

HOLLANDBIO HIGHLIGHTS































































































































































































































































FOREWORD

The Dutch biotech landscape is an encouraging sight. How could it not be? The sector is teeming with innovation, growing like a weed. Companies sprouting from our own national ecosystem are flourishing. There are therefore highlights in abundance. This is a snapshot of the brilliant biotech leaders in our community, and the work we have done to enhance their success. It's an honor to be able to represent more and more of these innovative mavericks. That's why we look so happy in our photographs.

If we were to get all our members into that metaphorical snapshot, we would have had to whip out a wide-angle lens by now. It is in representing the full breadth of biotech that strength lies. Only together can we tackle the global challenges. Climate change, the depletion of natural resources and rampant epidemics. People are undernourished, over-nourished, dying of diseases against which we are still defenseless. The challenges are greater than ever.

If it's up to the biotech sector, the tide will turn. By drawing inspiration from nature, biotech is realizing breakthrough innovations that help people, animals and the planet thrive. Propelled by the biorevolution, and with smart and sustainable solutions for health, chemicals, agriculture, fisheries, livestock and more, we offer the prospect of a return to health.

It is no surprise, then, that a fierce commitment resonates across HollandBIO. Our members, our board, the HollandBIO team: we share a passion for biotech and the drive to maximize the potential of biotech innovations for the good of sustainability, health and the economy. The tremendous social urgency and the great, growing potential of the biorevolution urge us to speak loud and clear, to put our heart and soul into realizing that potential. Because the facts are irrefutable: biotech makes life better.



Annemiek VerkammanDirector

Oscar Goddijn Chair



HOLLANDBIO

HollandBIO's strategy

HollandBIO aims to unlock biotech's potential for the good of sustainability, health and the economy. This and more is expressed in HollandBIO's vision and strategy.

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Name a challenge of our time, and biotechnology is part of the solution. That's why the global biotech sector is growing like a weed.

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Dutch biotech innovations are truly world-class

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HollandBIO represents the sector

The more members we have, the stronger we stand. Our members come first. 13

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HOLLANDBIO'S STRATEGY

Biotech makes life better

Global challenges are greater than ever: climate change, the depletion of natural resources, under- and over-nutrition, epidemics and unmet medical needs. Society is calling for solutions, sooner rather than later. And solutions, that's exactly what biotech delivers. By drawing inspiration from nature's potential, biotech provides innovations that help people, animals and the planet thrive.

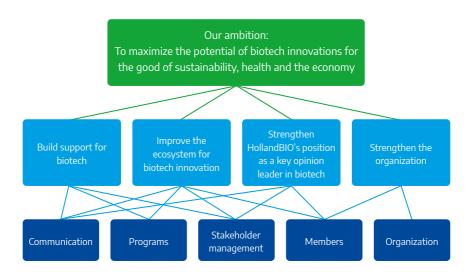
Global scientific research has unleashed a biorevolution that puts smart, sustainable and healthy solutions to societal challenges within reach: new medicines, vaccines, diagnostics, crops, cultured meats, biobased ingredients and materials. The list goes on and on. If we want to make the most of these opportunities, there is work to be done. After all, we will only really reap the massive benefits of the biorevolution if our innovations take off.

HollandBIO aims to unlock biotech's potential for the good of sustainability, health and the economy. Successful biotech innovation requires excellent knowledge, entrepreneurship, ample and patient capital and a hefty dose of risk-taking. New applications from frontrunners of biotechnologies always challenge the status quo. An adaptive innovation ecosystem, working on shared goals together as one, is therefore indispensable.

HollandBIO goes for maximum impact. Our distinct programs work to foster that adaptive innovation ecosystem. We are tackling the hurdles and do not rest until the red carpet has been rolled out for innovations. We are boosting support for biotech innovations by not just putting them on the map, but by making sure they stand out. And we are reinforcing our leading position as an authority in our field, as a champion of biotech innovations, and as the reliable partner for collaboration.

Biotech makes life better

We get our inspiration from nature's potential. Our innovations help people, animals and the planet thrive. We make this happen together. We are HollandBIO, the advocacy group for the biotech sector.



Biotech makes life better, that is the firm conviction we stand for. And fortunately side by side with growing numbers of people, because only together can we make this happen.

We are HollandBIO, the advocacy group for the biotech sector.



Want to learn more, think along with us, or get involved?

Read more (scan the QR-code) or get in touch with HollandBIO's Annemiek.



THE REVOLUTIONARY GROWTH OF BIOTECHNOLOGY

The global biorevolution

Reducing CO2 emissions, fighting the coronavirus, giving patients new perspective, ample food for all. Name any challenge of our time and biotechnology is part of the solution. It's not for nothing that governments, research institutes and companies worldwide invest enormously in both the scientific and commercial development of this sector. The global biotech sector is growing like a weed.

It's hard to notice a revolution when you're in the middle of it. But the fact is that developments in biotech are moving at an unprecedented speed. Every day, we learn something new about what happens in and between all kinds of (micro) organisms. Major breakthroughs in biology, such as the discovery of CRISPR-Cas, coincide with developments like rapid advances in automation and the rise of artificial intelligence. This is producing a watershed which is changing our lives so much that the McKinsey Global Institute is talking about the "biorevolution". We can engineer organisms on a scale and in a manner that was impossible until recently, and that comes with a wealth of new possibilities, particularly in healthcare, food production and chemistry.

The Netherlands as a potential frontrunner

The Netherlands has everything it needs to become the European biotech hub. We invest a lot of money in research, and there is innovation capacity and agility. Dutch research institutes are often leaders in biotechnology, and we are home to major players in the fields of chemistry, health and plant breeding, as well as a flourishing biotech scene with hundreds of start-ups and scale-ups. Together with other assets, such as a well-trained workforce and a good investment climate, the Netherlands has everything it needs to reap the benefits of the biorevolution.



According to McKinsey, capitalizing on the opportunities of the biorevolution will have an impact on the Netherlands of between 27 and 37 billion euros per year by 2040. This number comes from the social improvements that will be made, and does not yet include effects such as enhanced well-being and indirect productivity gains. Most of the social improvements are the result of better health and life years gained, primarily from the treatment of cancer and the fight against infectious disease. But there is also a lot to be gained in the agricultural sector, including major reductions (up to half) in greenhouse gases and nitrogen emissions from animal husbandry, and better preserved or simply better products. In other words: the average apple in 2040 will taste better, keep longer, be pesticide-free, and come in a bioplastic bag.

