INNOVATION LAB ASIA

# RORDIC HEALTHIECH

SHOWCASING 24 NORDIC STARTUPS









Nordic Innovation

## **PREFACE**

This report introduces 24 Nordic Healthtech startups to a Japanese audience, specially chosen for their relevance to the Japanese market.

The Nordics and Japan have much in common, and face many of the same challenges. Both regions are relatively affluent, and technologically advanced; moreover, both face an aging population and a dwindling workforce, necessitating innovative solutions in healthcare technologies.

With this in mind, both the Nordics and Japan can begin to look to the future — together. We need to find smarter ways of working. We need to stop preventable medical conditions from arising and find cheaper and more efficient ways of treating these conditions when they do manifest. Furthermore, we need to automate as many tasks as possible, while ensuring that the manpower in healthcare is optimally used. Having worked with the Nordic and Japanese ecosystems in the course of this project, we have come to believe that a deeper collaboration between the Nordics and Japan might facilitate these developments.

This publication was produced by Innovation Lab Asia, a non-profit, community-based initiative that connects the Nordic and Japanese startup ecosystems.

Innovation Lab Asia is a collaboration between Asia House Denmark and TechBBQ and works closely with partners across the Nordics including Copenhagen Capacity, Copenhagen Healthtech Hub, Public Intelligence, Enter Espoo, Maria 01, Startup Norway, Icelandic Startups and Nordic Innovation House Tokyo. Innovation Lab Asia is supported by the Danish Industry Foundation and Nordic Innovation.

We hope this report will inspire Japanese investors and stakeholders to explore new opportunities within Nordic Healthtech to the mutual benefit of all parties involved. For further information and guidance, contact:

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# INTRODUCING NORDIC HEALTHTECH

The Nordic healthcare ecosystems are globally renowned for providing efficient, high-quality, population-wide healthcare. These healthcare systems have also provided an ideal framework for Healthtech innovation centering around the following four characteristics.

**Firstly, these healthcare systems have traditionally been quick to adopt new Healthtech and digital solutions**, with
a particular focus on enabling the elderly and disabled to
function independently in their own homes. This has given local
companies a perfect opportunity for testing and developing
solutions through public-private partnerships, leading to the
creation of a range of companies that deliver products and
services targeting the elderly and disabled people.

Secondly, the public healthcare systems - and the Nordic societies as a whole - are characterized by a high level of trust in public institutions and between citizens, paving the way for the development, piloting, and commercialization of personalized home medical care.

Thirdly, the public healthcare systems have developed a unique register of health data dating back to the 1960's,

allowing for cross references between registers. The quality of the data is unparalleled among other regions, where data was mainly collected by private sector insurance companies for administrative purposes. Today, the accessibility of high-quality data and biobanks provides the basis for Al-driven Healthtech solutions, as well as strongly documented use cases and Proof of Concepts for Nordic-developed solutions.

Finally, the Nordic countries are characterized by high digital competitiveness and a high level of digital skills in its population. This makes the region well-suited to develop, test and launch solutions within telemedicine, digital healthcare, and ambient assisted living technology.

Today, Nordic Healthtech companies excel in the following three areas:

**Smart digital solutions**: E-health and solutions that facilitate communication in the health sector, including remote doctorpatient meetings and telemedicine solutions.

**Ambient assisted living/care technology**: Monitoring, self-care solutions, rehabilitation equipment, etc.

**Personalized care**: Products based on collection and/or use of big data to create personalized health solutions.

Not surprisingly, Nordic Healthtech startups have already attracted the attention of Japanese investors in recent years: Medfiles in 2017, KIDE Clinical Systems and Oncolmmunity in 2018, and Nightingale Health, Combinostics and Meru Health in 2019.

Nordic Healthtech has never been more relevant, especially in the wake of the present COVID-19 pandemic. Many of the most vulnerable patients lack proper care or find themselves at risk for infection when visiting hospitals and clinics. The pandemic has not only strained healthcare systems across the world, but also exposed some of their fundamental weaknesses.

There is an urgent need for introducing solutions that enable remote monitoring and treatment of patients, and provide tools for prevention, earlier diagnosis, and self-help. These are all fields in which the Nordics are leaders.

The following section will showcase 24 Nordic Healthtech startups; their solutions, their product fit to the Japanese market and their ambitions in Japan.

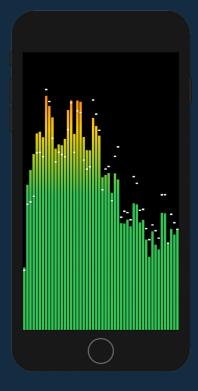
#### DEFINING HEALTHTECH

All the startups showcased in this report are defined as Healthtech. They bring the power of software to the health sector, combining data-driven solutions with machine learning, artificial intelligence, augmented reality, sensors, and wearables. Healthtech startups all seek to enable healthy living; they can track, treat, and diagnose mental and physical conditions, and improve the independence of disabled and elderly people. None of the startups provide solutions based on living organisms, i.e. biotechnology.









Country:
Year of establishment:
Founders:
Revenue 2019 (EUR):
No. of employees:
Funding type:
Funding stage:
Investors:

Denmark
2020
Michael Kai Petersen
0 (pre-revenue)
1-9
Bootstrapping
Pre-seed
AWS Activate

# ENHANCING AND PERSONALISING HEARING EXPERIENCES FOR HEARABLE USERS



### **AUGMENTEDHEARING.10**

One in four adults have problems understanding speech in noisy environments. Also, 95% of adults suffering from mild hearing loss avoid hearing aids due to concerns of compromised sound quality in hearing aids. With the drastic increase in video conferencing as a result of the COVID-19 pandemic, hearing difficulties have become more prevalent and apparent than ever. Many struggle to understand what is being said across noisy and unstable connections, and experience so-called "Zoom fatique".

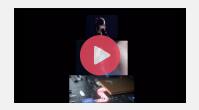
Augmentedhearing.io has developed an Al-powered cloud solution that improves speech perception in hearables – a fast growing consumer product. The product is a smartphone app that connects to and adjusts hearables' audio processing to changing soundscapes, instead of the fixed calibration found in existing hearables. The app reduces "Zoom fatigue" by learning voice characteristics and adapting amplification to the individual's preferences.

Subsequent product releases will extend Al-augmented hearing to real-life listening scenarios, by crowdsourcing the learning of preferences through "users like me in similar contexts".

#### **Ambitions in Japan:**

Augmentedhearing.io is looking for distribution partners and funding.

