

MIBITON INVESTMENTS



Welcome to the new Mibiton brochure

Mibiton is the right address if you are looking for financing for your equipment or facility. We invest by granting investments (financial lease) for which we request the market interest rate. We do not take an equity interest in your company, but supplement your other forms of investment.

This brochure provides all the information you will need and includes interviews with a number of SMEs in which we have invested. We continue to work alongside other investors to provide optimal support to life sciences companies to help them in achieving their goals.

The small size of our team enables us to make quick decisions. We not only provide financing, but also support SMEs where necessary, and we have been doing this successfully for almost 30 years.

Mibiton has a unique role in the financing environment, so please visit our website if you are looking to finance your equipment.

Liduina Hammer Chairman Mibiton Foundation 2023 ->



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MIBITON, INVESTING IN INNOVATIVE

117 MIBITON FACILITIES IN THE NETHERLANDS

MIBITON INVESTMENTS

The Mibiton foundation (Material Infrastructure Biotechnology Netherlands) was founded in 1994 to stimulate the use of innovative equipment and facilities in the field of the Life Sciences. One hundred seventeen facilities founded between 1994 and Q3 2023 were financed by Mibiton. The total investment has been € 41.8 million, of which € 37.7 million has been revolved. The programmes of Mibiton were specifically developed to meet the market's requirements. These programmes focus on the stimulation of public-private collaborations (Mibiton), the foundation of spin-outs from research organizations (BioPartner)

and the development of young companies (Solo programme).

The Mibiton Share fund, focusing on Life Sciences development- and production facilities for SMEs, has been operational since 2005. Investments are structured as shared lease arrangements. The Mibiton Science Fund (2010) focuses on investing in young spin-off companies, which share the equipment with the Research Organisation. The Mibiton organization consists of the Management Team and the 6-membered Board with representatives from the scientific, industrial and financial community. The Ministry of Economic Affairs and Climate Policy has been co-financing Mibiton until 2019.

DUTCH LIFE SCIENCES FACILITIES

Regional spread of the 117 Mibiton investments in the Netherlands represent a total investment of \in 41.8 million. For each region, the investments are specified in medical – (red), agro and food related – (green) and industrial (white) Life Sciences facilities.





 ${\ensuremath{\, \in }}$ 41.8 million has been invested in 117 Life Sciences facilities.

€ 37.7 million revolved and reinvested.

1. MIBITON

Public-private sharing of facilities > 26 investments. (€ 10.8 million for soft loans)



2. BIOPARTNER

Sharing of facilities between start-up companies and academic centres > 11 investments. (€ 3.7 million for soft loans)







MIBITON CAN MOVE FORWARD FINANCIALLY FOR YEARS TO COME

"For many years I have been involved in various organisations assessing funding applications from startups, mainly in the life sciences, but Mibiton is where I have enjoyed it the most. In the team, things are very professional but also very sociable", says Colja Laane, who stepped down in December 2022 after 13 years as chairman.

He looks back with satisfaction. "Mibiton has been around for 29 years and is still going strong. We don't need to do any marketing. People know how to find us. The six-member board is very familiar with biotechnology and its financing, and serves the full breadth of life sciences. And the support from Network Office Director Vera Blom and Investment Manager Kees Recourt is simply excellent.

Usually, we decide on 4-5 investments per year. Last year, there were many more. The annual turnover, i.e. financing granted, was more than € 2.5 million compared to around € 1.5 million normally. "I honestly expected the larger investment funds to take over some of our business, but they haven't done. While their numbers have increased considerably, they still prefer to work in partnership with us, mainly because we don't take shares. The fact that more funds are taking an interest in the sector therefore only works in our favour", Laane explains.

Startups can purchase all kinds of equipment by leasing it from Mibiton.

They usually repay the amount they borrow within four years, after which they own the equipment both economically and legally. For founders and investors, this means less risk at start-up. Investors prefer not to put their money into equipment which they often refer to as 'dead capital'.

"Mibiton is here to give life sciences startups momentum. We are both commercially astute and idealistic; our main task is to stimulate the sector. We don't need to earn massive profits and we only charge market interest rates in order to sustain the Mibiton fund. In recent years, we have lingered at around € 8-10 million", Laane said.

Until 2022, the fund remained slightly smaller in size, because it wasn't possible to fully recover the management costs of the office in The Hague. We also had to pay negative interest on the funds held in the bank. But in 2022, there was a windfall. "In 2005, the then Ministry of Economic Affairs 'forced' us to take a stake in the fill & finish company BioConnection in

'Mibiton is here to give life sciences startups momentum. We are both commercially astute and idealistic'

Colja Laane Chairman until 31-12-2022



Oss, which continued independently after the sale of Organon to Schering-Plough and then MSD. Last year, however, the Flemish investor Gimv took a majority stake in BioConnection, reducing our stake from 13 per cent to 6 per cent. 'We reinvested part of the proceeds from the sale of our shares; that was the deal, and about \in 3 million was credited to our account', Laane explains.

The Ministry of Economic Affairs and Climate agreed that Mibiton should keep this amount for itself in line with its decision in 2019 that the fund would continue independently. Laane: "Before then, the fund was already more than 100 per cent revolving, but on balance, the management costs were just a bit more than the amount of interest generated by the investments. Therefore, the ministry contributed to the management costs so that we could break even".

During the 25th anniversary, Laane suggested to an Economic Affairs representative that Mibiton be hived off from the ministry, as we both felt their role was becoming increasingly limited. "There was € 8 million in the pot at the time. We could make do with that for years to come. Since that money had already been revolved many times, it had in fact been privatised, but formally it was still government money. The director-general agreed, so Mibiton was able to continue independently. He complimented us on what we had 'The team also discussed whether it might not be an idea for Mibiton to invest its money to get more returns'

achieved in 25 years and we thanked the ministry and the Netherlands Enterprise Agency for their years of support. 'Should you ever decide to call it a day, we would like to have the money back', he said. "So, that's a pretty good arrangement", Laane said.

"The team also discussed whether it might not be an idea for Mibiton to invest its money to get more returns. However, the conclusion was that we shouldn't do that, as it would create too much risk and hassle, and we should just carry on doing what we have been good at for years", Laane adds.

When Mibiton's pot turned out to be well filled after the deal with Gimv in April 2022, Laane thought it was a good time to say goodbye. He is still chairman of the evaluation committee of Health Holland, the Top Sector for Life Sciences & Health, sits on a number of assessment committees of the scientific funding organisations ZonMw and NWO, and is still keen – if allowed – to take part in Mibiton's social outings, which other former board members also attend •

VERA BLOM, SAYS GOODBYE

Vera Blom Network Office Director until 31-12-2023

"In recent decades, biotechnology has evolved substantially. In the meantime this field of expertise has become more socially acceptable. When I came to work here almost 29 years ago, the term 'genetic engineering' was still in use. Thanks to Mibiton and other organisations 'modified' has now become a widespread term. I believe this has been a significant change during that period."

