

For Marc Bonten, there's nothing better than doing research with PhDs. But you won't find him pipetting samples in the lab anymore. It's better that way, says the managing researcher, grinning mischievously. Marc Bonten has kept a close eye on antibiotic resistance for over 25 years. Along with Bruno Francois, and the EFPIA partners, he helped create COMBACTE-NET in 2013. We asked Marc Bonten about his experiences and vision for the future.

Some three years on, COMBACTE-NET appears to be well on track.

"Absolutely. While the early years were mainly spent setting up and expanding our partner, hospital and laboratory networks, in 2015, they began bearing fruit with the launch of COMBACTE-CARE and COMBACTE-MAGNET, when we embarked on a phase of conducting an increasing number of concrete trials. We will continue along those lines in 2016: more trials are planned in the near future."

One of the COMBACTE projects defining features is collaboration between the academic world and the pharmaceutical industry.

How did you feel about that?

"Like the other academics, I, too was skeptical when the call came from IMI on behalf of ND4BB. Why help the pharmaceutical industry develop new antibiotics with European tax money? But I immediately got involved, anyway – partly because I instantly saw opportunities for scientific research – my primary motivation. Fortunately, because I think we collaborate really well, in spite of our inherently different perspectives."

At its core, the COMBACTE-NET project is about setting up a research network. What makes that network so crucial?

"Setting up our network makes it possible for our EFPIA partners, the pharmaceutical companies, to develop new antibiotics faster, more effectively and more economically, lowering the threshold to again invest more in new drugs. There wasn't even a clinical trial network specializing in antibiotic resistance research, which is more complex than research into many other conditions. The number of infections is relatively small, so assembling a large enough research population is more difficult. On top of that, doctors must treat infections quickly, so we have just a few hours to start our research. That means the network has to act very quickly and must be extremely flexible."

Is that network getting off the ground?

"I'm really pleased. The network is really starting to take shape. We bring together Europe's best academic partners, partly by linking up existing local networks. Partners in regions with less experience in advanced research, which often are areas where resistant bacteria are more frequently found, such as Eastern Europe, also receive our assistance. In the process, we raise antibiotic resistance research in Europe to a higher level – across the board."

The network continues to expand. How are you able to recruit new partners?

"That's a matter of persuasion. No academic partner is a philanthropist. For academics participation must generate funding to realize their own effective clinical research. The financial incentive is important, because more money potentially means better research. However, the three COMBACTE projects are also involved in addressing an urgent problem. And participants make a direct contribution to those efforts."

That's what's in it for academics. What about the pharmaceutical companies?

"They are also financially motivated: half of the funding comes from the EU. But

"BY 2020, THE NETWORK WILL NEED TO BE SELF-SUSTAINING"

even without EU funding, pharmaceutical companies would be able to develop new antibiotics faster, more effectively and more economically via our network rather than individually, in part because we have better knowledge about how to select the right sites, and thanks to our academic background, garner a greater commitment from hospitals and laboratories."

Does the network get the respect it deserves?

"First, just having a network obviously won't get you anywhere. That's why the 2015 launch of COMBACTE-CARE and COMBACTE-MAGNET was such a boon – now we can conduct more and more trials. It activates the network and makes us stronger. But we are definitely recognized for building something amazing. By the Food and Drug Administration in the USA (USFDA), for instance. In many cases, pharmaceutical companies are already actively approaching us. That's in line with our vision to also intensify collaboration with those companies, separate from the Innovative Medicines Initiative (IMI) program."

Which brings us to a glimpse of the future. How will the COMBACTE projects evolve?

"IMI funding will not continue indefinitely. By 2020, the network will need to be self-sustaining and attract companies without a financial incentive. In other words, we want to be competitive

enough that pharmaceutical companies will want to use our network. To do that, we need a smart organization. An organization with promise, which the academics can also get behind. It's in our reach if we manage to maintain the academic profile by continuing to combine commercial and academic projects. A legal entity with a not-for-profit character. We're considering it, but we have a long way to go."

It sounds like a success story. Weren't there any hard times in the early years?

"Of course there were. At first, a lot of effort went into developing a Network Management System (NMS). We also realized the risk involved in depending on pharmaceutical companies. We had a sudden shortfall of €70 million when GSK ceased developing an antibiotic, which eliminated the work several researchers in Europe had prepared for. That was really hard for me personally. But above all else, we feel we've made great strides with all of our partners – academic and EFPIA – in just a few years' time. And we've only just begun. So from that perspective, we have a bright future."

"I INSTANTLY SAW OPPORTUNITIES FOR SCIENTIFIC RESEARCH, MY PRIMARY MOTIVATION"

After initial skepticism, the future looks bright

Interview with Marc Bonten,
Academic Coordinator of all three COMBACTE projects