#### Watch augmentedhearing.io's video pitch



#### Primary contact:

Michael Kai Petersen , Co-Founder michaelkaipetersen@gmail.com augmentedhearing.io

### **BUILDING AN OPEN LIBRARY FOR** LIFE SCIENCE ALGORITHMS AND **DATA ANALYSIS TOOLS**



# **BIOLIB**

Drug discovery and development is infamously expensive and slow. While new data sources and breakthroughs in machine learning have the potential to transform how we do life science, getting the newest computational tools and algorithms in the hands of the researchers that need them remains a challenge.

BioLib is a platform that increases the impact and reach of bioinformatics research. With BioLib, it is easy to build, share, and run bioinformatics applications.

On BioLib, scientists from across the research community can access a global library of data analysis tools. All tools can be run without having to code, and all computation happens in a sandboxed environment, ensuring that sensitive biomedical data stays protected.

#### **Ambitions in Japan:**

BioLib's purpose is to accelerate innovation and collaboration in the global bioinformatics community. With one of the most expansive life science and biopharma sectors in Asia, Japan is a key actor regionally and globally. BioLib is interested in connecting with Japanese project partners from academia and the wider biopharma ecosystem.

#### **Primary contact:**

**Jørn Emborg,** Founder / Enterprise Lead jorn@biolib.com biolib.com



Country: Year of establishment: 2019

Jeppe Hallgren, Mads Brøgger, Founder: Jakob Hautop, Jørn Emborg

No. of employees: Funding type:

Funding stage: Pre-seed

**Investors:** Nordic Makers, Nordic Web, Nina Capital



Country:

Year of establishment:

Founders:

D 0040 (

Revenue 2019 (EUR):

No. of employees:

Funding type:

Funding stage:
Accumulated investment:

Investors:

Denmark

2018

Akshay Pai, Robert Lauritzen, Erik Dam,

Mads Nielsen, Martin Lillholm

0 (pre-revenue)

20-49

Bootstrapping / Grants / Angel / VC

Seed

JPY 380 million

Vaekstfonden, Crista Galli Ventures, Innovation Fund Denmark, KMD Venture

# PROVIDING FASTER PERSONALIZED DIAGNOSTIC IMAGING



### **CEREBRIU**

Cerebriu has developed a smart protocol technology that accelerates brain MRI scan acquisition and patient treatment by providing real-time detection of critical pathologies, thereby improving workflow efficiency, quality, and patient outcomes in diagnostic imaging.

Cerebriu's Apollo product is powered by state-of-art machine learning methods and accelerates MRI scan acquisition and patient priority by providing appropriate patient triage and PACS support. Ultimately this results in improved productivity, prioritizing the right patients at the right time with less involvement from clinicians.

According to a hospital survey conducted by Japan's Ministry of Health, Labour, and Welfare in 2015, Japan needs more than twice as many full-time diagnostic radiologists to analyse all CT and MRI reports. Cerebriu's Apollo system may help to ameliorate this shortfall.

#### Ambitions in Japan:

Cerebriu is looking for radiology and hospital partners seeking to optimize their brain MRI workflow process.

#### Watch Cerebriu's video pitch



#### **Primary contact:**

Akshay Pai, Co-founder / CTO
ap@cerebriu.com
cerebriu.com

### **PROVIDING DIGITAL SOLUTIONS FOR ENHANCING CARE QUALITY AND PATIENT** SAFETY



## COGNUSE

Cognuse builds digital health solutions for healthcare staff and patients with a focus on improving guidelines adherence, enhancing care quality, patient safety and outcomes across the care continuum.

Cognuse's core product, CoNurse, is a voice-guided protocol adherence and deployment application that improves quality and standardisation of healthcare. CoNurse supports staff by providing step-by-step, institution-specific guidelines for clinical protocols and workflows for non-routine procedures and emergency situations, significantly reducing preventable adverse events, the main non-reimbursable cost driver in healthcare. CoNurse also allows for more cost-effective onboarding of new staff.

Cognuse investors and partners include Johns Hopkins University, 500 Startups, Philips, the Red Cross, the Estonian Government, and the German Agency for International Cooperation (GIZ).

#### **Ambitions in Japan:**

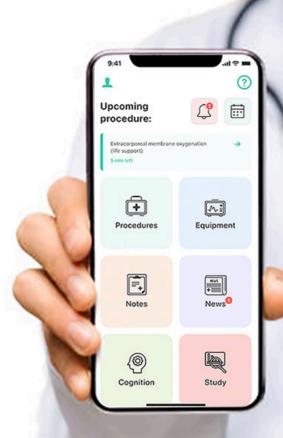
Cognuse is looking for funding, distribution partners, clients, and R&D capabilities. By entering the Japanese market, Cognuse would be able to widen their investment strategy and increase scaling opportunities.

#### Watch Cognuse's video pitch



#### Primary contact:

Andres Mellik, Founder / CEO andres@cognuse.com cognuse.com



#### COMPANY DATA

Country: Year of establishment:

Founder:

Andres Mellik 100.000 - 499.999 Revenue 2019 (EUR):

No. of employees:

Bootstrapping / Grants / Angel / VC Funding type:

2012

10-19

Series A Funding stage: Accumulated investment:

JPY 93 million

Investors:

EASME-EU, 500 Startups, Dreamit



Country:
Year of establishment:
Founders:

Revenue 2019 (EUR):
No. of employees:
Funding type:

Funding type:
Funding stage:
Accumulated investment:
Investors:

and 7

Seppo Salorinne, Petri Louhelainen,

Yrjö Salorinne 0 (pre-revenue)

Grants / Angel Seed

JPY 124 million

Business Finland, Vertical Accelerator

# HELPING CHRONIC RESPIRATORY PATIENTS MONITOR AND MANAGE THEIR LUNG CONDITION



# **KAMU HEALTH**

KAMU Health has developed a digital tool that helps patients with chronic respiratory issues monitor their lung condition from their home, enabling them better predict changes in their conditions and take proactive measures to address those changes.

The solution improves the quality of life for patients by removing uncertainty and improves patient–doctor communication by sharing data with the doctor. KAMU Asthma combines accurate, clinical grade technology with a modern, mobile consumer experience.

KAMU Asthma is particularly relevant during the present COVID-19 pandemic, as it facilitates quality care in a time when healthcare systems across the world are under extreme pressure. It also makes it possible for these very vulnerable patients to self-isolate, as their need to visit clinics is strongly reduced.