"It's been a joy to work here"

These are words by Vera Blom, Mibiton's network office director, who will be retiring in December. She has been with the fund from the onset in 1994. At that time, she was working at Niaba, the former trade association of companies in industrial and agricultural biotechnology, which negotiated with the Ministry of Economic Affairs about investing natural gas revenues in biotechnological innovation. The idea was then conceived to make capital available to universities and research schools enabling them to buy highquality equipment for research. This resulted in the establishment of Mibiton, which provided soft loans for this purpose. Once at least 50% of these loans were repaid after four or five years, the capital became available again for new investments.

"We started with universities and research schools who applied for investments for equipment. This was followed by equipment for university spin-offs, and then the Share Fund was set up for the purchase of equipment to be shared by multiple, young companies. Finally, the Solo Fund was added to finance equipment for solo operating young companies in life sciences. Blom explains: "Mibiton now focuses on the Solo Fund, however, we are still open to applications for the Share Fund. This is how it's developed".

From its inception, Blom conducted Mibiton's administration while she was still involved in Niaba. She officially joined almost seven years later, in May 2000. She worked closely with the investment manager at the time, Hans Grande, the predecessor of Kees Recourt, who is the current investment manager.

SHORT LINES

"I had to get used to working in such a small organisation with a five-member board and an investment manager, because the lines of communication are very short here. The government, where I used to work, involved a great deal of paperwork everywhere. Here, I can call an accountant, lawyer or board member directly, as well as the CEOs of the companies involved. If an issue comes up, we immediately respond to it and solve it. That's what I have loved about working here."

She didn't mind being the only one working at Mibiton's office. "Many people from other organisations are working here in the building. We talk to each other in the pantry or have a corridor chat, which I really enjoy. During covid times, I didn't like working at home at all and at some point I returned to the office to work half days."

The applications from companies for funding are first received by Blom. After collecting the required details, she informs the investment manager and arranges a meeting between him and the company's CEO. "Kees Recourt decides whether an application goes to the board. If that happens, he supervises the drafting of the application and submits it as a finished article to the board. A decision is made by the board following a presentation by the company's CEO. If that's a 'yes' or 'yes provided that', I return to the application process to prepare the fee letter and the contract. Subsequently, further contacts on the financial side and monitoring of the entire process runs through me," says Blom.

There is currently a long list of investment applications. The board can deal with three to four per meeting and meets four times a year. "If necessary, we convene an interim meeting. It does happen that no investments are added. That does not mean that all applications fall through. Sometimes, for example, a company has to apply for other funding before an application can be granted. Or some companies, over time, make a second application in addition to their first application and investment. It is all running tremendously well. Through word-of-mouth advertising, people know how to find us," says Blom.

Since 1994, Mibiton has made 117 investments. Six were added in 2022, which is slightly more than the average number added per year.

Blom points out that young companies in their early stages do not qualify for financing expensive equipment from banks or other capital providers who consider it too risky.

THE RISK IS NOT TOO BAD

"The risk is not too bad in practice. Thanks to our investment manager and board members who are well versed in the world of finance and business, have knowledge of white, red or green biotechnology and can therefore make an informed assessment of the investments that are promising, we have faced only one bankruptcy and one bankruptcy where we were able to resell the equipment in all these years," Blom explains. "With the online meetings things have become a bit more distant, but it works much faster and saves a lot of travelling time. Half of the board meetings are held physically though."

"We also owe our success to the fact that we are flexible with companies that encounter problems. We don't tell them to just stick to their commitment to repay, instead, we find a solution together."

Little has changed in Mibiton's successful formula over the years. However, much has now been digitised. "With the online meetings things have become a bit more distant, but it works much faster and saves a lot of travelling time. Half of the board meetings are held physically though."

Blom says that she never considered another job. "I have learnt so much here. More and more tasks have been added. That's created a lot of dynamic. When I get up in the morning, I don't know what the day will bring. I enjoy that very much and I love to move swiftly between different tasks."





At the same time, this job did tie her down and she would, for example, always take a laptop and some bank cards with her on holidays, to make sure that payments could continue. From next year, that will no longer be necessary. She and her husband are going to Australia and New Zealand where they can enjoy their holidays in complete freedom. Blom looks back with gratitude on almost thirty years of working for Mibiton: "I have enjoyed working with all the board members. I also have an excellent relationship with Kees Recourt, we complement each other and discuss thoughts and ideas with each other when necessary. In fact, I'm still in touch with several former board members. Mibiton is like a warm blanket with a trove of knowledge." •

> **Cindy Gerhardt** Board member from 01-01-2023

NEW NETWORK OFFICE DIRECTOR



Anne-Marie Boers will permanently take over Vera Blom's tasks as network office director from 1 January 2024 after a two-month training period. "I have a financial background and have worked with entrepreneurs all my working life," she says. "My duties included unburdening, looking after business matters, being the central hub, keeping track of finances and conducting the management of the administration."

She looks forward to continuing with this type of work at Mibiton. "Life Sciences is an entirely new industry for me, where I expect to make contacts with many interesting people and companies."

"In addition, I will try to emulate Vera Blom, to make sure that in time, I will be a similarly useful oracle for everyone on everything related to the great and inspiring work of Mibiton. I am looking forward to it!" •

"WHITE BIOTECHNOLOGY CAN CONTRIBUTE TO A BETTER CLIMATE AND MORE BIODIVERSITY, BUT IT WON'T HAPPEN OVERNIGHT"

The Netherlands is strong in innovations within white biotechnology. If we want to reap the benefits of this, we need to help young companies get through the scale-up phase. Just helping them get started is not enough. Without the right support, they cannot commercialise their technology, or they disappear abroad, which is a missed opportunity for the growth of white biotech in the Netherlands. So says Cindy Gerhardt, who has been on the board of Mibiton since 1 January 2023.

As director of the open-innovation hub Planet B.io at the Biotech Campus Delft, she feels closely involved in the fortunes of the 18 biotechnology companies operating there. Since 2018 she has been leading the metamorphosis of DSM's industrial estate in Delft, the former Gist-brocades site, having previously earned her spurs in the field of biotechnology in science and business. "During my career at Unilever and DSM, I learned to build bridges between *research* and *business*, and between internal and external organisations, which can differ considerably in culture. At Planet B.io, there are also public parties and investors around the table. Building bridges suits me well."

Meanwhile, Planet B.io is expanding. A second building is opening in August and 15 new laboratories will be added. Insurance company a.s.r.'s Dutch Science Park Fund is also investing € 500 million into new buildings on the campus over the next 20 years.

IMPORTANT LINK

Gerhardt sees Mibiton as an important link in the successful start-up of life sciences companies. "It is not easy for early-stage companies to finance the purchase of expensive equipment. Mibiton provides this, enabling these companies to get off the ground. Mibiton doesn't need to get rich from it and we keep the organisation as small as possible, so that we can offer our loans on attractive terms. You shouldn't saddle young companies with financial constructions that could cause them more trouble than they're worth later", Gerhardt argues.

