

Annual Review 2022



**Breaking
through
impossible.
Together.**

leaps 

20

22

We are thrilled to present to you our second annual review, which highlights the key developments of Leaps by Bayer in 2022.

None of these developments would have been possible alone. Only through collaboration with our outstanding portfolio companies and partners, we were able to leap forward in 2022.

Breaking through impossible. Together.

Leap Forward

**Breakthroughs in science drive us forward.
But what does it take to cross the line?**

To shift paradigms, we need more than a lone hero, more than a trailblazer heading into uncharted territory.

**Science is a team sport.
Behind every innovation is the work of many.**

There are those who enable, so others can fly.
Those who guide, so others break boundaries.

**When we believe in science,
we believe in possibility.**

We take a leap forward together, so impossible today becomes possible tomorrow.

Voiceover from our brand film
Leap Forward



Key Milestones 2022

Total Amount Invested

in Leaps Portfolio 2015 – 2022

1.7+
Billion
USD

Key Portfolio

Company News

- Q1** **Huma Therapeutics** partners with **AstraZeneca** to acquire **AMAZE**, a disease management platform for asthma and heart failure patients.
- Q2** **Affini-T Therapeutics** and **Metagenomi** collaborate to create new opportunities for cancer patients by combining **Metagenomi's** proprietary gene editing systems and **Affini-T's** state-of-the-art TCR discovery and synthetic biology platform.
- Q3** **Century Therapeutics** receive IND clearance from the U.S. FDA to assess CNTY-101 in patients with relapsed or refractory CD19 positive B-cell lymphomas. **Affini-T Therapeutics** and **Metagenomi** selected by Endpoints News as two of the most promising startups in biotech for the Endpoints 11.
- Q4** **Metagenomi** and **Ionis Pharmaceuticals** form an alliance to jointly develop medicines for up to four genetic targets.

Total Company

Investments

2015 – 2022

55+

Company

Investments

2022

7+

Financing

Rounds

Participated 2022

15+

Portfolio Companies

Announced in 2022

Cellino Biotech
ReCode Therapeutics
Affini-T Therapeutics
Indapta Therapeutics
Woebot Health
Gandeeva Therapeutics
Capstan Therapeutics
NuCicer

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Leap Forward

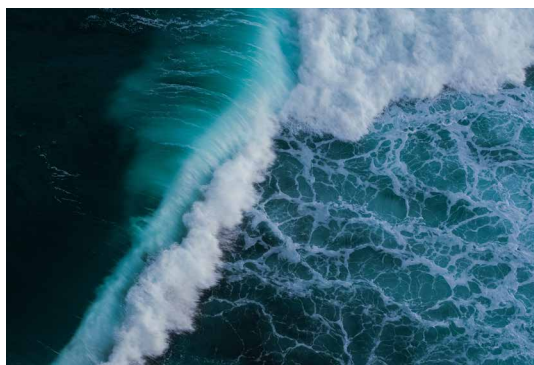
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“At Leaps, we’ve drawn inspiration from the tremendous scientific innovations of the past year. Together with our partners, we’ll continue accelerating the pace of innovation, and seek the next generation of breakthrough technologies. Through collaboration, we aim to build a better future.”



Juergen Eckhardt
Head of Leaps by Bayer

Summary of 2022 Achievements

Oncological diseases

Besides **Affini-T Therapeutics** and **Indapta Therapeutics**, our multiple investments in the field of oncology include **Capstan Therapeutics**, which builds on in vivo cell engineering technologies to develop new treatment options for oncological diseases, and **Gandeeva Therapeutics**, which leverages the power of both cryo-electron microscopy and AI to accelerate drug discovery, design, and development.

Carbon challenges

Bayer acquired a majority share in **CoverCress**, which was already a Leaps by Bayer portfolio company for seven years. **CoverCress** is developing a new winter oilseed crop that allows corn and soybean farmers to add a new crop into their rotation on existing land during winter, while offering the ecosystem benefits of a cover crop, including improved soil health and carbon sequestration.

Alternative protein supply

Our recent investment in **NuCicer** emphasizes our commitment to helping develop climate resilient, plant-based, and affordable protein alternatives. The agri-food technology company **NuCicer** pioneers ultra-high protein chickpeas by harnessing biodiversity of wild chickpea relatives, while helping to decarbonize our food system.