#### **Ambitions in Japan:**

KAMU Health is looking for partnering opportunities with established players in the area to help manage respiratory conditions and the economic burden they cause.

#### Watch KAMU Health's video pitch



#### **Primary contact:**

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seppo@kamuhealth.com
kamuhealth.com

# ENSURING PATIENTS THE RIGHT MEDICINE AT THE RIGHT TIME



# **MEDICPEN**

MedicPen develops comprehensive solutions for medicine management, making it easier for doctors, healthcare workers and patients alike to manage medications.

MedicPen provides automatic medicine dispensing, real-time monitoring, and traceability of medical use. This increases compliance, improves drug adherence and efficiency, and reduces drug loss and waste.

As MedicPen solutions are integrated and connected with healthcare systems, dose changes can be made remotely, reducing the need for patients to visit doctors and health clinics for medicine management. This in turn reduces the pressure on the healthcare system and lowers the risk of transmitting COVID-19 to vulnerable citizens.

MedicPen solutions are scalable and adaptable to different needs and integrated with the IT environment.

#### Ambitions in Japan:

MedicPen is looking for sales channels and distribution partners.

#### Primary contact:

Jan Andersson, CEO
jan.andersson@medicpen.com
medicpen.com



#### COMPANY DATA

Country:
Year of establishment:
Founder:
Revenue 2019 (EUR):
No. of employees:
Funding type:
Funding stage:

Sweden 2006 Cristian Hallin 100,000 - 499,999 1-9 Grants / Angel / VC

Series C and above



Country: Year of establishment: Founders: Revenue 2019 (EUR):

No. of employees: Funding type:

Funding stage:
Accumulated investment:

Investors:

Sweden 2009

Anna Omstedt, Anna Norin

1-9,999 1-10

Bootstrapping / Angel

Series A

JPY 130 million

Founders, 20 North Street, and private angel investors

### BRIDGING THE COMMUNICATION GAP BETWEEN THE PHARMACEUTICAL INDUSTRY AND HEALTHCARE PROFESSIONALS



### **MEDUNIVERSE**

Pharmaceutical companies with novel treatments often have difficulty in reaching and communicating with healthcare professionals. This limits the implementation of new technologies and treatments, which negatively impacts patient outcomes.

MedUniverse has developed a digital platform that facilitates engagement between life science companies and healthcare professionals. Companies can market and inform stakeholders about their products and treatments on a digital platform by creating hypothetical "patient cases." These cases serve as an educational demonstration of the needs and perspectives of both patients and healthcare professionals. The platform also offers engagement metrics for companies to help them analyze knowledge gaps and iterate and update their marketing and educational materials.

MedUniverse's vision is to become the industry standard facilitator of the important dialogue between pharmaceutical companies and healthcare professionals. The platform currently serves more than 15 global pharmaceutical companies across different therapeutic areas, supports 28 languages, and allows for instant omni-channel distribution.

#### **Ambitions in Japan:**

One of the founders of MedUniverse has experience living in Japan, and therefore the company feels a special connection to the country. They have already established a partnership with Takeda to accelerate patient access to innovative medicines, and are looking for distribution partners, clients, funding, and new talents to join their team.

#### Watch MedUniverse's video pitch



#### **Primary contact:**

Anna Omstedt , Co-Founder / CEO anna.omstedt@meduniverse.com meduniverse.com

### COMBINING ELECTROENCEPHALOGRAMS AND AI TO DIAGNOSE CENTRAL NERVOUS SYSTEM DISORDERS



# **MENTIS CURA**

Currently, doctors can diagnose a person with dementia; however, determining the exact type is more difficult. ADHD poses different challenges, as this condition is diagnosed from behavioural patterns, which are easily influenced by highly subjective information provided by close observers. However, both are examples of central nervous system dysfunctions.

Mentis Cura has developed cost-effective biomarker solutions to help doctors diagnose a wide variety of brain health disorders using electroencephalogram (EEG) and Al. Their first CE marked software, Sigla, is a fast and affordable alternative to MRI scanning that allows differential diagnosis between dementia with Lewy Body and Alzheimer's Disease, contributing to more early diagnosis and patients receiving the correct treatment.

Their second CE marked product, Katla, will identify physiological markers, thereby providing a reliable prognostic and diagnostic marker for ADHD. The data-driven approach provides the patient and their family added certainty and access to appropriate treatments.

Mentis Cura's technology platform has immense potential to transform the standard of care and treatment development programs for brain health disorders.

#### **Ambitions in Japan:**

Mentis Cura began conducting clinical studies in Japan in 2018, and has set up a local subsidiary company. Currently, they want to strengthen collaborations with Japanese pharmaceutical companies operating in brain health, and are looking for distribution partners, clients, and funding.

#### Watch Mentis Cura's video pitch



#### **Primary contact:**

Claire Button , CEO
claire.button@mentiscura.com
www.mentiscura.com



Country:
Year of establishment:
Founder:
Revenue 2019 (EUR):
No. of employees:
Funding type:
Funding stage:
Investors:

Norway 2004 Kristinn Johnsen 10,000 - 99,999 10-19 Angel / Grants Seed

Research Council of Norway, Nyskopun, and angel investors





**Country:** 

Year of establishment:

Founder:

Revenue 2019 (EUR):

No. of employees:

Funding type:

Funding stage:

Accumulated investment:

**Investors:** 

Denmark

Habib Frost

0 (pre-revenue)

Grants / Angel / VC

Series A

JPY 1.4 Billion

TAG Holding, GreenOcean Capital,

Nina Capital, Nordic Impact, and several Scandinavian life-science angel investors

### **PROVIDING BREAKTHROUGH** TREATMENT FOR CARDIAC ARREST AND **HEMORRHAGE**



# **NEURESCUE**

Cardiac arrest is the leading cause of death globally, killing up to 9 million people annually, including 200,000 in Japan every year. Today, the treatment consists of chest compressions and defibrillation, and only 10% survive with the current treatment.

Neurescue seeks to improve the current low survival with their breakthrough device, the world's first computer-aided aortic occlusion catheter with pressure-controlled inflation and position feedback. The balloon is advanced into the aorta through the femoral artery and temporarily inflated, thereby redirecting blood flow to the heart and the brain. The increased blood flow may increase the chance of immediate resuscitation from chest compressions and defibrillation, but may also increase the treatment time window, allowing the patient more time to receive advanced treatments.