Almost all young companies in white biotechnology have a long road ahead of them, according to Gerhardt. The sector is capital-intensive. After the initial purchase of laboratory equipment, which Mibiton can help with, at some point a medium-scale *proof-of-principle* is needed for the new product or process.

Gerhardt: "Suppose you develop a new biobased molecule or food ingredient, you can perform fermentations for this in the lab in bioreactors of about 20 litres. But for commercialisation, you need bioreactors of a few thousand or even a few hundred thousand litres! You have to carry out the scale-up process in small steps at a time, because the micro-organisms or cells in the bioreactors are sensitive to changes in the supply of, say, food or oxygen, which can reduce the efficiency of production."

Financing that scale-up process is not easy and is therefore sometimes referred to as the *valley of death*. A shared scale-up facility, where companies can temporarily hire plants and operators to scale up their process, can provide critical support in that process.

"Unfortunately, last year the only biotechnology scale-up facility in the Netherlands, the BPF (Bioprocess Pilot Facility - ed.) in Delft, went bust. This shows that scaling up is not only difficult for companies, but also for parties offering shared scale-up infrastructure. That is why I advocate a Dutch policy in which the potential of biotechnology as a sustainable production solution is "It is not easy for early-stage companies to finance the purchase of expensive equipment. Mibiton provides this, enabling these companies to get off the ground"

firmly embedded. Shared scale-up facilities should be seen as an extension of research infrastructure, not as a commercial activity. This makes discussions around public funding and state support much easier. At the same time, private investors need to recognise that scale-up is a bottleneck for the companies in their portfolio and that financing shared facilities is therefore an efficient accelerator for a successful exit", says Gerhardt.

WHITE BIOTECH GOOD FOR ECONOMY AND CLIMATE

Gerhardt emphasises that there are huge benefits to be gained from white biotech for climate, biodiversity, animal welfare and *resilience*. White biotech involves replacing fossil raw materials with renewable biological raw materials, for example for the production of biofuel or bioplastics, and also replacing food derived from living animals or plants with food produced by cells, so-called cellular agriculture. As the world's second exporter of agricultural products, Gerhardt says the Netherlands has much to lose in the transition to a sustainable food supply, but also much to gain. "In Cellular Agriculture, we do not keep animals, but grow animal products like meat, fish, chicken, eggs, proteins, fats from cells", she says. Cultured meat is a Dutch discovery, which several Dutch start-ups and two scale-ups, MosaMeat and Meatable, are working on. Those two scale-ups now produce in Singapore, and not in the Netherlands, because of the scale-up facilities available and faster regulatory approval of the final products", Gerhardt explains.

Gerhardt: "If we want to have and to keep sustainable production in the Netherlands, we will have to cherish our start-ups and scale-ups, and optimise all preconditions in terms of scale-up infrastructure, venture capital and legislation. For that matter, I remain proud of the Netherlands and our position in white biotechnology. We have a huge knowledge base and I see a steady increase in the number of innovative start-ups. We are small enough to bring all stakeholders together, we have a good collaboration culture and by building the right bridges we can maintain and even expand our strong global position in biotech. With Mibiton, I hope to make many more useful contributions to all entrepreneurs who are using biotech to work towards a sustainable world." •



RECENT INVESTMENTS 2022

MIBITON SOLO PROGRAMME

FacilityEquipment cellular biology laboratoryInvestment€ 215,923Project leaderT. BarfCompanyArtica Therapeutics



Tjeerd Barf (CEO), Charnelle Tromedjo and Rick Boergonje (both Scientist Technician), Huub Sijben (Research Scientist), Arwin Ridder (COO) and Ad IJzerman (Chair SAB)

"The support of Mibiton has enabled Artica to accelerate its drug discovery and development programs, unlock the full potential of its unique technology platform and generate innovative and life-changing medicines."

Artica Therapeutics (2020) is focusing on the development of small molecule medicines to treat diseases of high unmet medical need, e.g. inflammatory diseases. The company has developed specific expertise to target so-called G protein-coupled receptors (GPCRs) which were previously difficult to target for drug development. To equip the R&D facilities at the Leiden Bio Science Park, the company has successfully applied for a Mibiton lease funding.

Facility	Development of a Ventricular Assist Device for temporary support of the heart function during times of cardiac distress	
nvestment	€ 485,000	
Project leader	F. Ludwig	
Company	CardiacBooster	



"We are very happy with the support by Mibiton. The financing of much needed R&D equipment will allow CardiacBooster to make capital equipment investments earlier than planned and accelerate device development." says Daniël van Dort, founder and CSO at CardiacBooster."

CardiacBooster (2018) is a spin-off company of the Nijmegen Radboud UMC, developing a percutaneous VenticularAssist Device (pVAD). The pVAD micropump supports the heart function during and after angioplasty procedures, as well as in patients suffering a cardiogenic shock. The Mibiton financing will be used to acquire R&D equipment, applied during the preclinical verification and validation phases of the pVAD device. Thereafter, the CardiacBooster pVAD device will be tested clinically to support regulatory approvals (CE certification and FDA approval).



Facility Investment

Company

R&D equipment for novel drug development laboratory € 365,722 Proiect leader Mrs. E. van Beest Hybridize Therapeutics



Eric van der Veer (CIO and Founder)

"Thanks to the loan we received from Mibiton, we were able to fully equip our R&D laboratories. This has been instrumental in helping us execute our research efforts and bringing our programs closer to the clinic. We're grateful for the support and partnership of Mibiton in helping us achieve our goals."

Hybridize Therapeutics (2019) is a spin-off of the Leiden UMC, developing RNA therapeutics to treat

kidney diseases. Current focus areas are the BK virus- and fibrosis programs. The BK-virus program aims to develop an antisense

oligonucleotide therapy to supress virus expression after a kidney transplantation. The company has moved to a BioPartner facility at the Leiden Bio Science Park and uses the Mibiton lease fund to equip the R&D laboratories.

Facility	Regenerative stents; R&D equipment to furnish the novel	
	laboratory	
Investment	€ 443,511	
Project leader	B. Sanders	
Company	STENTIT	



"The opening of our own research laboratory has been one of the most awaited moments for our team. We are extremely grateful to Mibiton for helping us turn this dream into reality. With this lab, we now have the freedom to develop and test our regenerative stents in-house - at any time, with peace of mind, and via the sophisticated laboratory equipment this research (and the patients of the future) deserve. Thank you, Mibiton, for your trust and support"

STENTIT (2017) is a Dutch-based start-up which develops regenerative stents - stents that, once implanted in patients with cardiovascular diseases, can hold blood vessels open while healing them. After successfully proving the regenerative power of these stents in preclinical studies, STENTIT is now focusing

on the first therapeutic application - the treatment of atherosclerosis in patients at risk of amputation. The company, a spin-off from the Eindhoven University of Technology, has recently moved to the High Tech Campus, Eindhoven. The Mibiton Solo financing is used to fully equip STENTIT's R&D facilities.