If we keep at it, medical companies alone could add some 60,000 additional jobs by 2030 and generate at least 3 billion euros a year for GDP. That number rises even more when you include impacts on agriculture and chemicals. The biorevolution can thus strengthen our innovation capacity and overall prosperity in the Netherlands.



Learn more?
Click here or scan the code.

DUTCH BIOTECH INNOVATIONS ARE TRULY WORLD-CLASS

Cell and gene therapies

Even though the decades-long development of cell and gene therapies has seen high peaks and low valleys, the great promise of these new forms of treatment is indisputable. Enormous progress has been made, and the Netherlands is also benefiting from this. In recent years, various cell and gene therapies have made their way into the basic health insurance package, and with it all the positive gains in patient health.

The Netherlands is also increasingly making the most of the potential of cell and gene therapy in other areas. While Kite Pharma had already built and commissioned a large CAR-T cell therapy facility in Hoofddorp, Bristol-Myers Squibb chose Leiden and thus also the Netherlands as the European location for its own CAR-T cell therapy facility. The Dutch government's modernization of legislation, policy and roll-out in the field of cell and gene therapy is clearly bearing fruit. We are sure we will be seeing many more clinical research, production and



treatments in the Netherlands in the future

Four vaccines in record time

Who would have expected that? Thanks to global efforts, our sector managed to get no less than four coronavirus vaccines out of the lab, through the approval process and into arms in just one year – an absolute record! An unprecedented achievement, in which bright Dutch minds also played a role. With the Janssen vaccine, we even added an impressive illustration of Dutch glory to the vaccination arsenal against the dreaded coronavirus. HollandBIO considers this a remarkable triumph.

In addition to all of our healthcare heroes. HollandBIO believes that the heroes of biotech also deserve a long and loud applause. Not only "our Leiden vaccine manufacturer" lanssen. but also Pfizer and BioNTech, Moderna, AstraZeneca, and all the other research institutes and companies that contributed to this exceptional achievement. And they deserve this applause no matter what. After all, as the pandemic wore on, we also learned the unfortunate truth that setbacks come with the territory. Disappointing results, production problems, delivery delays, excessive or disappointing profits, price hikes, extra shots, nasty mutations: the list is endless. But here we also find solutions. Because if the pandemic has taught us anything, it is that the impossible becomes possible when we work together.

Biotech-wide breakthrough in growth capital

Although it continues to be extremely difficult for starting and expanding biotech companies in the Netherlands to raise sufficient funding, several big gains have been made in recent years: from IPOs, initial public offerings, licensing agreements and series A, B and C financing rounds, to partnerships, Innovation Credits and European subsidies. Every year, Dutch biotech companies manage to secure billions of euros for the fastest and best possible path from bench to bedside.

What is striking is that Dutch biotech is on the rise across the board. Not only are biopharmaceutical companies such as AM-Pharma and Scenic Biotech attracting large sums of growth capital, but plant breeding is also able to close significant funding rounds, as Hudson River Biotechnology and Solynta showed. In industrial biotech, deals like those with The Protein Brewery and Deep Branch stand out. It is precisely in its range that our flourishing biotech sector makes sure the Netherlands stands out as a global biotech center.

Dutch cultured meat gets a new look

Though cultured meat has always attracted curiosity, we are now seeing this potential game changer gaining the attention of an ever larger and wider audience. "Leonardo DiCaprio has given a face to Dutch cultured meat," HollandBIO's Annemiek joked with the ANP news agency, about the famous face joining Mosa Meat. The fact that DiCaprio is drawing global attention to this Dutch innovation marks the great progress in the making for cultured meat.

The recent announcement from Dutch multinational DSM about its collaboration with home-grown meat pioneer Meatable, based in Delft, also illustrates the sector's maturity. The companies will work together to make further improvements to the growth



Not Leonardo DiCaprio, but another handsome face: Mosa Meats' Mark Post.

media that is needed. Dutch biotech companies are working hard to make cultured meat affordable and widely accessible.

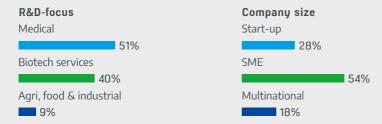
If successful, the impact could be even greater than expected. With the right support from governments, cultivated

food could contribute to much more than just sustainable agriculture, as more and more scholars are seeing. We couldn't agree more. Our motto is not for nothing: biotech makes life better. And a better life – not only should we want that, but we should go all-in, as well.

HOLLANDBIO REPRESENTS THE SECTOR

HollandBIO is a privately-funded association of biotech companies. Our community is made up of the life sciences sector: from start-ups and SMEs to multinationals, active in health, nutrition or sustainable innovations. Just like the sector, HollandBIO is growing like a weed. And the more members we have, the stronger we are. Our more than 250 members are leaders, and we continuously invest in recruiting new ones.

HollandBIO members



The Dutch life sciences sector



Source: Biotechgate 2021

MEET HOLLANDBIO

Board







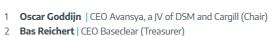
The board consists of seasoned biotech professionals. Together they reflect the range of HollandBIO's members. They represent start-ups, SMEs and multinationals, members active in healthcare and prevention, agri-food, industrial biotech, and all associated members that move the sector forward.











- 3 Marc Kaptein | Country Medical Director Pfizer
- 4 **Michiel van Eijk** | CEO Genetwister
- 5 **Martine van Vugt** | Senior Vice President Strategic Initiatives Genmab
- 6 **Willemijn Vader** | CEO VitroScan
- 7 **Sabine Koken** VP, Country Head Benelux Galapagos
- 8 Katrien Reynders | CEO Pan Cancer T
- 9 Roel Schaapveld | CEO InteRNA Technologies
- 10 Linda Dijkshoorn | CEO EV Biotech





Team

The team is the driving force behind HollandBIO's activities. We take on the hurdles to the industry's success, ensuring that biotech innovations maximize their impact on a sustainable and healthy society. We manage member administration, organize events, collect and analyze data about the sector, speak to the press on behalf of the sector and – as you will read below – so much more.

Are you looking for specific information on biotech, do you want to exchange ideas, or would you like to sit down (in person or online) for a chat? Contact us!