The Neurescue device is currently being investigated for cardiac arrest treatment, with the potential to increase survival and neurological outcome. At the time of writing, the company has submitted their FDA 510(k) marketing application for the treatment of hemorrhage. Neurescue also holds patents for other automated devices for life-saving procedures, such as automated catheter insertion into blood vessels.

#### **Ambitions in Japan:**

Neurescue is looking to connect with distribution partners, preferably with experience with the Japanese PMDA process and reimbursement system, and knowledge of the trauma and cardiac arrest market. Neurescue is also interested in exploring a strategic partnership for funding or acquisition.

#### Watch Neurescue's video pitch



#### **Primary contact:**

Bjørn Broby Glavind, COO & Co-founder bjorn.broby@neurescue.com neurescue.com

# PRODUCING OPTIMIZED SKINCARE SOLUTIONS BASED ON CUSTOMISED INGREDIENT COMBINATIONS



### NOIE

The brand name, Nøie, means "careful, accurate, and meticulous" in Danish. This reflects their approach to finding skin care solutions that work for every individual skin type.

The team behind Nøie spent three years analysing data from more than 60,000 people suffering from skin issues such as psoriasis, dermatitis, and acne. They also screened thousands of skincare products on the market, selected the best 515 and carefully studied scientific research involving the individual ingredients and their effects.

In collaboration with data scientists and skin experts, Nøie combines medical knowledge with machine learning to develop an algorithm that identifies the optimal ingredient combination for any individual. With this innovative approach, Nøie seeks to provide optimal skincare for all skin types and symptoms.

#### **Ambitions in Japan:**

Noie is passionate about bringing Danish customised skincare to Japan and are looking for partners to research and launch on the Japanese market.

#### Primary contact:

Chris Lykke Christiansen, Co-founder chris@noie.com

### COMPANY DATA

Country: 2018 **Year of establishment:** Founders: Daniel Jensen, Chris Lykke Christiansen 100.000 - 499.999 Revenue 2019 (EUR): No. of employees: Funding type: Grants / Angel / VC Funding stage: Series A JPY 500 million Accumulated investment: LEO Pharma, PreSeed Ventures, Seed **Investors:** Capital, Vaekstfonden, Thomas Ryge

Mikkelsen

FACE CLEANSER HADE FOR BASHIR 302261 / 000001 Carbomer, Morinda Citriro la Callus Culture Listie des Flower Estract, Citric Acid, Phanosyethand, CK



Country:

Year of establishment:

Founders:

Norway 2019

lers: Cathrine Ro Heuch, Marcus Engebretsen,

Stefan Borg, Anker Stubberud, Alexander

Olsen, Erling Tronvik 100.000 - 499.999

**Revenue 2019 (EUR):** 100

No. of employees:

**Funding type:** Bootstrapping / Grants

Funding stage:

**Accumulated investment:** JPY 56 million

Investors:

Bootstrapping / Grants / Angel

Seed

Startup Lab, Business Angels

### DEVELOPING DIGITAL MIGRAINE TREATMENT BASED ON SELF-ASSISTED BIOFEEDBACK



## **NORDIC BRAIN TECH**

Biofeedback is the process of gaining greater awareness of physiological functions of one's own body, by using electronic or other instruments. Nordic Brain Tech has developed a remote, self-assisted biofeedback treatment for people with migraines that uses smartphones and wireless sensors to give the patient a personalized treatment plan.

Nordic Brain Tech has also developed *Brain Twin*, a digital headache diary that can be used as a tool for diagnosis and follow up for anyone experiencing headaches.

Nordic Brain Tech seeks to improve brain health and treat migraines and other neurological diseases using deep learning. Nordic Brain Tech introduces a complete home-based migraine treatment that empowers users with an affordable treatment option.

With 6% of the Japanese non-elderly population suffering from migraines in any given year, home-based treatment of migraines can save the Japanese society huge costs by reducing sick leave and loss of productivity.

#### **Ambitions in Japan:**

Nordic Brain Tech wants to partner with health insurance, pharma and/or consumer electronics companies looking for digital solutions to treating and alleviating headache diseases. Nordic Brain Tech is also looking for partners to establish early collaborations on how their products fit into the Japanese user groups and market segments.

#### **Primary contact:**

Cathrine Ro Heuch, CEO cathrine@nordicbraintech.no nordicbraintech.com

### PROVIDING THE WORLD'S SMARTEST PILL REMINDER TO REDUCE MISSED MEDICATIONS AND IMPROVE QUALITY OF LIFE



## **POPIT**

According to the World Health Organization (WHO), 50 % of patients miss medications. This medication non-adherence has many reasons, but the biggest one is also the simplest: forgetting. In Japan, spending on medicines in 2019 totalled almost 10 trillion yen. What if even 1% of that could be saved?

Popit has developed a device that can be connected to patients' medication pack where it detects how medications are taken. This data is sent to a medically certified app that reminds the patient of missed medication when necessary. The system is clinically validated to reduce missed pills by over 80%, thus reducing waste and improving treatment.

The anonymous data is also sent to the cloud, which sends customized support messages. Popit improves patient adherence and treatment outcomes, provides data on how and when medication is consumed, provides direct access to the patient, and adds medication-intake data to telehealth platforms.

Popit provides solutions for both individual customers as well as healthcare systems and pharmaceutical companies, including Pfizer, Novartis, Almirall and Fermata.

#### **Ambitions in Japan:**

Japanese consumers are very interested in new innovations, which is one of the reasons Popit has already shipped their first products to Japan. The first reviews have been overwhelmingly positive, so Popit is now looking for more clients in Japan and possibly also funding.

#### Watch Popit's video pitch



#### **Primary contact:**

Timo Heikkilä, Co-founder / COO timo@popit.io



•••

#### COMPANY DATA

**Country:** Finlar **Year of establishment:** 2015

Founders:

Marko Nirhola **Revenue 2019 (EUR):** 100.000 - 499.999

No. of employees: Funding type: Funding stage:

Series A
stment: JPY 150 million

Accumulated investment:

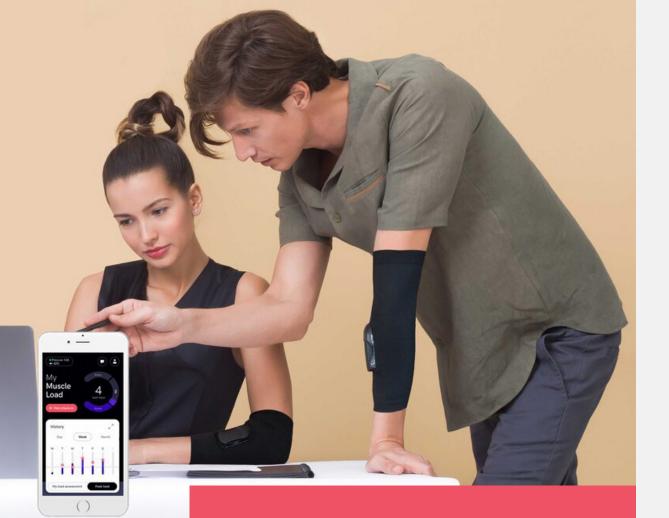
Butterfly Ventures, Amor & Labor Oy,

Timo Heikkilä. Teemu Piirainen.