Facility	Manometric ManoX 3D scanners
Investment	€ 288,509
Project leader	R. Jones
Company	Manometric



Robin Jones (Founder)

"An orthosis or prosthetic is life-changing, and if it is designed with skill and care, it brings color back to the life of the wearer. But O&P did not change much for the last 40 years. And today, it's on the verge of being disrupted by advanced 3D technology and AI. With a laser-focus on the patient, unique, proprietary 3D technology, innovative orthoses and our diverse and talented team, we believe we can define the new standard in orthopedic care. Mibiton enables us to place our 3D hand scanner in clinics throughout The Netherlands."

Manometric (2017) with roots at Delft University is developing a disrupting technology to create hand- and wrist braces for patients such as suffering from rheumatism. Essentially, the Manox 2.0 system scans the patients complete hand and/or wrist, creating a 3D model using proprietary software. This model is used to 3D print a tailormade brace. To enable scanning of patients at hospitals and medical clinics throughout the Netherlands, Manometric produces the next series of Manox 2.0 scanners using the Mibiton financial lease facility.

Facility	Components for Pintuition Base Units and Probes	
Investment	€ 333,255	
Project leader	B. Schermers	
Company	Sirius Medical	



Vladislava Dinkova (R&D Engineer)

"Sirius is growing dramatically, and with that the required supply chain investments grow naturally as well. The current climate is such that components need to be ordered up to years in advance to facilitate manufacturing continuity, resulting in significant cash-flow challenges. Luckily, Mibiton stepped in to close this gap by prefinancing our components, enabling us to more flexibly scale and focus on company growth."

Sirius Medical Systems (2017) is

marketing its Sirius Pintuition medical device, which provides surgical navigation of breast tumours in a patientfriendly procedure. Instead of inserting a metal anchor wire to localize a breast tumour during surgery, a tiny, rice-grain sized biocompatible magnet (the Pintuition Seed) is implanted. This Seed can be detected and localized by the surgeon using the Pintuition Detector. Due to the macro-economic climate, Sirius' supply chain was challenged, and significant upfront investments were required to facilitate its bright future. In that light, the Mibiton investment instrument was used to prefinance components for an additional significant number of base units and probes to accelerate sales in Europe and the USA.



PREVIOUS MIBITON INVESTMENTS 2005-2021

VectorY

Facility Investment

Project leader

Project leader

AAV Gene Therapy Pilot Plant Facilities € 567.022 S. van Deventer

Facility Investment

Company

Developing a CRISPR/Cas9 gene editing technology for DMD € 219,801 Mrs. S. Weijers NTrans Technologies

Facility

Company

Circular ingredients from food companies' side-streams Investment € 198.358 Project leader C. Cabrera Company Greencovery

Facility Investment Project leader

Expansion DAB laboratory € 312.497 E. van der Meer and mrs K. Herben-Steinbusch

Company Delft Advanced Biofuels (DAB)



Facility	Dynamic test facility for Meniscus prothesis development
Investment	€ 214,676
Project leader	Mrs. A. Brinks
Company	ATRO Medical

Facility Investment

Company

Project leader

HTC Scale-up Facility at Echo Pharmaceuticals € 177,507 J. Hooft Echo Pharmaceuticals

Liquid handling robot for single-cell sequencing

Facility

Investment Project leader Company

€ 490,458

Facility Investment Project leader Company

Chemical analytical lab equipment € 178,972 K. van Bochove Datura

M. Muraro and mrs J. Vivié

Single Cell Discoveries

Facility

Investment

Imaging equipment for analysing cellular screening assays € 238,583

Project leader Company

S. Braam Ncardia

Facility

Investment Project leader Company

Solutions for tissue-sparing tumor surgery € 355,520

H. Martens

Sirius Medical

Facility

Investment Project leader Company

Nanoflowsizers and diagnostic lab facility € 197,682 A. Gerich, MSc (CEO) InProcess-LSP

Facility

Investment Project leader Company

Second pharmaceutical filling and finish production line € 400,000 A. Willemse, PhD (CEO) BioConnection

Facility Investment Project leader Company	Molecular eDNA facilities € 134,610 K. van Bochove, MSc (CEO) Datura Molecular Solutions
Facility Investment Project leader Company	CarbExplore Research & CarbExplore Sweeteners lab equipment € 180,769 S. Moolenaar, MSc (CEO) CarbExplore
Facility Investment Project leader Company	Cleanmeat: the development and production of animal-friendly, sustainable and scalable lab-grown meat products. € 166,838 K. de Nood, BA, MSc (CEO) Meatable
Facility Investment Project leader Company	MicroSure 'Motion Stabilizers' € 337,392 L. Schiemanck (COO) MicroSure
Facility Investment Project leader Company	Transforming CO ₂ from an issue to a valuable product, powered by the sun € 397,973 V. de Bruijn MSc MBA (CEO) Photanol
Facility Investment Project leader Company	Production of new medical device (DeltaScan) for monitoring delirium € 328,928 R. van Merkerk PhD MSc (CEO) Prolira
Facility	Evolution inspired medicine

Investment€ 176,000Project leaderS. Nijman PhD (Founder & Managing Director)CompanyScenic Biotech

Facility	Equipment to purify Matisse M6229 to study the clinical impact on sepsis
Investment	€ 250,000
Project leader	B. Kool PharmD and H. Relouw (CFO)
Company	Matisse Pharmaceuticals

Facility

Investment

Diagnostic equipment for the preclinical analysis of second generation CriPec® nanomedicines. € 248,136

Project leaderJ. Holthuis PhDCompanyCristal Therapeutics

Facility

Investment€ 196,995Project leaderJ. van den BergCompanyFlowid

SpinPro reactor adaptation € 196,995





Facility	Bioprocess equipment for upscaling of cardiomyocytes production
Investment	€ 172,749
Project leader	S. Braam PhD
Company	Ncardia (Pluriomics)
Facility	Semi-automatic production line for dip-coating endoscopic biopsy needles with Sono-Coat
Investment	€ 248,552
Project leader	H. Breek MD
Company	Encapson
Facility	Certified facility for processing of biological tissues

Investment Project leader Company

€ 254,700 Mrs. H. Valster HCM Medical



Facility	Facility to organize Pharmaceutical Compound Libraries
Investment	€ 370,000
Project leader	J. Tijhuis PhD
Company	Specs Compound Handling

Facility	Sp
Investment	€ '
Project leader	W.
Company	Flo

pinning Disc Production - SpinPro 150,000 Stam MsC lowid

Accelerate configuration of GENALICE VAULT servers to process
Next Generation Sequencing Data
€ 100,000

Investment Project leader Company

Facility

Facility

J. Lunenberg Genalice

Facility	Multispectral Normalized Imaging System enabling real time
	surgery guidance

Investment € 347.118 Project leader Company

T. van den Hoven	
Surgvision	

Equipment: Labscale manufacturing and characterization
of Nanoparticles
€ 250,252