Mental health

280 million people are estimated to suffer from depression globally, making it one of the most common mental disorders worldwide. With **Woebot Health** and its AI-powered, chat-based 24/7 digital therapist, we made our first investment in Leap 05 'Protect Brain and Mind'. We are excited to join the company's journey in becoming the world's first mental health ally for people and businesses, making tech-supported continuous care a reality for all.

Cell & gene therapies

The rapid advances in cell therapy are among the most exciting avenues for the future of biotech. Our new portfolio companies testify to both the power and relevance of the segment. **Cellino Biotech** aims at making personalized cell therapies available at scale. **Affini-T Therapeutics** is unlocking the power of T cells, thereby targeting core oncogenic drivers to develop potentially curative therapies for solid tumor cancers. **Indapta Therapeutics** researches cancer therapies that employ natural killer immune cells, while **ReCode Therapeutics** works on gene correction therapeutics and develops a targeted genetic medicines technology enabling precise delivery to target organs and cells beyond the liver.

Spotlight Health Investments

2022

We are truly proud of our collaborations with such talented pioneers, visionaries and leaders within our healthcare and agriculture portfolio companies. All our “Leap Forward” achievements have only been possible together with them. Please find below and on the next page a glimpse of the inspiring companies we have partnered with in 2022.



Jak Knowles
MD, CEO, President &
Co-founder of
Affini-T Therapeutics

“Affini-T is unlocking the power of T cells by targeting core oncogenic driver mutations to develop potentially curative therapies for solid tumor malignancies. Our differentiated cell therapy platform utilizes state-of-the-art engineering and synthetic biology capabilities to target devastating cancer-driving mutations like KRAS for patients with hard-to-treat tumors. To develop life-changing medicines, it takes a village of talented collaborators working together. Through the joint power of our management, our renowned founding team of scientific innovators, leaders in immunology and cellular engineering, and great investors backing and challenging us regularly, we endeavor to develop transformational medicines to help patients with some of the most difficult cancer diagnoses.”



Lucio Iannone
VP of Venture
Investments Health

“Preventing and curing cancer is certainly one of the biggest milestones we have yet to achieve in medicine, which is why our investment announcement in Affini-T Therapeutics excited me even more. Through our investment in Affini-T, we hope to help the team achieve their vision to develop potentially curative therapies for solid cancers with high mortality rates and few treatment options including lung, colorectal, and pancreatic cancer.”



Lee Cooper
Senior Director of Venture
Investments Health

“I am thrilled about the recent addition of Capstan Therapeutics to the Leaps portfolio. Capstan has tremendous potential to change standards of care for patients across several disease areas by bringing complex cell therapies into the world of off-the-shelf mRNA therapeutics.”



Laura Shawver
PhD, CEO & President of
Capstan Therapeutics

“At Capstan, our vision is to thoughtfully advance *in vivo* cell re-programming through non-viral targeted delivery of payloads to specific cells and tissues in the body. We are grateful for the support of Leaps by Bayer and our investor syndicate that recognize the paradigm-shifting potential of our science, which has applications across multiple therapeutic areas, and look forward to continuing to collaborate with Lee and the Leaps team as we work to make our vision a reality for patients.”

“The successful administration of billions of doses of mRNA COVID-19 vaccines, and continued progress with novel RNA and gene correction therapeutics, have catapulted us into a new era of possibility for genetic medicines. We are harnessing that potential to make a meaningful difference for people with rare genetic diseases.”



Shehnaaz Suliman
MD, MBA, MPhil, CEO of
ReCode Therapeutics



Rakhshita Dhar
Senior Director of Venture
Investments Health

“ReCode’s novel LNP delivery platform has the potential to power the next wave of breakthrough genetic medicine. Their ability to deliver genetic cargo to multiple organs and tissues in a redosable manner has game changing potential that overcomes current technologies’ limitations.”

Spotlight Agriculture Investments 2022



Paimun Amini
Senior Director of Venture
Investments Agriculture

“Holistic nutrition and protein are inseparable. NuCicer’s approach to enhancing chickpeas with 75 percent higher protein content and simultaneously targeting to reduce chickpea protein ingredient costs by 50 percent compared to today’s commodity versions deeply fascinated me. Access to low-cost, delicious, and climate resilient plant-based protein alternatives is important to decarbonize the food supply chain and better use earth’s natural resources like water to produce more with less.”

“Co-founded by UC Davis Professor and CTO Douglas Cook, a world-renowned expert on chickpea genetics, NuCicer harnesses the extensive natural biodiversity of wild chickpeas using a machine learning and genomic breeding platform.”