Investors:

Business Finland

Angel / VC



Country:
Year of establishment:
Founders:
Revenue 2019 (EUR):
No. of employees:
Funding type:
Funding stage:
Accumulated investment:
Investors:

Denmark
2016
Finn Bech Andersen
10,000 - 99,999
10-19
Grants / Angel /VC
Seed
JPY 57 million
Sparbo Finans, Bornholm's Business

Foundation

### PREVENTING MUSCULOSKELETAL DISORDERS SUCH AS TENNIS ELBOW AND LOWER BACK PAIN

## **PRECURE**

PRECURE has developed a smart wearables solution that monitors and transmits the user's muscle activities to a smartphone app. The user gets feedback on the muscle load enabling the users to adjust work behaviour when the strain level is high and thus reduce the risk of musculoskeletal disorders.

The solution is based on IoT and Al-technology and helps individuals, companies, insurers, and society. As data is stored in the cloud, the company gets insights to reduce the risk and frequency of injury-causing behaviours. This will protect their employees, save costs, and improve productivity. Healthcare insurers will also benefit, as claims will decrease.

Studies show that work-related musculoskeletal injuries such as tennis elbow and back pain impose a substantial burden on the Japanese workforce. Smart technology to prevent such injuries and disorders would be beneficial for Japan, who will be facing challenges presented by an aging workforce in the near future.

Additionally, during the COVID-19 pandemic, ergonomic and repetitive strains are expected to increase due to a prolonged period of remote work. PRECURE's technology allows employers to ensure a higher level of health and safety for their employees, even in remote conditions.

#### **Ambitions in Japan:**

PRECURE considers Japan a key market for their products and is keen on establishing partnerships with Japanese healthcare stakeholders. PRECURE is also looking for funding, clients, distribution partners and new ideas.

#### Watch PRECURE's video pitch



#### **Primary contact:**

Finn Bech Andersen, CEO fba@precure.dk precure.dk

### DEVELOPING AI POWERED IMAGING TOOLS TO AUTOMATE READING OF BONE AND JOINT X-RAYS



# **RADIOBOTICS**

There is a global shortage of experienced radiologists, and even routine x-ray analysis can be a time-consuming process. As a result, many patients aren't getting their diagnoses in time — and when they do, there is a high risk of misdiagnosis due to human error.

Radiobotics provides an Al-based decision support tool that replicates the work of an expert radiologist, delivering more consistent analysis than visual inspection alone. The output is provided as a structured text report with findings and conclusion, along with a visual overlay explaining each finding. This also ensures a high reporting uniformity across hospitals, enabling more effective management of patient records.

The tool has been developed in close collaboration with clinicians so as to address their specific needs and requirements.

Having obtained its first CE-mark in 2020 and awaiting FDA clearance in 2021, Radiobotics is ready to accelerate their growth and provide the next big breakthrough in radiology.

#### **Ambitions in Japan:**

With an ageing population and an acute lack of radiologists, there is a strong potential for Radiobotics' solution to be implemented in Japan. Radiobotics is looking for distribution partners, clients, and new ideas.

#### Watch Radiobotics' video pitch



#### Primary contact:

Stine Mølgaard Sørensen, Co-Founder / COO stine@radiobotics.com www.radiobotics.com



### COMPANY DATA

Country:

Year of establishment:

Founders:

Revenue 2019 (EUR): No. of employees:

Funding type: Funding stage:

Accumulated investment:

**Investors:** 

Denmark

Mads Jarner Brevadt, Pavel Lisouski, Martin Axelsen, Stine Mølgaard Sørensen

0 (pre-revenue)

10-19

Bootstrapping / Grants / Angel / VC

Seed

JPY 560 million

EASME, Data Pitch, inQvation, Bjerg, PreSeed Ventures, Crista Galli Ventures,

and several business angels



### **PROVIDING HAPTIC TECHNOLOGY FOR** A NEW GENERATION OF SURGEONS



### REON

Reon is a product development company that focuses on both physical and digital product development and provides a wide range of services including design sprints, UX/UI design, software development, apps, web-systems, e-commerce, bots, machine learning, and automation. Now, Reon is applying their skills and knowledge within haptic technologies to the medical sector.

Haptic technology is a growing area of medical intervention that enhances remote control of medical devices through tactile interactions. Reon is currently developing compliant haptic mechanisms for laparoscopy, which will drastically increase safety and minimise risk of errors during surgeries.

Until recently, the training times for new surgeons were timeconsuming and strenuous; however, now they can benefit from training and operating with instruments that offer full tactile feedback, thereby reducing the training times and increasing operating safety.

#### **Ambitions in Japan:**

Reon sees a huge market potential in Japan and is looking for partners to assist in market entry.

#### **Primary contact:**

Ásþór Tryggvi Steinþórsson, Lead Engineer asthort@reon.is

#### COMPANY DATA

Country: Year of establishment: Founders:

Elvar Thormar, Ásþór Tryggvi Steinþórsson

Revenue 2019 (EUR): 500.000 + No. of employees: 10-19

Bootstrapping / Grants

Funding stage: **Accumulated investment:** JPY 66 million

Investors:

Funding type:

Series A

Technology Development Fund

### HELPING LAB WORKERS AND RESEARCHERS WORK FASTER AND SMARTER



# ROTAPURE LAB INSTRUMENT

The Rotapure Lab Instrument system simplifies key research workflows in laboratories working with human biology. The Rotapure system consists of a patented rotator and a high capacity tube rack that allows handling of laboratory samples in large batches.

As a result, lab workers can increase their workload capacity, improve consistency, save time, and greatly increase productivity. The measured benefits of the Rotapure Rotator system for a workflow with 120 tubes is 50%-time savings and 4800 avoided repetitive movements for each sample preparation workflow of 10 iterations of mixing/centrifugation.