Investment J.J.M. Holthuis PhD Project leader Company **Cristal Therapeutics**

M. Zwaal

DCPrime

Facility	Expansion of Lanthio Pharma's lantipeptide production- and analysis facility
Investment	€ 164,009
Project leader	G. Moll PhD
Company	Lanthio Pharma

Facility	Equipment for the novel DCPrime facility at the BioPartner
	Centre Leiden
Investment	€ 286,857

Project leader Company



Facility	Facility to produce and analyse vaccine proteins
Investment	€ 259,416
Project leader	C.J. Leenhouts PhD, G.J. Schouten PhD
Company	Mucosis

Facility

Investment

Development of a novel disposable Trocar system to perform brain surgery € 183.750

Project leader Company

M.J.S. Begemann MSc Neurendo

Facility

Microscopic- and analytical facility to unravel the blood-brain barrier mechanism € 111.183 W. van Weperen MSc MBA

Project leader Company

Investment

Production Facility

Lab. Facility

to-BBB

Investment Proiect leader Company

€ 248.150 Ir. P.B. Hol **Delphi Bioscience**

Facility Investment

Project leader Company

Facility

Feeding the Future, Facilities for high end products from algae € 346,000 G.F. Woerlee PhD FeyeCon, CleanAlgae SA / Algae Biotech SA

Facility Investment

FlexArrayer lease to accelerate global expansion € 204,957 F. Dom MSc

Project leader FlexGen Company

Facility

Investment € 161,799 Project leader Mrs. R. Lamers PhD, Mrs. M. Wordragen PhD Company NSure

Facility	3D Fibre deposition equipment
Investment	€ 48,096
Project leader	J. Riesle PhD
Company	CellCoTec

Facility

Investment € 97,614 Project leader T. Logtenberg PhD Merus Biopharmaceuticals Company

Facility

Investment Company

SKIN Analyzer € 400,000 Project leaders G.J. Puppels PhD, M.P. Dijkshoorn MSc **River Diagnostics**

Personalizing Cancer diagnosis

Application for an Octet biosensor

Facility

Investment € 168,300 Project leader H.E. Viëtor PhD Company

Facility

Investment € 149,183 Project leaders A. van Brakel, L.N. Sierkstra PhD Company BAC

Skyline Diagnostics

Octet en AKTA explorer

Facility

Facility

Investment Project leader Company

Expansion of PROXY Laboratories' analytical equipment

€ 90,488 R.E. Santing PhD **PROXY** Laboratories

AKTA Process

Investment Company

€ 170,000 Project leaders A. van Brakel, L.N. Sierkstra PhD BAC

Facility

Gene Expression Profiling for Molecular Diagnostics of Leukaemia and other Malignancies

€ 165,194 Investment Project leaders H.E. Viëtor PhD, Prof. B. Löwenberg PhD Company **Skyline Diagnostics**



NEW PUMP AIMS TO INCREASE SURVIVAL OF HEART PATIENTS

Florian Ludwig CEO of CardiacBooster After major heart surgery or a heart attack, patients are often supported with a heart assist device to help offload the weakened heart and maintain normal blood pressure. This support allows the heart to recover and helps to protect other vital organs, such as the kidneys, from further damage.

CardiacBooster, a spin-off from the Radboud University in Nijmegen, develops a cardiac assist device that is designed with the goal of improving patient support above and beyond existing pumps. Its innovative design aims to provide strong pump support without significantly damaging red blood cells, and allowing for a small delivery profile. The company expects to start clinical trials in the near future.

"Our device is an innovative pump system that is designed to provide greater flow, ease of use and improved safety compared to existing pump systems", says Florian Ludwig, CEO of CardiacBooster. "Existing clinical data indicates that patient survival in cardiogenic shock may increase with pump capacity. With our novel design, we are aiming to provide a device with stronger pump support to the interventional cardiologist. In addition, we aim to make it easier for the physician operator to deliver the pump (which is located at the tip of a catheter) to its target location within the patient. To deliver the device, the interventional cardiologist introduces the catheter device into a patient's vasculature

at an access point in the groin, and subsequently navigates the catheter (a long thin tube) through the blood vessel system to the heart. There, the cardiologist places the pump in the left ventricular heart chamber from which it pumps oxygen-rich blood into the aorta. This pump is a temporary device. It is typically removed after a few hours or days, depending upon the state of the patient and the indication for using the device."

'Percutaneous ventricular assist device' is the official name of these pumps, whereby 'percutaneous' stands for access through the skin, in this case in the groin. 'Ventricular' or 'ventricle' is the heart chamber that pumps the blood through the body.

NOVEL, DIFFERENTIATED PUMPING MECHANISM

Most of the current blood pump manufacturers, including the market leader Abiomed (part of the Johnson & Johnson medical group), use a rotating impeller (a small spiral pump screw) to pump blood. Such an impeller must be quite small to fit onto a cardiovascular device and as a result has to rotate at high speed to generate clinically meaningful flow.

"Rather than rotating an impeller blade, our device works by expanding and contracting within the heart, similar to the action of the heart muscle. With this mechanism, we expect to achieve higher flow than existing pumps, at a smaller

"We were able to lease some test and production equipment earlier than planned, which allows us to accelerate product development"

pump size, such that interventional cardiologists can easily place it. In addition, we expect this novel and differentiated pumping mechanism to be gentler on red blood cells and cause less hemolysis", Ludwig explains.

"The goal is to support the heart during a high-risk stenting procedure, and/or give it time to rest and recover from an injury such as sustained in a severe heart attack complicated by cardiogenic shock. Only about half of cardiogenic shock patients survive. With a more powerful pump, we expect survival rates to increase", Ludwig explains.

CardiacBooster places high value on its intellectual property and is diligently building its patent portfolio. That patent portfolio was reviewed by an independent law firm during the due diligence for the last financing round and additional patent applications have been filed since.

DEVELOPMENT STARTED AT RADBOUDUMC

CardiacBooster's pumping concept was conceived more than a decade ago by Daniël van Dort, who is currently Chief Scientific Officer at the company. At that time, he worked as a researcher at

the Radboud University Medical Center. where he still works part-time. In 2018, he founded CardiacBooster together with Thuja Capital and Radboudumc, in order to accelerate development. Thuja Capital is a Dutch venture fund who invests in medtech and pharma/biotech companies. After its incorporation, CardiacBooster received support from the RedMedTech Discovery Fund, the Rabobank (via an AIL, a subordinated Innovation loan), as well as from MIT, **EIT Health Headstart and Eurostars** grants. The RedMedTech Discovery Fund provides financial support for start-ups developing innovative medical technology, especially in the East of the Netherlands.

"Thuja is different from other investment firms in that it dares to invest money in innovative development at an early stage. This means that Thuja is more involved than is typical in the early stages of a project", Ludwig explains.