- 1 Annemiek Verkamman | Managing Director
- 2 Wieteke Wouters | Program Director
- 3 **Timen van Haaster** | Public Affairs Manager
- 4 Britt van de Ven | Program Manager
- 5 **Casper Brack** | Communications Manager
- 6 Hugo van Rooijen | Program Manager
- 7 Ingrid Vosters | Office Manager
- 8 Leonie White-Scholten | Project Manager
- 9 Marit Heblij | Program Manager
- 10 **Rianne Hageman** | Program Manager
- 11 **Robbert Wever** | Project Manager
- 12 **Thomas Broekhoff** | Project Manager

HOLLANDBIO PROGRAMS

HollandBIO operates in programs to maximize our impact. Our programs make it perfectly clear what we stand for and where we're going (the "why"). With this in mind, we work to realize our goals. We pinpoint the bottlenecks and opportunities and devote ourselves to implementing solutions (the "what"). We do this together with our members and partners, in the characteristic HollandBIO way (the "how").

Why!

Rock-solid innovation climate

With plenty of funding in each phase of development, seamless tech transfer and a business climate that attracts companies and leading talent, the Netherlands is becoming the undisputed Boston of Europe.

Technology for a sustainable future

The IPCC's "Code Red for Humanity" is clear: it is the hour of reckoning. Biotech can help turn the tide by making chemicals, agriculture, animal husbandry and fisheries more sustainable. With biotech innovation in the highest gear, the future is healthy, sustainable and animal friendly.

Personalized health

Every person is different. But when we get sick, we all want the same thing: to get well. Even better, we just want to stay healthy. Two of our programs are working on our ambition to maximize our contribution to personalized health: giving everyone the best treatment at the right time – both curative and preventive.

Faster and better from bench to bedside

The development of new treatments takes a long time, is costly and risky, and accessibility is running into more and more hurdles. Thanks to continuous innovation, there is plenty

of room for improvement in the way we develop treatments and bring them into the clinic.

Prevention: better safe than sorry Vaccines, antivirals, antibiotics and a range of diagnostic tests are crucial in

the prevention, early detection and treatment of infectious disease. And even though the costs come before the benefits, going full steam ahead with preventive innovations should be a no-brainer.

What! Current situation Mapping it out Stakeholder analysis Agreement on the hurdle(s) Stakeholder analysis Support for the solution

For which members is it relevant?

Member participation

Problem analysis
What are the
hurdles?

SolutionsHow do we remove the hurdle?

Roll-outRealization of the solution

How!

Here's how we do it

- Forward-thinking
- Unifying
- Ambitious
- Enterprising
- Transparent



Want to learn more, think along with us, or get involved?

Read more (scan the QR-code) or get in touch with HollandBIO's Wieteke.



HOLLANDBIO PROGRAM

ROCK-SOLID INNOVATION CLIMATE

The Dutch biotech sector is an incubator for innovations of global significance. McKinsey calculates biotech's annual social and economic potential over the next decade at 30 billion euros, which includes health gains, more sustainable and efficient manufacture of products, and higher consumer satisfaction.

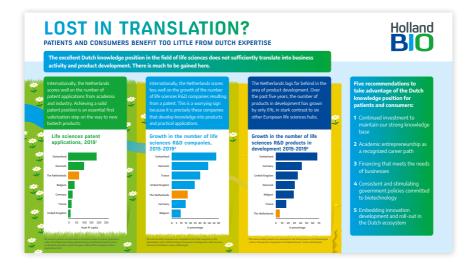
The Dutch biotech sector is not only an important innovation engine for health and sustainability, it also generates economic growth in terms of high-quality jobs – a pull for international companies and private investment. The people in this sector are passionate and driven, with unparalleled commitment to realizing their ambitions.

HollandBIO is committed to a rocksolid innovation climate: we strive to cultivate the fertile soil in which biotech companies can grow and prosper. That soil means plenty of **financing** opportunities, for every phase of development. Promising biotech companies grow rapidly and lose no time in searching for capital. Thanks to optimal processes and conditions for **knowledge transfer**, national academic excellence drives biotech activity and product development in the Netherlands. Finally, an attractive **investment** climate makes the Netherlands a good place for business, which in turn attracts international life sciences companies and leading talent.

A glimpse at our results

Valorization through Biotech Booster

HollandBIO joins forces with Dutch universities, the Dutch Federation of University Medical Centers, the Association of Universities of Applied Sciences, Janssen and DSM to capitalize on the potential of excellent Dutch biotech knowledge. Biotech Booster is a new valorization approach, in which promising ideas receive business support, funding and the team to grow into rock-solid and investable propositions. The intended result? More health and sustainability from homegrown biotech innovations, a stronger biotech ecosystem, and more biotech jobs and companies. We drew up our joint ambition and plans for the Biotech Booster in an application for the National Growth Fund, which was submitted on behalf of the Ministry of Education, Culture and Science.





Reduced VAT rate for production of cell and gene therapies

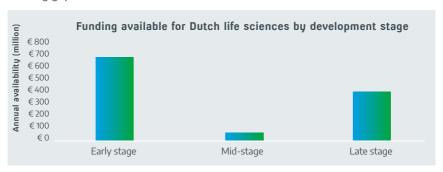
Thanks to HollandBIO's efforts, the Dutch Tax and Customs Administration concluded that advanced therapy medicinal products (ATMPs), such as cell and gene therapy products, are considered medical products. This means that the reduced VAT rate of 9% for medicines also applies to ATMPs. A boost for our business climate. The ruling provides clarity and certainty, and makes the production of ATMPs more attractive in our country. To achieve this excellent result, HollandBIO sought cooperation with the VIG, the LUMC, the Ministries of Economic Affairs, Health, Welfare and Sport, and Finance, and the Dutch Tax and Customs Administration.



∢Read more? Scan the code.

Funding landscape mapped out

Biotech companies generally need a great deal of capital. At an early stage, companies depend on government funding; it is only at a later stage that they can attract private investors. Unfortunately, the existing government instruments do not always match the needs of the entrepreneurs, and private investors sometimes step in too late. HollandBIO investigated supply and demand and identified the gaps and bottlenecks in the funding landscape. We brought our findings and recommendations to the table in the evaluation of the Innovation Credit, the PPP allowance, and the establishment of the Deeptech Fund, among others, resulting in some cautious initial changes to conditions and instruments. In 2022, we will present our assessment of the funding landscape. Below you will find a sneak preview of the results – which clearly show the funding gap!





