## **Carsten Mahrenholz**



Wound care is one of those issues that is easily overlooked, with the grim consequences making it tempting to turn the other cheek. It's estimated, however, that over 2 million people currently live with a chronic wound in Europe, with around 350 000 of those wounds remaining unresolved after a year or more.

EIT Audience Award winner Carsten Mahrenholz believes it's a problem that demands more attention, and the cold plasma technology developed by his startup, ColdPlasmatech, is creating waves around the world.

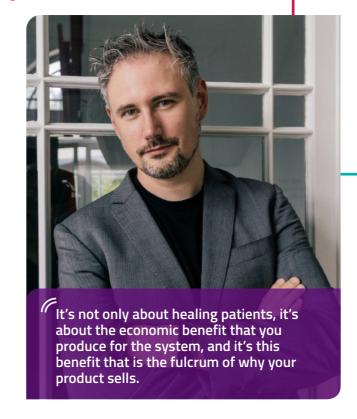
Mahrenholz says that despite the medicinal use of cold plasma being a bedrock of science fiction dramas such as Star Trek, the inspiration for ColdPlasmatech came very much from the market, and from people with an intense demand for better wound care technologies.

'We started talking to stakeholders, nurses, physicians and people who have buying power in healthcare, and they basically told us what we should do, and we listened,' he says.

## Providing economic benefits

While there are a growing number of technologies aiming to tackle this issue, by speaking directly with stakeholders, Mahrenholz has gained a deep understanding of the financial realities of healthcare across the developed world. It's rare to find a healthcare provider that isn't stretched financially, so just having cool science is not enough if it isn't also financially viable.

'It's not only about healing patients, it's about the economic benefit that you produce for the system, and it's this benefit that is the fulcrum of why your product sells,' Mahrenholz explains.



The company is partnering with big multinationals for production support, and a partnership with Dell EMC is also helping to flesh out the IT infrastructure at the company. This helped get live production set up by the end of 2017, with the first live patches produced on 22 December. Ideally, they want to create a 'pull market', whereby customers come to them because of the strong need they have. As with so many start-ups however, scaling internationally remains a key challenge.

'I don't think small start-ups are very good at conquering one market, two markets, three markets, so this will always set us back to the point that we are a small startup in a new market,' Mahrenholz says. 'What we really need are big companies who are able to distribute our technology into other countries and other markets.'





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## **European innovation**

It's a process that the EIT Community helps out with, not least because EIT Health consists of healthcare start-ups from across Europe. This provides a fertile environment for sharing knowledge and experiences, not only of operating a healthcare start-up but also of operating in various territories. It's a mutual support network that has seen weekly conversations occur to share knowledge and advice.

This is especially vital for Europe as the continent aims to better promote the science and technology that is taking place across the EU, and therefore compete with Asia and North America in terms of innovation.

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It creates a mutually beneficial relationship between start-ups such as ColdPlasmatech and the EIT Community. The pan-European network provided by the EIT makes it so much easier to market and promote technologies and start-ups across Europe. Besides, the strong support network within EIT Health proved to be extremely efficient, as three of the four winners at INNOVEIT 2018 were from this Innovation Community.

Mahrenholz believes that central to this success is the ability to passionately communicate the virtues of your technology. You have to be able to verbalise what you're doing, why you're doing it, and the benefits that will come from it. This can be especially challenging for scientists, but it's crucial for society that start-ups can communicate the science to stakeholders on all levels. It's a lesson he hopes the next generation of start-ups take on board as they seek to develop the next big thing.