In 2022, two US life science investors joined CardiacBooster's shareholder base: Lightstone Ventures and Santé Ventures. Together with Thuja Capital, they invested a significant amount in CardiacBooster's Series A financing round. The funds are being used to accelerate development. The company's aim is to enter clinical trials as soon as possible, with cardiac patients receiving temporary support from this device under controlled study conditions. "Before that happens, we must first complete design verification and pass various pre-clinical tests to ensure proper working of the device and to minimize the residual risk to study patients", Ludwig explains.

CardiacBooster has strengthened its team to go through this trajectory. Since last year, the number of CardiacBooster employees has more than doubled. "We have built up a sizeable team across two locations. A part of the team is



located in Nijmegen, Netherlands, and a part in Galway, Ireland. We also work with suppliers specialized in catheter development and manufacturing."

In Q4 of 2022, CardiacBooster received € 485,000 in financing from Mibiton Solo. Mibiton provides funding in the form a financial leasing structure through which the company has purchased equipment, inter alia, to test the characteristics of catheters. Among other, a bench model of the human vasculature has been purchased to test whether the catheter and pump can be properly routed to the heart through the body's blood vessels.

One of the conditions of the Solo financing is that the amount is repaid in instalments within four or five years, with eight percent interest applicable on the outstanding amount. Despite the relatively high interest rates, Ludwig finds this form of financing attractive: "We were able to lease some test and production equipment earlier than planned, which allows us to accelerate product development. Given the fast growth of our company, we expect that the company's value creation will by far outpace the interest costs", says Ludwig.

CLINICAL INVESTIGATION PROVIDES QUICK READ-OUT

Clinical trials can start once design validation and assessment of the safety and performance of the device has been successfully completed in non-clinical models. "Physician investigators will look to evaluate pump performance and handling, and pay close attention to patient recovery and outcomes at 30 days after the procedure. As the pump is removed after a few hours or a few days (depending on the state of the patient and the indication for use), no implant remains. This allows physicians to determine the success of the temporary support of the heart rather quickly. With a hip prosthesis, you want to know if it still works after five years. In our case, it will be clear within a few days whether the pump is functioning properly, and the treatment is successful", says Ludwig.

It is difficult to predict how soon the device will be allowed into the US and European markets. "It depends on which clinical studies the US FDA (Food & Drug Administration) requires and what additional questions will be asked. We obviously want to launch the pump on the market as soon as possible, but it will certainly take a few years before we can introduce it", Ludwig explains.

CardiacBooster is likely to produce the pump in-house, in collaboration with suppliers. If necessary, the company may decide to subcontract the production to another company with an appropriate production line, but this choice has not yet been made. "In the first instance, CardiacBooster will retain close control over the building and quality control of the device", says Ludwig.

CREATING VALUE

As a medical device start-up, CardiacBooster focuses on creating value by reducing technical and other risks associated with developing a new technology. Innovative technology start-ups such as CardiacBooster are typically financed by venture capital from venture investors with the intention of addressing an unmet clinical need and an attractive market. While CardiacBooster is prepared to execute the development of its device independently, there are potential advantages in an early partnership with a larger strategic. The structure and scale of a larger company allows to accelerate execution of larger clinical studies and ultimately make the device available to physicians and patients worldwide more quickly than would be possible for CardiacBooster on its own. In such a partnership, the larger strategic company benefits because it gets access to innovative technology, allowing it to better serve its customers", says Ludwig.

CardiacBooster anticipates a potential growth of the global market for supporting heart pumps to up to € 10 billion per year. "There are opportunities for growth, especially if pumps become easier to insert and maintain, allowing interventional cardiologists to use them more broadly", Ludwig predicts. •



The Mibiton foundation invests in the Dutch Life Sciences infrastructure and has three funds: Science, Solo and Share. The investments are in general provided as financial lease constructions.

Mibiton Science:

supports spin off companies still incubating at the premises of the Research organization. The equipment or facilities are shared with the research organization, which provide a guarantee to partly compensate for the investment. Maximal investment of € 250,000,-

Mibiton Solo:

provides loans up to € 500,000,- to acquire equipment for young Life Sciences companies. The cash flow managing facilities support can for instance be used to equip a state-ofthe-art laboratory or to develop novel equipment.

Mibiton Share:

facilities are exploited by at least two partners, from which at least one is a Life Sciences SME. Part of the facilities or equipment may be installed at each partner. Investments may accumulate up to € 650,000,-

MIBITON SHARE PROGRAMME

Facility

Investment

Project leader Company ISO Class 8 cleanroom environment and associated equipment for the manufacture of terminally sterilized medical devices € 399,010 Mrs. V. Fernandez PhD and G. Woerlee PhD Echo Pharmaceuticals FeyeCon D&I

Facility

Partner

High Pressure Pasteurisation of Food products

Investment Project leader Company Partner

nt € 850,000 eader Ir. J.C.M. van Rijsingen / Pascal Processing Proverka



Investment € 170,000 Project leader W. de Heij MsC Company TOP	s in a GMP-certified
Project leader W. de Heij MsC Company TOP	s in a GMP-certified
Company TOP	s in a GMP-certified
	s in a GMP-certified
Partner PhytoNExT	s in a GMP-certified
Facility Oligonucleotide-based drug analysis environment	
Investment € 117,907	
Project leader D.A. de Boer, R.E. Santing PhD	
Companies ProQR Therapeutics en PROXY Labora	atories
Facility Demonstration unit for CO ₂ drying fo food products	or premium quality dried
Investment € 550,090	
Project leader Ir. G.F. Woerlee PhD	
Company FeyeCon	
Partners AVEBE U.A. (Ir. M.L.F. Giuseppin PhD)	
FacilityIsolation, extraction and drying of foInvestment€ 437,352Project leaderE. Houtzager PhDCompanyPhycom	od
Partners TOP	
Facility Manufacturing and analyses platforr the Leiden Bio Science Park	m for synthetic peptides in
Investment € 600,000	
Project leader R.H. Holslag MSc	
Company Prosensa Therapeutics	
Partner ISA Therapeutics (G. Platenburg MSc)	
FacilityDiagnostic fingerprinting for Acute MInvestment€ 404,107Project leaderH.E. Viëtor PhD – K. Schmidt (2012)CompanySkyline DiagnosticsPartnersErasmus MC (Prof. B. Löwenberg PhD)	Myeloid Leukemia), Sanquin
(R. Baumgarten PhD)	
Company Phycom Partners TOP Facility Manufacturing and analyses platform the Leiden Bio Science Park	m for synthetic peptides in

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Oligonucleotide based drug manufacturing and analysis in a **GMP-certified environment – Manufacturing equipment and** investments for facility adaptation

Investment € 1,273,334 Project leader Company Partner

R.H. Holslag MSc **Prosensa Therapeutics** PROXY Laboratories (R.E. Santing PhD)

Facility Investment

HPP equipment WAVE 6000/55 € 481,500 H. Tournois PhD Project leader TOP

Company Partner

Facility

Next Generation DNA sequencer

Biqualys

Juicy-Line (M. Bruijn)

Investment Project leader Company Partner

€ 398,421 B.J. Reichert MSc BaseClear ZF-screens (Prof. H.P. Spaink PhD)