Dutch cabinet: choose for biotech

Biotech is important. But not everyone is as aware of this as we are. That's why we regularly publish independent or joint reports and research to convince others of its significance and potential. Together with the employers' association VNO-NCW, we launched the Biotechnology Future Pact, which was received with enthusiasm by the Minister of Infrastructure and the Environment. Our report "Kiezen voor Biotech", with recommendations for the sector to grow into an international leader, was also well received in The Hague. The State Secretary of Economic Affairs, who received the study, indicated that the biotech recommendations are important to our future and would therefore certainly be on the table during the formation of a new cabinet.



Learn more about the
Biotechnology Future Pact.
Scan the code.

Read the report

"Kiezen voor Biotech".

Scan the code.



An information center in times of corona

The corona crisis brought much uncertainty. Especially in the beginning, when laboratories were forced to close, development timelines were turned upside down, and lab materials became scarce. From the start of the crisis, we did our best to serve as an information center for biotech entrepreneurs. We passed information we collected on to the government, for example to help it tailor regulations to biotech entrepreneurs. We tackled the functionality of the emergency support measures, the importance of keeping laboratories open, and securing the supply of lab materials.

There's work to be done!

HollandBIO is committed to a rock-solid innovation climate in which biotech companies can thrive. That is why we are working on:

- Tailored financing for any biotech company, at any stage of development With the gaps in the funding landscape for life sciences companies in view, it is now time to close them. We are fully committed to improving existing funding instruments such as the PPP allowance and the Innovation Credit. And to ensuring that new instruments like the Deep Tech Fund meet the needs of entrepreneurs.
- Effective knowledge transfer from academia to business
 The Biotech Booster ensures that companies make better use of academic knowledge. But knowledge sharing also plays an important role. With a series of seminars, we bring the problems of valorization to the attention of a broad stakeholder field
- Attractive investment climate
 We lobby for maintaining and further strengthening key building blocks in our business climate, such as tax benefits for R&D activities like the WBSO and the innovation box, and robust protection of intellectual property.



Want to learn more, think along with us, or get involved? Read more (scan the QR code) or get in touch with HollandBIO's Hugo or Robbert.





HOLLANDBIO PROGRAM

TECHNOLOGY FOR A SUSTAINABLE FUTURE

Technology has brought the world unprecedented prosperity. But that prosperity has also resulted in the depletion and pollution of our planet. It is code red for humanity. Climate change is leading to floods, drought, extreme heat and cold. On top of this, by 2050 we will have to provide some 10 billion world citizens a complete diet with enough high-quality protein, vitamins and minerals. Consumption is on the rise, on all fronts. How can we meet this soaring demand without further damaging the planet, or even better, while making it healthier? We are convinced that we can turn the tide. And that biotech has a key role to play in producing clean, healthy and responsible solutions for a sustainable society.

A stunning world of possibilities is on the horizon for consumers. **CRISPR** products are on the shelves, cultured meat on the plate, alternative proteins with great texture and flavor are making our mouths water. For every type of climate, we are developing robust crops that are

sustainable to grow, and which provide food with better nutritional value and shelf life. The chemical industry is getting greener. We make plastics, textiles and paints without a trace of petroleum. And that's just the tip of the iceberg. A **biorevolution** is underway.

With the Technology for a sustainable future program, we are breaking ground for innovative, homegrown biotech entrepreneurship. We are removing barriers that prevent agri-food and biobased frontrunners from taking their biotech innovations from the lab into the world. We are building a tight network, lobbying for legislative and regulatory incentives, and with the best roll-out in Europe, and we are building awareness around and demand for biotech products. The Netherlands has traditionally been strong in agriculture and chemicals. Our leading biotech sector is a tremendous asset in future-proofing this position. And if it is up to HollandBIO, that future starts today.

A glimpse at our results

A network to be proud of

Our network is growing. More and more innovative frontrunners recognize themselves in HollandBIO and are joining our ranks. We have welcomed several frontrunners which use biotech to develop products as diverse as they are brilliant: from fragrances to plastics, and from meat substitutes to cultured meat. To strengthen the network, we <u>made sure</u> the Netherlands was represented at the leading European Forum for Industrial Biotech, EFIB, on behalf of Top Sector Chemicals. Over the coming years, we will continue to invest in our network, and have several networking activities in the pipeline. The stronger the network, the stronger our representation. But that's not all: our network also facilitates mutual cooperation and increases the visibility of biotech innovations among the general public.



Biotech solutions in the National Protein Strategy

According to research, the Dutch eat the most meat substitutes of all Europeans. And the consumption of vegetable alternatives is growing at a record pace across the continent. The goal of the National Protein Strategy is to increase the self-sufficiency rate of new and plant proteins, and in a sustainable way that contributes to the health of humans, animals and the natural environment. Biotech can play a major role here. By focusing on protein-rich crops, on alternative proteins, such as cultivated meat, fermentation with microorganisms, or insects, and on utilizing waste streams and increasing vegetable consumption,

we can meet this need. HollandBIO actively contributed to the consultation process, resulting in a strategy that contains many starting points for our community.



<u>Learn more</u> about the National Protein Strategy. Scan the code.

European developments for new genomic techniques

HollandBIO's vision of future-proof, product-oriented policy is gaining support. After the coalition agreement stated that our country would request an exemption for the use of new genomic techniques, the European Commission has now also concluded that, due to scientific progress and new insights, the legislation on genetic modification is no longer suitable. The commission has started the process towards developing new policy. HollandBIO is actively contributing its insights and sharing them with the field. There is urgency: outside the EU, biotech innovations are conquering the world, and lagging behind is not an option in this competitive and future-proof growth market.



Learn more about European developments in genomic technologies. Scan the code.

There's work to be done!

Spotlight on biotech

Biotech is hot, and more and more people know it! Influential celebrities (Hollywood stars!), astronauts and musicians are already fans and are speaking out: biotechnology is indispensable for a sustainable and prosperous society. By increasing our visibility, that of our members and celebrities in the media, online, at events and on business trips, the sector gets the attention it deserves. At our own web shop full of biotech products <u>crisp.vision</u>, we show off the sustainable delicacies that modern breeding techniques can make.



