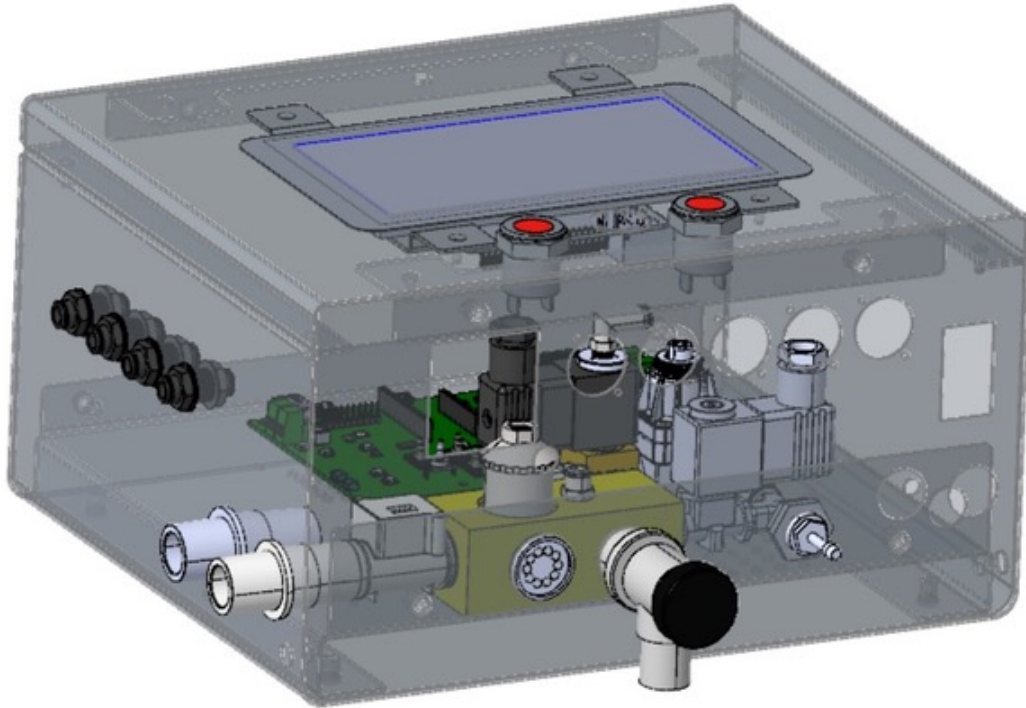
Direct funding via IBAN:

<http://mvm.care/support-us-en/>

GoFundMe campaign:

<https://www.gofundme.com/f/emmeviemme>

## Milano Ventilatore Meccanico



**Figure 2:** 3D rendering of the MVM serial production unit.



**Figure 3:** the first MVM serial production unit, in a temporary 3D printed polymer case, built at Elemaster on Easter Sunday, April 12, 2020. From left to right, the unit interior, the unit near completion, and the completed unit in operation.