

Fiberlab

Improving the quality of life for those with chronic wounds thanks to personalized care in their home

In a nutshell

Chronic wounds – those that don't heal properly – are an under-recognised and poorly managed affliction. It's estimated chronic wounds affect 1-2% of the world's population and cost between 2 and 4% of global healthcare expenditure. In Switzerland alone, there are around 30,000 new cases annually, with the country spending around CHF2b in treatment. One of the core problems is that clinical assessment remains visual and highly subjective - strongly dependent on the doctor or nurse's own experience. Infections, the most common complication and the main cause of delayed healing in chronic wounds, remain particularly difficult to diagnose and treat. FiberLab complements the experience of the caregiver by offering an objective on-site assessment of the wound based on inflammation biomarkers, allowing a reliable evaluation of the healing progress and a detection of the early signs of infection.

Why is our technology important?

Traditionally, chronic wounds are assessed by sight - what does the edge look like, the size, the colour, the smell? These subtle signs are difficult to interpret, especially in the context of early chronic wound infection, resulting in high rates of misdiagnosis or overtreatment with antibiotics. Thanks to our objective measure of wound inflammatory status, on-site indication of infection and healing progress become accessible to the majority of clinical settings, including home care. The simple on-site testing kit cuts down treatment costs and allows medical staff to make quick, evidence-based decisions on the next steps of care and treatment. Chronic wound care costs health systems billions each year. With FiberLab, we can help reduce these costs by 20 to 50% by rationalizing treatment decision and reducing incidents of hospitalisation.

FiberLab is an EPFL spin-off that has developed an innovative microfluidic test strip to perform multiple laboratory assays at low cost and with the ease-of-use of a pregnancy test. The disposable test kits are supported by an application allowing for effective wound assessment no matter where the patient is. Our application supports healthcare professionals in their daily duties through on-the-spot access to key health parameters.

Fiberlab's vision is to create a world where caregivers can make the best decisions through evidence-based medicine - so every patient gets the right treatment at the right time.

The benefits of our solution

- With Fiberlab, healthcare professionals can
- make informed decisions based on the specificity of their patient's wound and fight infections more efficiently
- reduce treatment time and cost
- help patients regain quality of life quicker

Keywords

Wound care, Point-of-care testing, Personalised medicine, Healthcare, Infection, Chronic wounds, Digital health, Home care

Founding Team

fiber-lab.ch

Dr Bastien Schyrr – Founder: [linkedin.com/company/fiber-lab/](https://www.linkedin.com/company/fiber-lab/)