European paradigm shift

Crops may be a low-hanging fruit, but we will not rest until the paradigm shift for truly future-proof policy is a reality. In addition to plants, microorganisms can also contribute significantly to the European Green Deal objectives, but current legislation and regulations nip this potential in the bud. This must change, which is why we continue to push for legislation and regulations that do not discriminate on the basis of organism or technology, but that stimulate the development of sustainable, healthy and safe innovations.

Exploring improvements

Alongside our European efforts, we are focusing on optimizing policy and roll-out at the national level. We constantly find ways to improve, simplify or speed up processes, and we work together to make the most of these opportunities. For example, we recently made important improvements in the licensing of clinical research with medical GMOs, and we are now working with the Ministry of Infrastructure and the Environment to optimize policy, procedures and roll-out for the contained use of GMOs.



Want to learn more, think along with us, or get involved?
Read more (scan the QR code) or get in touch with HollandBIO's Rianne or Leonie.





HOLLANDBIO PROGRAM

FASTER AND BETTER FROM BENCH TO BEDSIDE

Biotech makes life better. People are getting a new lease on life thanks to groundbreaking technological innovations and new treatment methods. Personalization is rapidly becoming the new reality. Despite this excellent progress, we see plenty of room for improvement in the way we develop innovations and bring them to society.

The development of new treatments takes a long time, is costly and risky. Access to them is becoming increasingly difficult. Healthcare is also facing major challenges: the demand for and costs of healthcare are rising, as is the shortage of healthcare professionals. HollandBIO advocates for a shift: from cost-cutting at the expense of health to personalized **health**. The best treatment for everyone at the right time, whether preventive interventions, diagnostics, medication, or another form of treatment. When that treatment doesn't exist, our members commit to

developing it. When the treatment is available, we do everything we can to make sure it reaches the right people.

To realize our ambition, we want to bring new treatments from bench to bedside faster and better. First, this requires a more **adaptive ecosystem** that seamlessly links the various steps in the development process. Second, we need to accelerate and secure the transition to personalized health through the optimal development and **deployment of innovations** that make testing and diagnostics smarter.

In the program Faster and Better from Bench to Bedside, the focus lies on the frontrunners of this transition: orphan drugs, cell and gene therapies (ATMPs), and innovative measurement methods and diagnostics. It is precisely this vanguard that is the first to get stuck in the system. If we can remove the hurdles for them, then the promising prospect of personalized health will come a step closer.





Learn more about personalized health. Scan the code.

A glimpse at our results

Converge rather than diverge

HollandBIO sees the big picture, without losing sight of the details. Our intention is clear: personalized health. We gladly share our vision – whether we're asked or not. For example, we have published work on cell and gene therapies in the Netherlands, made suggestions for <u>drug policy</u> in the Dutch Coalition Agreement, and contributed to the <u>national strategy</u> for rare diseases.

For us, the key to success is listening to, talking to and working with all stakeholders. Through countless initiatives, HollandBIO has been able to contribute to a more adaptive ecosystem. Educating leading patient advocates through the EUPATI NL training program, dialogue through RSNN, the pilot on parallel CBG/ZIN procedures, and faster registration of "old" drugs for rare diseases – to name a few. We get people thinking, and we bring people together.



<

Curious about the stakeholder vision for cell and gene therapies in the Netherlands? Scan the code and <u>read more</u>.

Understanding the Dutch reimbursement landscape

To optimize the accessibility of new treatments, processes and turnaround times must be crystal clear to everyone. A shared basis of facts and figures is step one. We mapped out the routes to reimbursement for new intramural medicines. We also examined the lead times between registration and reimbursement. The conclusion: while previously an EMA marketing authorization meant automatic access for the patient, this access – especially for orphan drugs – is now often blocked by our national reimbursement system. This must and can be done faster and better.



4

Reimbursement of new intramural medicines, step by step. Scan the code and read more.

Measuring smarter: charting opportunities and challenges

More and more HollandBIO members are developing technological innovations, such as diagnostics, to achieve the transition towards personalized health. These include whole genome or single-cell sequencing, 3D cell cultures, organoids, organs-on-a-chip, imaging, bioinformatics and artificial intelligence. Thanks to the data coming out of these innovations, we can prevent over- or under-treatment. Moreover, data from today's patient helps tomorrow's. This is why data rightfully serves as the fuel for the transition to personalization. We took stock of the opportunities and challenges of technological innovations on the way from bench to bedside, and seize every opportunity to make improvements. At the top of our wish list: a national data infrastructure to share and deploy all this new data.



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Curious about the opportunities and challenges of technological innovations on their way from bench to bedside? Scan the code and read more.

Accelerated and improved procedures for clinical cell and gene therapy research

Cell and gene therapies (ATMPs) are among the most innovative drugs of our time. The entire national ecosystem benefits when research into and with these therapies takes place in the Netherlands. The sluggish licensing of clinical medical GMO research stood in the way. HollandBIO forged a coalition to improve the situation, and with results: response time went from more than a year to 60 days, and the administrative burden was also reduced.



Watch the video, scan the code or click on the image.







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View a larger version of the infographic? Click on the image or scan the code.

There's work to be done!

Everyone wants the best treatment at the right time. We're not there yet. Preferably in collaboration with the health ecosystem, we are working on solutions where health gains, innovation and affordability go hand in hand.

A shared goal: personalized health

We are working on developing a shared vision for personalized health, where cost savings are not an end in themselves, but the result of an adaptive health ecosystem and the implementation of implementation of technological innovations.

Clear and optimal pathways from bench to bedside

We will not rest until the pathways from bench to bedside are clear and suitable for all innovations that contribute to personalized health. For admission into the insurance package, personalization becomes the starting point: proven, effective care for subpopulations or even at the individual level. This certainly applies to increasingly personalized medicines or medicines for (ultra-)rare diseases.

National data infrastructure

We are going to measure smarter. A national data infrastructure is a prerequisite for us to be able to use all that data to build a smart health ecosystem that is transitioning to personalized health. We are lobbying for and participating in the realization and sustainable embedding of a national data infrastructure in our healthcare landscape.



Want to learn more, think along with us, or get involved?

Read more (scan the QR code) or get in touch with HollandBIO's Marit, Britt or Thomas.







HOLLANDBIO PROGRAM

PREVENTION: BETTER SAFE THAN SORRY

Treating a disease is nice. Curing a disease is great. But preventing a disease, that's the holy grail of biotech. That's why we are working on prevention with the program Prevention: Better Safe than Sorry.