Source: Vegconomist about NuCicer



Kathryn Cook
CEO & Co-founder
of NuCicer

“Expanding affordable, scalable plant protein beyond currently available soy ingredients is a critical and urgent need for our food system. We look forward to taking the next steps in our journey together with Leaps – bringing NuCicer’s high-protein chickpeas to market in 2023 and expanding our breeding program to target crop improvements that create value for our farming and manufacturing partners at every step of the supply chain.”

“Accompanying CoverCress on its journey to create a new crop and become a sustainable low carbon oilseed producer has been amazing. CoverCress is a great example for how we at Leaps aim to support breakthrough innovations that can create positive benefits for people and planet.”



Derek Norman
VP of Venture
Investments Agriculture



Mike DeCamp
CEO & President
of Cover Cress

“Since our founding in 2013 we have actively sought – and benefited from – scientific, operational, and financial support from our academic and strategic partners like Leaps. The progress we have made in converting pennycress into our novel, lower carbon intensity oilseed technology, CoverCress, would have been much slower without this critical support and we look forward to advancing our product even further together.”

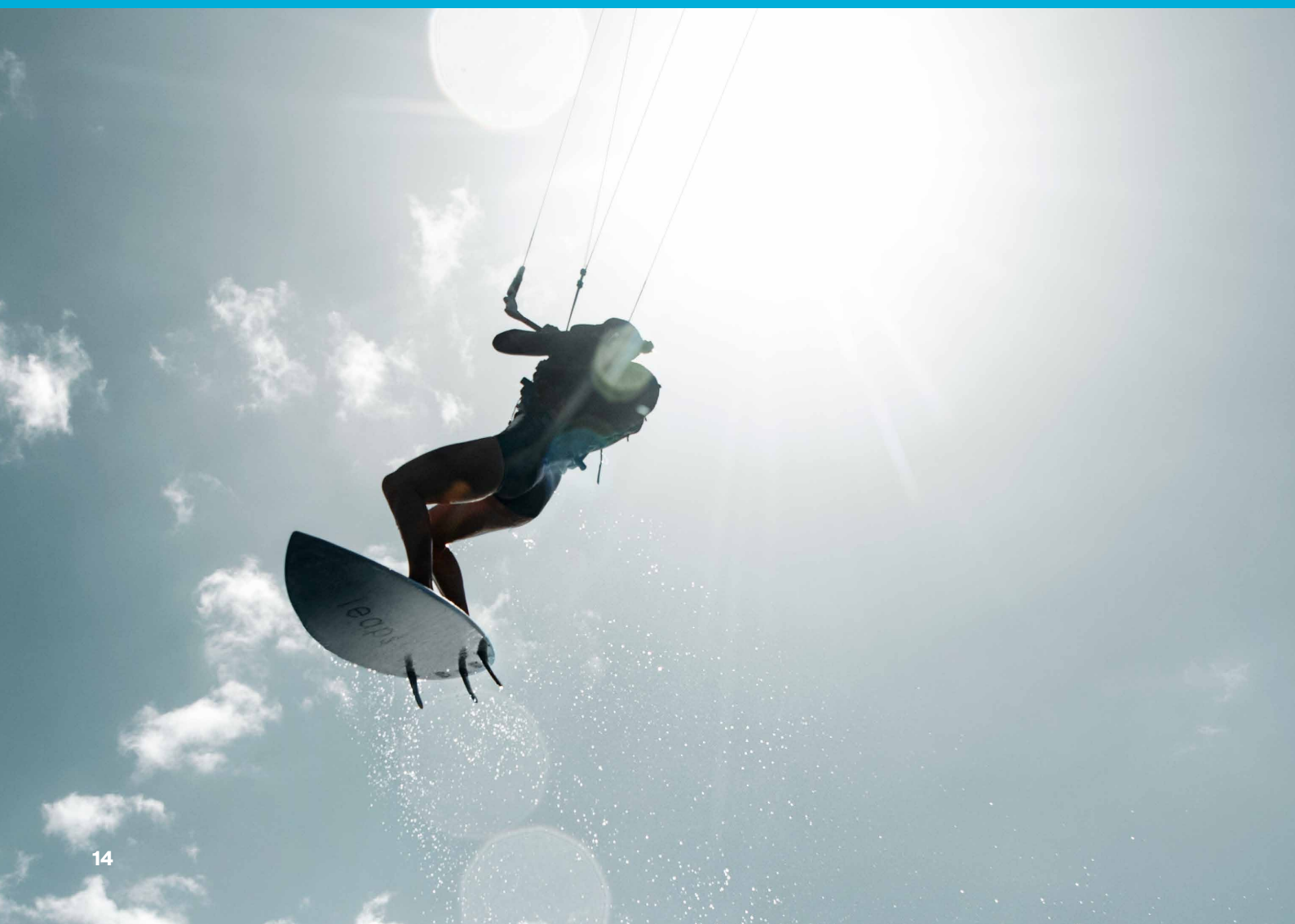
“By leveraging expertise and backing from leaders in fuels, soybean crushing, logistics, and crop sciences, CCI will be positioned to deliver on its full potential via a supply chain that understands its crop’s production, growth, processing, and delivery needs from the ground up.”