Facility

Investment € 125,000 Project leader J. van der Leijé MSc and C. van der Plasse a.i. Wageningen Business Generator, Biox BioSciences, Mibiton Shareholders

Facility

Oligonucleotide based on drug development using LC-MS in a GLP certified environment

Investment € 204,974 Project leader G. Platenburg PhD and R.H. Holslag MSc Company Prosensa Technologies PROXY Laboratories (R.E. Santing PhD) Partner

Facility

UPLC high throughput HPLC

€ 84,998 Investment Project leader J. Bender MSc, PharmD Company Bactimm / Farmalyse Partner FeyeCon (G.F. Woerlee PhD)

Facility	BioConnection
Investment	€ 2,000,000
Project leader	A. Willemse PhD
Shareholders	MSD, Brabant Development Company, Mibiton

MIBITON SCIENCE PROGRAMME

Facility	Equipment Incubator Center Catalyst Eindhoven
Investment	€ 467,592
Project leaders	F. de Jong MSc, M.A.J. Cox PhD, W. Stam MSc
Companies	EmulTech, Xeltis, Flowid

Facility	Acceleration of the development of novel antimalarials
Investment	€ 40,006
Project leaders	K. Dechering PhD
Company	TropIQ
Partners	RUMCN (Prof. R. Sauerwein PhD)



MIBITON INVESTMENTS 2000-2004

MIBITON SOLO PROGRAMME

Facility HPLC Alliance system in a GLP setting Investment € 46,229 Project leader R.E. Santing PhD **PROXY** laboratories Company

Facility

Salmonella Serovar-Array

Investment Project leader Company

Project leaders

€ 94,900 J. Thijssen MSc Check-Points

Facility Investment

Dedicated Raman Instrument € 110,000 W.M. Riggs, G.J. Puppels PhD **River Diagnostics**

Facility Investment

Company

DNA Multiplex Platform

Project leader Company

Project leader

€ 140,295 G. Simons PhD PathoFinder

Facility Investment

Laboratory equipment € 120,259 A.D. de Boer PhD Genetwister Technologies (Expressive Research)

Facility

Company

PCR and sequencing equipment

Investment € 262,710 Project leader A.D. de Boer PhD Genetwister Technologies (Expressive Research) Company

Facility	ZQ2000
Investment	€ 150,000
Project leader	P.C. van Dijken PhD
Company	Pepscan Systems

BIOPARTNER FACILITIES SUPPORT PROGRAMME

Facility Investment Project leader Partners	Production pipeline for natural compounds € 600,725 Prof. R. Verpoorte PhD (Leiden University) Enzyscreen, FeyeCon, Xenobiosis and Farmalyse
Facility Investment Project leader Partners	High throughput capillair system, micro-organisms € 150,000 Prof. J.D. van Elsas PhD (University of Groningen) Ingeny, BioClear
Facility Investment Project leader Partners	High throughput capillair system, human disease genes € 150,000 Prof. C.H.C.M. Buys PhD (Academic Medical Centre Groningen) Ingeny, Synvolux
Facility Investment Project leaders Partners	Seldi Proteomics € 879,431 C.G. de Koster, Prof. J.M.F.G. Aerts PhD, D. Zonneveld BSc (AMC Amsterdam) MacroZyme, Primagen, Genzyme
Facility Investment Project leader Partners	CombiChem Synthesis € 301,435 Prof. F.P.J.T. Rutjes PhD (Radboud University Nijmegen) Chiralix, DSM Geleen
Facility Investment	Test facility for marine invertebrates € 173,557

Project leader Partners

Prof. R.H. Wijffels PhD (Wageningen University) EcoDeco, Diergaarde Blijdorp, S::can



Facility	Multiple Imaging Plant Stress
Investment	€ 181,517
Project leaders	A.J. Koops PhD, W.J.M.R. Jordi PhD (Plant Research International)
Partners	Plant Dynamics, Growlab, Syngenta Mogen

Facility

Molecular Device FLEX Station

Investment€ 235,249Project leaderJ.A.G. van Strijp PhD (University Medical Center Utrecht).PartnersPepscan Systems, JARI Pharmaceuticals, Sopachem NV



FacilityMembrane Protein LaboratoryInvestment€ 483,323Project leadersProf. A.P. IJzerman PhD, Mrs. M.W. Beukers PhD (Leiden University)PartnersAPBiotech, Applikon, Beckman Coulter, Perkin-Elmer,
Screentec (Kiadis)

Multiple Peptides Synthesizer

Facility

Investment€ 324,452Project leaderP.C. van Dijken PhDCompanyPepscan Systems

Facility

Investment	€ 191,373
Project leaders	Prof. J. Brouwer PhD, Prof. H.A. de Boer PhD (Leiden University)
Partners	MucoVax, Biocult, Pharming Transgenic Technology

MIBITON (+) PROGRAMME

Elisa robot

Facility	Froteomics Nijmegen
Project leader	Prof. R.A. Wevers PhD (Radboud University Niimegen)
Partners	Amersham Biosciences, KGCN, Multigen, Tecan,
	Thermo Elektron, Yamanouchi
Facility	Proteomics Groningen
Investment	€ 713,314
Project leader	Prof. R.J. Vonk PhD (University of Groningen)
Partners	Danone, Merck, Agilent, IQ Corporation, Pharma Key, Biacore, Simac
Facility	Biacore 3000
Investment	€ 228,251
Project leaders	P.J. Schaap PhD, M.C.R. Franssen PhD,
	Prof. J.A. van den Berg PhD (Wageningen University)
Partners	Danisco Ingredients, DSM Food Specialties
Facility	Advanced Fermentation Facilities (Phase 2)
Investment	€ 318,235
Project leader	Prof. J.G. Kuenen PhD (Delft University of Technology)
Partners	Micromass, anonymous company

MIBITON INVESTMENTS 1994-1999

Facility	1500 litre G51 Bioreactor
Investment	€ 293,823
Project leader	G. Eggink PhD (Agrotechnology and Food Innovations)
Partners	CSK Food Enrichment, Fuji Photo Film, Hercules,
	Numico Research, Applikon Dependable Instruments

Facility

Cytokine laboratory

Investment	€ 279,342
Project leader	Prof. H. Schellekens PhD (Utrecht University)
Partners	Biosource, BPRC, Innogenetics, Medarex, U-CyTech

Facility

Central GMP & GLP facility € 722.914

Investment Project leaders Prof. J.A. Schalken PhD, Ir. J. de Koning (Radboud University Nijmegen) Beckman, Bioprocon, BioRad, Eurodiagnostics, Future Diagnostics, Partners IKS, Intertrial, Perkin Elmer, Yamanouchi

Facility

Genotyping Company

Investment € 494,711 Project leader G. van der Steege PhD (University of Groningen) Pharma Bioresearch, Amersham Pharmacia, Solvay Duphar Partners