#### Ambitions in Japan:

Rotapure is looking for local distributors to deal and promote their products and create a sales channel in Japan. They would also like to connect with end users in the biotech, pharma, and hospitals sector who want to save time and effort for their lab workers.

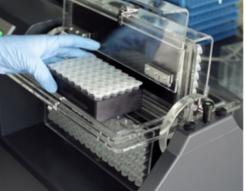
#### Watch Rotapure Lab Instrument's video pitch



#### **Primary contact:**

Peter Munkholm Nielsen, Co-founder pmn@rotapure.dk rotapure.dk













#### COMPANY DATA

Country:

Year of establishment:

Founders:

Peter Munkholm Nielsen 0 (pre-revenue)

Revenue 2019 (EUR): No. of employees:

1-9

Funding type: Funding stage: Bootstrapping / Grant

Janus Schou Jakobsen. Steen Nielsen.

Pre-seed

Denmark



Country: Year of establishment: Founders:

Revenue 2019 (EUR):
No. of employees:
Funding type:
Funding stage:
Accumulated investment:
Investors:

Denmark
2015
Theis Jensen, Morten Egholm,
Marco Bo Hansen
0 (pre-revenue)
10-20
Grants / Angel / VC
Seed
JPY 260 million
InQvation,
Pre-seed investment (Equity)

# MEASURABLY BETTER HAND HYGIENE IN HEALTHCARE ORGANIZATIONS USING DATA-DRIVEN SOLUTIONS



# **SANI NUDGE**

Hand hygiene compliance is one of the most critical patient safety measures in healthcare institutions. However, it has been extremely difficult to know who is sanitizing their hands correctly.

Sani nudge provides a data-driven hand hygiene measuring solution that provides valuable insights on employee hand hygiene habits and patient contact. The solution consists of wireless sensors at sanitization points and IDs placed on employee name badges. The sensors record employees' soap or sanitizer dispenser usage and direct patient interaction, and transfer the data to a comprehensive user dashboard for analysis and follow-up. Clinical tests have found that the sani nudge solution increases hand hygiene compliance twofold, reduces infections in both employees and patients, and decreases sick leave taken by employees.

According to the Journal of Hospital Medicine, a group of researchers found suboptimal hygiene adherence in the three Japanese hospitals they studied. Implementing sani nudge therefore has immense potential for improving hand hygiene and preventing outbreaks of healthcare acquired infections in Japan. With the ongoing COVID-19 pandemic, this is more important than ever.

#### **Ambitions in Japan:**

Sani nudge is looking for distribution partners and clients to help them expand into the Japanese market.

#### Watch sani nudge's video pitch



#### **Primary contact:**

Nancy Carleton, Head of Marketing
nc@saninudge.com
saninudge.com

### DEVELOPING QUALITY MANAGEMENT SOFTWARE WITH AUGMENTED REALITY WORKFLOW AND AUTOMATIC DOCUMENTATION



### **SCIAR COMPANY**

Augmented Reality (AR) technology is revolutionising the manufacturing industry, and the healthtech industry is no exception. Sciar Company Ltd. creates software to help advance bio-scientific research by incorporating the latest AR/MR and Al technology into a single, easy-to-use cloud platform.

Sciar's SaaS-based AR application enables creation and implementation of intuitive, interactive work instructions for laboratory processes. The data from the AR device is managed by Sciar's cloud-based quality management software, which eliminates human errors by keeping track of workflows and ensuring that each work step is completed correctly. Moreover, the system documents these processes automatically, thereby increasing worker productivity. Through this platform, scientists and laboratories will be able to connect and share data across the world.

The current COVID pandemic requires the industry to be more agile than ever. Sciar Company's software has an immense potential in accelerating bio-tech research.

#### Ambitions in Japan:

Sciar Company Ltd. is looking for investors and potential clients for their services.

#### Watch Sciar Company's video pitch



#### **Primary contact:**

Kristian Alaviuhkola, COO & Co-founder
kristian@sciar.co
sciar.co



#### COMPANY DATA

Country:

Year of establishment:

Founders:

2018

Kristian Alaviuhkola, Joel Noutere,

Felix Erkinheimo

**Revenue 2019 (EUR):** 1-9,999 **No. of employees:** 1-9

**Funding type:** Bootstrapping / Grants

Funding stage:
Accumulated investment:

Pre-seed
JPY 14 million

Investors:

Business Finland



Country:

Year of establishment:

Founders:

Revenue 2019 (EUR):

No. of employees:

Funding type:

Funding stage:

**Accumulated investment:** 

**Investors:** 

Sweden 2018

Kushagr Punyani

0 (pre-revenue) 1-9

Angel Series A

Series A

JPY 34 million

# REVOLUTIONIZING MALE FERTILITY DIAGNOSTICS



### **SPERMOSENS**

According to a 2016 report by ICMART, Japan has the highest number of in vitro fertilisation cases (IVF), yet the lowest rate of success. Additionally, the WHO reports that 50% of infertility worldwide is caused by male-oriented issues.

Spermosens AB is revolutionising IVF treatment by commercializing the first functional male infertility diagnostic device to directly predict the fusion capacity of sperm cells. Current IVF methods only evaluate sperm cells by their physical properties such as motility and morphology; however, these indicators do not provide the full cause for male infertility.

Using recombinant proteins, nanotechnology and electrochemistry, Spermosens' novel diagnostic device helps patients and healthcare providers to probe the underlying cause of unexplained male infertility, and direct them to the most suitable IVF treatment.

#### **Ambitions in Japan:**

Spermosens is looking for a strategic partner in Japan who can assist them in taking full advantage of this amazing opportunity and improving the quality of life for couples suffering from infertility. Spermosens is striving to create substantial value to all stakeholders involved in IVF treatment in Japan.

#### **Primary contact:**

John Lempert, CEO
jsl@spermosens.com
spermosens.com

### **CREATING FUN GAMES TO SOLVE SERIOUS PROBLEMS**



# **TACKL**

According to a UNICEF report, Japanese children have the second-worst mental well-being among the 38 richest countries, contributing to poor life satisfaction and high suicide rates. Limited access to mental health treatment for children and young people, including long waiting lists to specialist health services, further aggravates the problem.

Together with an interdisciplinary team of researchers from the University of Stavanger and the Norwegian University of Science and Technology (NTNU), Tackl has designed Habiit: a smartphone game helping children from 6-12 years create healthy habits for overcoming school refusal, anxiety, and other related mental health issues. The game connects children, teachers, child psychologists and therapists, and shows major potential for helping to solve mental health problems in children.