The Netherlands is heading for a healthcare infarct: demand and costs are soaring from an aging population, and we are increasingly short of hands at the bedside. Overcrowded hospitals, mounting waiting lists and staff losses due to COVID-19 make the enormous social and economic impact and upheaval of such an infarct painfully clear.

Prevention of illness and disease burden is therefore becoming increasingly important. Of course, we can do a lot on an individual level to keep diseases at bay: healthy diets, not smoking, and getting enough exercise. But help is welcome. By using biotech innovations to prevent diseases, or to detect and treat them at an early stage, people live healthier, longer and more productive lives. If we invest in preventive

innovations now, we will all reap the benefits in the future.

HollandBIO's program Prevention:
Better Safe than Sorry focuses on
the optimal use of preventive
interventions, and on combating
infectious diseases in particular.
Thanks to biotech innovation in recent
decades in the field of vaccines,
antivirals and antibiotics, millions
of people have been protected from or
cured of diseases such as measles,
diphtheria, tetanus, bacterial
infections and – more recently –
the coronavirus. Smallpox even
disappeared from the world stage due
to large-scale vaccination programs.

The corona pandemic shows that when the need arises, biotech is our best asset. The record pace at which the sector developed tests, vaccines and medicines during the crisis makes HollandBIO glow with pride. But infectious diseases require a structural, thorough approach throughout our entire lives: preventive, proactive and reactive. And that is exactly what HollandBIO is fighting for.

A glimpse at our results

Position paper: taking vaccination even further

We also contributed, with the help of the knowledge and expertise of our members – and whether we were asked to or not – to the discussions and policymaking

around the vaccination strategy, the testing policy and a broader pandemic preparedness plan around infectious disease." à "Aided by the knowledge and expertise of our members – and whether we were asked to or not – we also contributed to the discussions and policymaking around the vaccination strategy, the testing policy and a broader

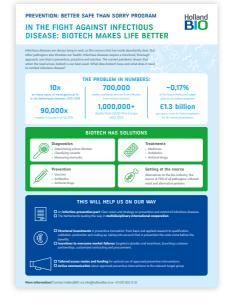


pandemic preparedness plan around infectious disease.

Mapping out what biotech has and what it needs

In the fight against infectious disease, the individual has limited influence. That's why the government must take a leading role. HollandBIO advocates for a

comprehensive policy that allows infectious disease prevention to go viral. By stimulating funding in the development phase, through early assessment and reimbursement, crystal clear communication and timely roll-out of innovations, biotech makes life even better! We published an infographic that depicts the biotech sector's arsenal and what it needs.

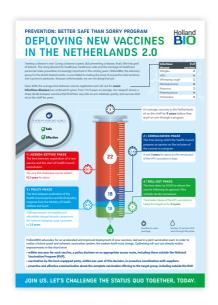




Foothold for an improved vaccination system

The roll-out of new vaccines in the Netherlands is taking longer and longer. Our own research shows that the time it takes has now risen to an average of 9 years. This reveals a sharp divide between vaccines that find their way into arms relatively quickly in a crisis, such as the meningococcal ACWY vaccine, and vaccines that lie on the shelf for years until a suitable strategy for a specific target group is determined, such as the pneumococcal and rotavirus vaccines.

For years, HollandBIO has been calling attention to the health benefits that are postponed due to the underutilization of vaccines. The route that an approved vaccine takes in the Netherlands before it reaches the right arm resembles jumping hurdles with a blindfold, as we have written before. State Secretary Blokhuis also ran into the limits of the vaccination system on several occasions. Partly for this reason, following up on various motions, he asked the Council of Public Health & Society and the Dutch National Health Care Institute for advice on future-proofing the system. The conclusion is consistent with what the Health Council already wrote in 2013: The Netherlands is missing out on health gains because vaccines are not used to their full advantage. With so much consensus, HollandBIO believes it is not a question of if, but when much-needed improvements to the system will be made.





View a bigger version of the infographic? <u>Click here</u> or scan the code.

There's work to be done!

HollandBIO is committed to the optimal use of preventive interventions, especially in the fight against infectious disease. Because even though the momentum has never been greater, there is still a long way to go. That's why we are working on:

Pandemic preparedness: measuring up

Biotech could use some help in dealing with outbreaks quickly, whether it is

future disease X. Given the needs in

Met dank aan de wetenschap, met dank aan ál die mensen die zich dag in dag uit inzetten om de vaccinatieoperatie tot een succes te maken. Hulde

prik banen we ons een weg uit de crisis.

Zoveel om dankbaar voor te zijn. 🙏 🦾 💉

voor al die fantastische mensen van de GGD. Prik voor

Hugo de Jonge 📀

corona, rising antibiotic resistance or a future disease X. Given the needs in biotech, HollandBIO has put a wish list on the agendas of those organizations and government bodies that are working to improve pandemic preparedness, including the <u>evaluation</u> of the corona crisis approach in the Netherlands, the parliamentary inquiry in the Dutch House of Representatives, the policy agenda of the Ministry of Health, and the Health Emergency Preparedness and Response Authority (HERA) of the European Commission.

Future-proof vaccination system

Now that the urgency around prevention is greater than ever, HollandBIO and its allies are committed to solutions: fast and efficient routes to the right arms for each registered vaccine. We are working on a vaccination system in which vaccines are an ongoing part of our lives as a key preventive intervention to achieve health gains, whether for public health or for individual, personalized health. It is therefore essential that we provide appropriate advice, funding, implementation, communication, ICT and training on vaccines.



Want to learn more, think along with us, or get involved?

Read more (scan the QR code) or get in touch with HollandBIO's Britt.



HOLLANDBIO: THE VOICE OF THE SECTOR

HollandBIO is the representative of Dutch biotech. Our commitment: removing obstacles to the success of our frontrunners. To achieve this, our advocacy and sophisticated lobbying go hand in hand with communication and stakeholder management. HollandBIO puts the sector on the map, communicates the results we achieve, and spotlights developments and current events. It makes us the reliable partner for collaboration and a leading authority in our field, and it maximizes our impact.

