DiaperID - a medical APP for smart stool recognition and newborn screening for biliary atresia



PRINCIPAL INVESTIGATORS: **Prof. Dr. Philip Bufler, Dr. Christian Hudert, Lucas Griessmair** Charité

Digital Health
Pediatrics

SUMMARY

Biliary atresia is a rare disease of the newborn liver that, if left untreated, can lead to liver failure within months. Early diagnosis is crucial to avoid liver transplantation. Pale stools are an early clinical sign and their detection should be simple. This is the vision of DiaperID. The team aims to develop a platform application to screen for stool colour using image analysis supported by machine learning. Both parents and health care professionals will be asked to use the platform as a routine test within the newborn screening program to collaboratively combat diseases of this nature by simply taking pictures of their newborn's stool and uploading the image for subsequent analysis.

PROJECT GOALS

- Development of a strong proof of concept
- Validation of the idea and business model

I4H

LONG-TERM GOALS

• That every newborn baby in Germany will be screened for rare liver diseases by analyzing stool pictures via DiaperID