#### **Ambitions in Japan:**

Tackl is looking to build a network of researchers and eventually launch their product in Japan.

#### Watch Tackl's video pitch



#### Primary contact:

Sindre Holme, CEO & Co-founder sindre@tackl.no tackl.no







#### COMPANY DATA

Country:

Year of establishment: Founder:

2018 Sindre Holme

Norway

Revenue 2019 (EUR):

10.000 - 99.999

No. of employees:

Funding type:

Bootstrapping / Grants

Funding stage:

**Accumulated investment:** 

**Investors:** 

JPY 12.5 million

Several small investors



Country:

Year of establishment:

Revenue 2019 (EUR):

Founders:

Denmark

Kasper Marstal, Valentin Rosenberg, Emil Johansen, Benjamin Legarth,

Zacharias Knudsen, Anders Lykkestrup,

Sigurd Carlsen 10.000 - 99.999

No. of employees:

**Funding type:** Bootstrapping / Gr

Funding stage: Pr

**Accumulated investment:** JPY 11 m

**Investors:** 

Bootstrapping / Grants
Pre-seed

JPY 11 million Innovation Fund Denmark

### BUILDING BIGGER HEALTH DATASETS, FASTER



## **TEAL MEDICAL**

Digital transformation has major positive impacts on the healthcare industry. However, organisations must adhere to strict rules around medical data protection, creating a bottleneck for research and product development projects.

Teal Medical provides a solution to manage and streamline health data sharing. They have developed the Teal Engine, a search tool that enables researchers, hospitals, and companies to extract large datasets of medical images from hospital systems securely, while complying with GDPR and HIPAA. It also automates the file de-identification process, eliminating laborious manual work.

The COVID-19 pandemic has highlighted a gap in the digital infrastructure in healthcare. In Japan, where medical images are dispersed across countless private healthcare institutions, the construction of this infrastructure is sorely needed. Teal Medical's solution both facilitates data sharing and enables the public and private sectors to develop strong partnerships, ultimately accelerating healthcare innovations.

#### **Ambitions in Japan:**

Teal Medical is looking for distribution partners and clients to help them access the Japanese market.

#### Watch Teal Medical's video pitch



#### **Primary contact:**

Kasper Marstal, CEO
kasper@tealmedical.io
tealmedical.io

# PROVIDING A POCKET-SIZED, AI-POWERED AND SMARTPHONE-BASED SOLUTION FOR DETECTING BREAST CANCER



## **THERMAISCAN**

Early detection is crucial for successful treatment of breast cancer and recovery. The conventional screening program consisting of mammography and ultrasound has some limitations. Younger women (under 45) often have dense breast tissues, making mammography less effective, and a huge variation in ultrasound screening capabilities among clinicians reduces the detection rate.

To supplement existing screening methods, ThermaiScan has developed a non-invasive, non-toxic pre-screening solution for early stage breast cancer development. The solution is cost-effective, combining a pocket-sized thermal camera, Al and a smartphone, and assesses the risk of early stage cancer by measuring temperature differences on skin surfaces. It is simple to use and allows operation by non-specialists.

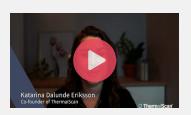
The solution is unaffected by the tissue density, and is therefore highly effective as a screening option for younger women; moreover, the AI brings exceptional accuracy and consistency to the assessment.

By incorporating ThermaiScan's solution, doctors can provide screening to a larger population, thereby achieving higher screening coverage of women and helping to save many lives.

#### Ambitions in Japan:

ThemaiScan is operating in Sweden, Armenia and in India following a win in the prestigious Innovation Challenge hosted by the India-Sweden Healthcare Innovation Centre. ThermaiScan is currently looking for Japanese distribution partners, clients, funding, R&D, and new ideas.

#### Watch Thermaiscan's video pitch



#### **Primary contact:**

Armen Aghinyan, CEO / Thermal Expert armen@thermaiscan.com thermaiscan.com



#### COMPANY DATA

Country:SwedenYear of establishment:2020

Founder: Armen Aghinyan
Co-Founders: Arby Leonian. Are

Arby Leonian, Areg Gevorgyan, Varduhi Shahinyan, Fredrik Höckerberg Sandholm, Dr Nerses Berberian,

Katarina Dalunde Eriksson, Tigran Vardanyan, Piotr Pietrzak

**Revenue 2019 (EUR):** 0 (pre-revenue)

No. of employees: 1-9

**Funding type:** Bootstrapping / Grants

Funding stage: Pre-seed
Accumulated investment: JPY 65 million

Investors:

Self-financed by key members, Almi



Country: Year of establishment: Founders: Revenue 2019 (EUR):

No. of employees:
Funding type:
Funding stage:
Accumulated investment:

Investors:

Denmark 2015

Melissa Azari, Helene Nørlem

10,000 - 99,999

1-9

Grants / Angel Series A JPY 130 million

Steen Ulf Jensen, Jamie Brokker and Johan Brandt (founders of Kahoot! app)

Capnova, EASME,

The Danish Innovation Fund

### CREATING A VISUAL DAILY PLANNER APP DESIGNED TO BE INCLUSIVE FOR PEOPLE WITH ADHD AND AUTISM



# TIIMO

Individuals with neurodiversities such as ADHD and autism often have difficulty planning and organising their everyday routines, and require assistance to get through the day.

Tiimo has developed a digital assistive technology app that helps neurodiverse people effectively structure and plan their day. The app makes it easy for users to create and repeat future activities, add checklists or small reminders, provide discrete and motivational reminders, and celebrate once the activity has been completed.

The app helps the users overcome symptoms like memory loss, anxiety, and inattention, inspires them to focus on the activity at hand, and ultimately helps them become more independent in their daily lives.

The app has been named the "Best Social Impact Startup in Denmark" by Nordic Startup Awards, and is currently used by more than 15,000 people worldwide of all ages and with a wide range of conditions. It is also available in the Japanese app store where it has attracted a lot of attention. The app will soon be fully available in Japanese.

#### **Ambitions in Japan:**

Tiimo has chosen Japan as their first overseas market and are looking for distribution partners, funding, and R&D partnerships to help them get insights and assist with market penetration.