Holland

STAATSSECRETARIS KEIJZER NEEMT RAPPORT 'KIEZEN VOOR BIOTECH' IN ONTVANGST: "DEZE INFORMATIE LIGT OPTAFEL BIJ EEN NIEUW KABINET"

JZERSTERK INNOVATIEKLIMAAT, HOLLANDBIO, UITGELICHT



5 MAART 2021

Amsterdam, 5 maart 2021 – Donderdagmiddag nam staatssecretaris van Economische zaken en Klimaat (EZK) Mona Keljzer uit handen van HollandBIDdirecteur Annemisch Verfamman het rapport "Kiezen voor bietech" in ontvangst. Dit rapport lidentilliceert zeven lessen om ens met bietech de crisis uit te innoveren. De Hoderlandse blotechsector is volop in ontwikkelling, maar om door te groeinen naar een koploperspositie meeten we nog stappen maken. Dit is niet alleen economisch van belang. Met biotechnologische uitvindingen kunnen we namelijk het hoofd bieden aan uitdagingen op het gebied van gezondheid en duurszahmbid. Tegelijkertijd is de blotechnologie een economische groeimotor die, met een retaltie geringe CD-uitstoot, op alle opleidingsniveaus banen biedt. Zo kan blotech ons de crisis uit hoppen.

Staatssecretaris Mona Keijzer roemde de Nederlandse biotechsector bij het in ontvangst nemen van het rapport: "Wij zijn innovatieleider in Europa." Ook gaf ze aan





Watch an excerpt, scan the code or click here.



Want to read more?
Click here or scan the code.

Stakeholder management

For our lobby to succeed, decision-makers and key organizations must know who we are and what we do. In short, HollandBIO must be the most reliable partner and leading authority in our field. This requires a smart approach: there is a lot to choose from and maintaining all these relationships is no easy task. We invest heavily in relationships with ministries, members

of parliament and key partnerships. Our strong network helps us realize HollandBlO's best-case scenario: that we are always involved at an early stage and at the right level with new or amended legislation, regulations and policies when these affect the success of our magnificent biotech sector.





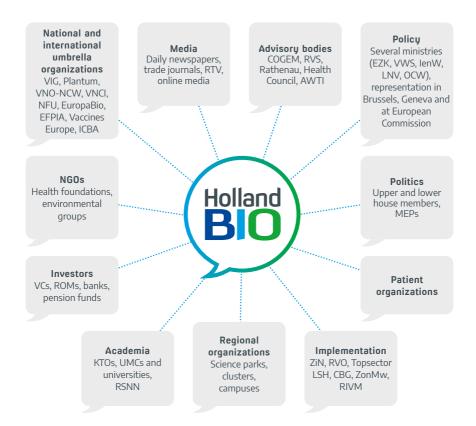
Read more on this here.







Read more on this here.



Communication

The Dutch biotech sector is growing like a weed, and HollandBIO with it. This is bearing fruit. Thanks to the expansion of our communications team, we can now devote even more time, effort and passion to putting the sector firmly on the map and raising HollandBIO's profile. Our Weekly is a well-read and highly valued

newsletter – both within and beyond our community – where we provide a platform for national and international developments in the sector and news about our members, spotlight current events in politics and policy, share our results, and occasionally voice our honest take on something. HollandBIO also uses other communication channels such as our website, Twitter and LinkedIn. We are reaching more and more people with our messages, partly due to our growing number of followers.

The impact of traditional media should also not be underestimated. That's why we maintain relationships with journalists and media, who regularly make grateful use of our expertise and quotes.

Btw-plicht voor celtherapie is een opsteker voor lifesciences in Nederland



In het kort

- Tot nu toe heerste onduidelijkheid of over cel- en gentherapieën btw verschuldigd
- Voor producenten van deze therapieën leidde dit tot onzekerheid over btw-
- De Belastingdienst heeft besloten dat voortaan standaard 9% btw moet worde betaald.

De Belastingdienst heeft helderheid verschaft over de btw voor cel- en gentherapieën. Hiervoor gaat standaard het verlaagde tarief van 9% gelden, net als voor andere geneesmiddelen. Het besluit is een opsteker voor de Nederlandse lifesciencesector, aldus brancheorganisatie HollandRIO

Volgens HollandBIO maakt de beslissing van de fiscus dat over cel- en gentherapieën btw verschuldigd is, Nederland aantrekkelijker als



Read more? Click here or scan the code.





The HollandBIO website consistently attracts many visitors, about 6,000 per month.



The number of Twitter followers has grown to 2,400.



Our newsletter "HollandBIO Weekly" reaches >2,600 stakeholders every week.



On LinkedIn, our reach is growing significantly, and we already have 6,500 followers.

Topberichten







HollandBIO's Annemiek in gesprek met Kamerleden over vaccinstrategie COVI...
Gistermiddag sprak HollandBIO's Annemiek in de Tweede Kamer over de
langetermijn-vaccinatiestrategie COVID-19. Daar benadrukte ze eens te meer d...



Click on an image to go to the post.

Holland HollandBIO

@HollandBIO



BRUNO #DOESLIEF

SNELLER & BETER VAN LAB NAAR PATIENT, HOLLANDBIO, GEZONDHEID

27 AUGUSTUS 2019

De open brief aan farmaceuten die Minister Bruins in de Volkskrant plaatste, smeekt om een openhartig en transparant antwoord. Hierbij.

Reste minister Bruins

Dank voor uw cri de coeur, gisteren in de Volkskrant. Wat fiin om te lezen dat u de waardevolle bijdrage van de farmaceutische industrie aan de gezondheidszorg erkent. De wens die spreekt uit uw brief, ligt ook ons na aan het hart. Betaalbare geneesmiddelen en betaalbare gezondheidszorg zijn net zo zeer in ons belang, als in het uwe. Van een behandeling die de patiënt niet bereikt, is nog nooit iemand beter geworden.

CAR-T SOEP WORDT NIET ZO HEET GEGETEN ALS **OPGEDIEND**

24 SEPTEMBER 2020

Terwijl fabrikant Gilead de laatste voorbereidingen treft voor de feestelijke opening van haar state-of-the art productiefaciliteit voor een hagelnieuwe geavanceerde kankerbehandeling ("CAR-T") in Hoofddorp, kopt De Volkskrant "Gronings ziekenhuis gaat prijzig kankermedicijn zelf maken met miljoenensubsidie". De verwarring, en oké, eerlijk is eerlijk, de verbijstering bij HollandBIO was groot. Want trekt de overheid nu echt 30 miljoen euro subsidie uit voor het namaken van een recent in het basispakket opgenomen, geregistreerde behandeling? Waarvan de fabrikant nota bene fors investeert in Nederland? Dat is niet stank voor dank, dat is een trap na! En, nog belangrijker, sinds wanneer is het ethisch verantwoord om omwille van kosten doodzieke patiënten aan extra risico's bloot te stellen wanneer er een geregistreerd en vergoed alternatief is? #DoetNederlandDanEchtNietMeerMee?