Facility

Detection laboratory

Investment Project leader Partners

€ 489,648 A.D. de Boer PhD (Genetwister Technologies) Beckman, B&L Systems, Enthoven Breeding, Enza Zaden, Humako Holding, Pharmacia, Wallac EG&G, Westburg

Facility

Partners

Physiology laboratory

Investment € 114,477 A.J. Koops PhD, W.J.R.M. Jordi PhD (Plant Research International) Project leaders Nunhems, VanderHave Research, MOGEN International



Facility	MALDI-TOF-MS
Investment	€ 172,436
Project leader	G. Beldman PhD (Wageningen University)
Partners	B&L Systems, Campina, Hercules, Isogen Biosciences, Nedalco,
	Nunhems Zaden, anonymous company
Facility	High Throughput Screening Centre
Investment	€ 470,865
Project leaders	G.J.W. Euverink PhD, Prof. L. Dijkhuizen PhD
	(University of Groningen)
Partners	Hercules, DSM Research

Facility

Electronic Nose	Е	le	ct	ro	n	ic	Ν	ose	
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Investment	€ 151,597
Project leaders	J. Roozen PhD, M. Bucking PhD
	(Agrotechnology and Food Innovations)
Partners	Bromyc, Coberco Isoco, Cacao De Zaan, Hitma

Facility

CAVE Biotechnology Centre

Investment € 181,512 A. Berg PhD (SARA) Project leader Partners Silicon Graphics, Unilever Research Lab

Facility Investment Project leader Partners	Molecular laboratory for HIV analysis € 952,938 J.M. Eekel (AMC Amsterdam) ASD, Bristol Myers Squibb, Glaxo Wellcome, Igen, Merck, Organon,	Facility Investment Project leaders	Microsco € 202,495 Prof. A.J.\ Prof. H.J.]
	anonymous company	Partners	Unilever F AKZO Not
Facility	Advanced Fermentation Facilities (phase 1)		
Investment	€ 820,629	Facility	Laborato
Project leader	Prof. J.G. Kuenen PhD (Delft University of Technology)	Investment	€ 215,562
Partners	DSM (G-B), Applikon, S&G Seeds, Hewlett Packet,	Project leader	Prof. J.C.
	anonymous company	Partners	VanderHa Cooperat
Facility	Characterization biopolymers		
Investment	€ 928,451	Facility	X-ray Str
Project leader	G. Eggink PhD (Agrotechnology and Food Innovations)	Investment	€ 461,214
Partners	Campina, Coberco, CSM Suiker, Friesland Frico Domo, DSM (G-B),	Project leader	R. de Vos
	Nutreco, Applikon, Hercules, S&G Seeds, Solvay Duphar, Quest International, LHS Micro-Filtrations	Partners	Unilever F
		Facility	Analyses
Facility	Lab. for Animal genome analysis	Investment	€ 156,917
Investment	€ 277,479	Project leaders	A.A.J.M. F
Project leader	J.A.M. van Arendonk PhD (Wageningen University)		(Plant Res
Partners	Euribrid Inc., Holland Genetics V.O.F.	Partners	Ansynth S Registerb
Facility	DNA-robots		0
Investment	€ 145,210	Facility	Laborato
Project leader	R.D. Hall PhD (Plant Research International)	Investment	€ 283,434
Partners	Avebe, Unilever Research Lab, Westburg	Project leader	Prof. R.G.I
		Partners	Avebe B.A
		Facility	PK-3 Faci
CLEAN (IR) Burvarguert		Investment	€ 93,025

lity stment ect leaders ners	Microscopy Centre € 202,495 Prof. A.J.W.G. Visser PhD (Wageningen University), Prof. H.J.Tanke PhD (Leiden University) Unilever Research Lab, Quest International, AKZO Nobel, Kreatech, Beun de Ronde, ISS, Carl Zeiss
lity stment ect leader ners	Laboratory for Plant Biotechnology € 215,562 Prof. J.C.M. Smeekens PhD (Utrecht University) VanderHave Research, MOGEN International, Cooperation SuikerUnie
lity stment ect leader ners	 X-ray Structure Analyses Centre € 461,214 R. de Vos (University of Groningen) Unilever Research, N.V. Organon, DSM Central laboratory
lity stment ect leaders ners	Analyses plant material € 156,917 A.A.J.M. Franken PhD, B. Vosman (Plant Research International) Ansynth Service, BMTC, Pharmacia, Registerbureau Lelieweefselkweek
lity stment ect leader ners	Laboratory for carbohydrate analyses € 283,434 Prof. R.G.F. Visser PhD (Wageningen University) Avebe B.A., Mettler Toledo
lity	PK-3 Facility

Investment Project leader Partners

Facility

Investment Project leader Partners PK-3 Greenhouses € 760,964 Th.P. Straathof PhD (Unifarm) Dutch Agro Industry (11 companies)

A.R. Stuitje (VU Amsterdam)

Rijk Zwaan, S&G Seeds







- Our investments in advanced research, development and production equipment give the young SMEs in the Netherlands more flexibility to manage their cash flow
- We provide a boost: the route to the market is shortened by approximately one year
- Every euro invested by Mibiton is worth an average of 5 euros after 5-10 years and leads to a significant increase in the number of employees
- Mibiton ensures faster market penetration of new products and more opportunities to collaborate with established companies and investors
- We prefer not to participate in shares, so there is no dilution effect. The speed with which Mibiton acts improves the competitive position

- We offer complementary finance with other investors by providing high-risk loans and financial lease constructions
- The cooperation with Mibiton also serves as a quality guarantee for other venture capital providers and increases the chance that companies will be able to arrange their additional financing in the future
- Mibiton contributes to solving a market imperfection
- Mibiton provides opportunities when no alternative financiering is possible
- Mibiton has been a well-functioning revolving fund of high quality with high customer satisfaction for almost thirty years

THE MIBITON FOUNDATION

MATERIAL INFRASTRUCTURE BIOTECHNOLOGY NETHERLANDS

The Mibiton Foundation stimulates entrepreneurship and public-private partnerships by investing in Life Sciences facilities.

Office Management Anne-Marie Boers, boers@mibiton.nl

Investment Management

Kees Recourt PhD

Board

Liduina Hammer BSc MBA, Chairman (Fund Engineer Polestar Capital) Edward van Wezel MSc, Treasurer (Managing Partner BioGeneration Ventures) Hans van den Berg MSc, Secretary (former MSD, VandenBerg Advies) Dénise van den Berg MSc (vandenberg Counseling & Consulting) Ernst van den Ende PhD (Director Animal Sciences Group Wageningen) Cindy Gerhardt PhD (Managing Director Planet B.io)

www.mibiton.nl



Presentation of the Mibiton Certificate to Stefan Braam – CEO Ncardia



Handing over the Mibiton Brochure 2022 to Carmen van Vilsteren – Chairman Top Team Life Sciences & Health









Cindy Gerhardt





Anne-Marie Boers

COLOPHON

Design	Optima Forma bv, Voorburg
Photography	Nils van Houts fotografie, Hoofddorp
Organization	Vera Blom, Mibiton