#### Watch Tiimo's video pitch



#### Primary contact:

Helene Lassen Nørlem, Co-Founder / CEO
hln@tiimo.dk
www.tiimoapp.com

### PREVENTING MOBILITY-RELATED INJURY THROUGH WEARABLES, INTUITIVE AIDS AND MACHINE LEARNING



# **WALK WITH PATH**

Walk With Path has developed innovative, award winning products that assist people to be more mobile and prevent falls. Path Finder is a shoe attachment that alleviates 'freezing', a condition primarily seen in patients with Parkinson's Disease. Path Feel is a smart insole that improves balance for people with sensory deficits caused by chronic conditions such as diabetes.

Walk With Path is also working on other novel products for the aging market. Japan's rapidly aging population coupled with reduced access to daytime care workers makes it increasingly important for Japanese society to ensure the independence of its elderly population. The products of Walk With Path have a great deal of potential for supporting more active lives among the elderly, while simultaneously reducing pressure on the Japanese healthcare system.

#### **Ambitions in Japan:**

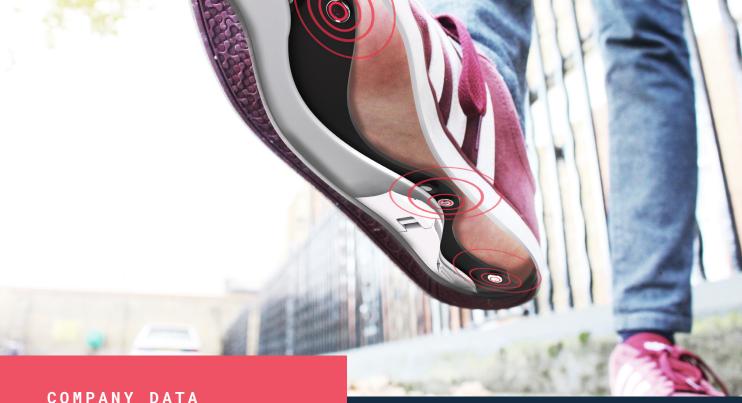
Walk With Path is already active in Hong Kong and will soon be launching in Taiwan. They are keen to expand sales to Japan. They are currently looking for distribution partners and sales channels for their products, Path Finder and Path Feel, along with future products.

#### Watch Walk With Path's video pitch



#### **Primary contact:**

Lise Pape, Founder & Managing Director lise@walkwithpath.com walkwithpath.com



Country: Year of establishment: Founder: Lise Pape Revenue 2019 (EUR): 10.000 - 99.999 No. of employees: Grants / Angel Funding type: Funding stage: Pre-seed JPY 420 million **Accumulated investment: Investors:** MassChallenge

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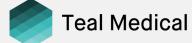
































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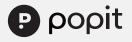
**tiimo** 











#### MEDICON VALLEY

Medicon Valley is the name for the Life Science ecosystem situated in the Greater Copenhagen area, spanning across eastern Denmark and southern Sweden. Some important facts about Medicon Valley:

- · Medicon Valley is the third strongest Life Science cluster in the world, and the most dense.
- Medicon Valley employs over 44,000 people in the private sector, across 350+ biotech, Medtech and pharma companies with local R&D, and four global R&D pharmaceutical companies: Ferring, Novo Nordisk, Lundbeck and LEO Pharma.
- Medicon Valley draws on knowhow and innovation from nine life science universities (all with hospitals), 24,000 life scie ce students, 14,600 researchers and 9.000 PhD students.
- Medicon Valley is a startup hub with 10 incubators and seven science parks with a major focus on life science.



# NORDIC HEALTHTECH HUBS



### **STAKEHOLDER OVERVIEW**

#### PAN-NORDIC ORGANISATIONS

#### HealthTech Nordic (SWE / NO / DK)

The largest community for Nordic Healthtech companies. This is a non-profit collaboration between many of the other organizations listed here, including CO-BIS, Health Tech Hub Copenhagen and Norway Health Tech.

#### Medicon Valley Alliance (SWE / DK)

The main entry point for the Danish-Swedish life science cluster Medicon Valley, providing access to more than 300 members from universities, hospitals, human life science business, regional governments, and service providers.

#### REYKJAVÍK

#### 3 Biomedical Center

An official collaboration between research groups at University of Iceland and other institutions working in biomedical molecular Life Sciences.

#### 0 S L 0

#### 4 Aleap Incubator

A non-profit incubator for Healthtech startups situated in the Oslo Science Park, and supported by Oslo Municipality and Innovation Norway.

#### 6 Norway Health Tech

Norway's main Healthtech cluster and co-working space with 270 members, representing the full value chain of healthcare.

#### COPENHAGEN

#### 6 COBIS

A Biotech incubator offering lab facilities, offices, and community activities for startups, mid-size companies and industry professionals. COBIS also houses The Bioinnovation Institute, an accelerator founded by Novo Nordisk offering mentorship to Life Science entrepreneurs and researchers.

#### 7 Healthtech Hub Copenhagen

A Healthtech hub and co-working space, and the primary access point to the Danish Healthtech startup ecosystem.

#### 8 Welfare Tech

Denmark's national cluster and hub for innovation and business development in healthcare, homecare, and social services. It also serves as the national entry point for international companies who want to enter the Danish market.

#### STOCKHOLM

#### 9 H2 Health Hub

A meeting place and co-working space for the Swedish Healthtech community with access to the Karolinska University Hospital, Karolinska Institutet and a large number of Biotech companies.

#### Stockholm Science City Foundation

A non-profit organization connecting the Life Science community of the Stockholm-Uppsala region, the second strongest in the Nordics after Medicon Valley. For a complete overview of stakeholders in this region, follow this link.

#### 10 SWElife

A strategic innovation program that supports collaboration within academia, industry and healthcare with the goals of strengthening Life Science in Sweden and improving public health.

#### **HELSINKI**

#### 4 Health Capital Helsinki

A public alliance of the largest cities, hospitals, and educational institutions in Finland, connecting international investors and corporations to opportunities and partners within the Finnish Life Science community.

#### **13** Upgraded

A non-profit community of Finnish Healthtech and Welfare tech startups, connecting ecosystem stakeholders and providing information.

#### TALLINN

#### **4** Connected Health

A country-wide partnership between health-related stakeholders in Estonia founded by Science Park Tehnopol, that brings together companies, R&D partners, health and wellness service providers, patient organisations, user communities, and the public sector.

#### 6 Health Founders

A Healthtech accelerator combining expertise from across Estonia's community of founders, partners, and investors.

For a complete overview of the Nordic Life Science ecosystem, follow this link (courtesy of TechBBQ and Upgraded Finland).

This report has been developed by





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