Holland HollandBIO 6,250 follower 3mo · §

"How I missed seeing you all in real life!" cheered HollandBIO's Annemiek, welcoming over 200 biotech entrepreneurs at the Dutch Biotech Event 2021, live in Maarssen. As a clear demonstration of the power of biotech, the biotech community was reunited thanks to the rapid development of multiple effective corona vaccines. 'We are in the midst of a biorevolution, and HollandBIO is here to promote it, making sure biotech innovations help people, animals and the planet thrive." The speech set the tone for the perfect day to follow, including the entrepreneurial insights of Paul Sekhri of eGenesis, Inc. and Linda Dijkshoorn of EV Biotech, interactive break-out sessions, and of course, catching up with fellow biotech pros while enjoying drinks, food and

https://lnkd.in/eFWxxX7G

#DutchBiotechEvent #Biorevolution



Dutch Biotech Event 2021 celebrates the power of biotech - HollandBIO

Holland HollandBIO 6,250 follower 3mo • §

Last Wednesday we celebrated the power of biotech during our Dutch Biotech Event! We welcomed over 200 participants InnStyle for a day full of plenary and break-out sessions, networking drinks, BBQ and a tasting of FUL Foods

We want to thank our speakers and moderators Paul Sekhri, Linda Dijkshoorn, Geraldine O'Keeffe, Jan-Willem Plomp, Roel Schaapveld, Maarten Bosch, Cristina Prat Taranilla, Carine Van Den Brink, Paul Iske, Pieter Duisenberg, Annemiek Verkamman and Hugo van Rooijen for their contributions.

Did you miss the plenary session or do you want to see the keynotes again? You can watch the keynotes by Paul Sekhri (CEO eGenesis, Inc.) & Linda Dijkshoorn (CEO EV Biotech) here: https://lnkd.in/dGtYQCvh

#DutchBiotechEvent #Biotech #LifeSciences









Want to learn more, think along with us, or aet involved?

Read more (scan the QR code) or get in touch with HollandBIO's Timen or Casper.





HOLLANDBIO'S EVENTS CONNECT THE SECTOR

Throughout the year, HollandBIO organizes numerous events – sometimes digital, preferably in person – where there is ample opportunity for networking and knowledge exchange. This is how HollandBIO helps bring the sector together. From top-notch speakers to the expertise at hand, from the original locations to the distinctive character of the events, and of course the drinks – we are proud of the high praise we receive time and again.



HollandBIO's Year Event 2020





HollandBIO's Year Event 2021









Read the entire report, scan the code or click here.













Watch an excerpt, scan the code or click here.

Dutch Biotech Event 2021







Read the entire report, scan the code or click here.

Watch the film, scan the code or click here.



Stakeholder dialogue on cell and gene therapies in the Netherlands











Read the entire report, scan the code or click here.

European Forum for Industrial Biotechnology & the Bioeconomy (EFIB)







Read the entire report, scan the code or click here.



Biotech Wednesday: Joining forces to outsmart cancer – Guiding cancer treatments in the 21st century



Read the entire report, scan the code or click here.















HOLLANDBIO BUSINESS SOLUTIONS

Running a biotech company is demanding and challenging.

Not to mention the courage, dedication and perseverance it requires. With our Business Solutions, HollandBIO makes doing business in life sciences a bit easier. Discover the possibilities!



Save money with the help of our purchasing programs

Saving money on your purchases has never been easier. By leveraging our combined buying power, the purchasing programs with <u>Fisher Scientific</u> and <u>Avantor</u>, <u>delivered by VWR</u>, achieve attractive discounts on a broad assortment of laboratory products from leading global suppliers. You get significant discounts on a wide range of products, from chemicals and equipment to consumables.

View the catalogs online, or sign up right away.

Join the more than 50 companies that have already signed up









Discounts on leading national and international events

Partnering conferences are essential in biotech. Whether you're looking for investors or research partners, if you're looking for a particular technology or if you have one to offer: these professional conferences are the place to be. HollandBIO negotiates member discounts for registration to the best biotech events. You'll find the current offer on our website.

For example, save hundreds of euros at the BIO International Convention or BIO-Europe





Mapping out funding opportunities with the Life Sciences Funding Database

The Life Sciences Funding Database is an initiative of HollandBIO and ttopstart to help biotech entrepreneurs find various national and European grants. The database is simple to use: enter the requested information via the easy search wizard and an up-to-date overview grants will appear on your screen.



180 visitors per month



See and be seen in the Dutch Life Science Database

The <u>Dutch Life Science Database</u> makes finding a Dutch biotech company a breeze. The database offers the most complete overview of our national life sciences sector, and is also part of the global Biotechgate database. Thanks to smart search filters, you can find what you're looking for in no time, whether it is a company to partner with or a specialized service provider. In short, the best overview of Dutch biotech companies there is.

500 visitors per month



Offering services via the Member-to-Member Marketplace

Most biotech entrepreneurs outsource a lot of work to specialized service providers. That's a good thing, because it allows them to focus their attention on the development of their own company. With the Member-to-Member Marketplace, HollandBIO puts service providers in the spotlight, and members can benefit from their attractive offers.

For example, get a 70% discount on Axon Healthcare's knowledge database





Organize your event with HollandBIO

HollandBIO organizes dozens of events every year. Large, small, specialized or general: it makes no difference. Are you a member of HollandBIO, and are you organizing an event that would be interesting for our community? Take advantage of our Collaborating with HollandBIO program. We will leverage our experience, network and communication channels to make your event a big success.





Want to learn more, think along with us, or get involved?

Read more (scan the QR code) or get in touch with HollandBIO's Robbert.



Colophon

Concept, writing and production: HollandBIO **Images:** HollandBIO, Nils van Houts, Jeroen Bouman

Design: Jacob & Jacobus

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JOIN HOLLANDBIO TOO!

Become a member today and...

- Gain access to our network
- Stay informed of relevant sector developments
- Put your organization in the spotlight
- Participate in our programs
- Meet peers at our events
- Have a say in our positions and priorities
- Benefit from our Business Solutions

HollandBIO is ready for you!