Source: Successful Farming about Cover Cress (CCI)

Leaps by Bayer aims to conquer ten huge challenges facing humanity. Some call them impossible.

We call them Leaps.

By leveraging transformative technologies, we aim to tackle ten Leaps that could have the greatest impact on humanity. Our Leaps are the articulation of our goals, based on where our experience and competencies as a company can make the biggest difference.



10 Leaps. 10 Huge Challenges.

01 / **Cure** genetic diseases

HEALTH

Stopping genetic diseases before they develop or progress could prevent chronic suffering and give many of us the chance to live a full and healthy life.

02 / **Provide** sustainable organ and tissue replacement

HEALTH

Cell and gene therapies hold tremendous promise to restore health, reverse the course of degenerative diseases, and prevent organ failure.

03 / **Reduce** environmental impact of agriculture

AGRICULTURE

From carbon sequestration to reducing land and water usage, innovation has the power to transform modern agriculture.

04 / **Prevent** and cure cancer

HEALTH

Biotechnology that leverages the immune system and other emerging platforms could make huge strides in the fight against cancer.

05 / **Protect** brain and mind

HEALTH

Neurodevelopmental and neurodegenerative diseases along with mental health disorders represent a massive and growing unmet need with no simple solutions available.

06 / **Reverse** autoimmune diseases and chronic inflammation

HEALTH

Systematically addressing autoimmune diseases and chronic inflammation could enable lives free of pain, disease management, and life-threatening conditions.

07 / **Provide** next-generation healthy crops

AGRICULTURE

The Green Revolution lifted millions out of starvation, yet new approaches are needed to provide comprehensive nutrition at a global scale.

08 / **Develop** sustainable protein supply

AGRICULTURE

Nourishing a global population will require new approaches to sustain both a healthy planet and healthy people.

09 / **Prevent** crop and food loss

AGRICULTURE

A pandemic, climate volatility, and an increasingly long and complex supply chain expose the fragility of our global food system and the need for resilience.

10 / **Transform** health with data

HEALTH

From wearable devices to artificial intelligence and protein modeling – digital technology is sparking a revolution in medicine.

Interview with Werner Baumann

CEO of Bayer AG and responsible Board of Management member for Leaps by Bayer since January 2020

In April 2022, Bayer announced that it is accelerating its investment in Leaps by Bayer with more than 1.3 billion euros funding until end of 2024. We are very humbled by this commitment, as we will be able to continue on our successful path and provide funding for the brightest minds working on solutions that truly make a difference for people and the planet. We sat down with Werner Baumann (Chairman of the Board of Management of Bayer AG) to gain further insights and perspectives from him about our fruitful collaboration.

2022 marks the 7th year of Leaps by Bayer, with over €1.7B invested into 55 portfolio companies to date. Why has Leaps become an integral part of Bayer's innovation strategy?

Leaps is like a speedboat attached to an ocean liner. The big boat can travel far and wide, but it can't navigate every channel. So the little speedboat takes off to explore distant waters. We have a world-class enterprise devoted to R&D in our three divisions, but it's also important for us to have the capability to stay on top of progress outside our traditional areas of expertise. This is especially the case as technological developments accelerate and intersect with biotech, unlocking new approaches that were out of reach even five, ten years ago. Like the idea of engineering microbes to store carbon in the soil or enable nitrogen fixation in plants, as our portfolio company Andes is working on. A lot of these types of creative solutions are coming from the start-up world, which gives us the exciting opportunity to help their ideas come to life via Leaps. Ultimately, we're trying to solve the biggest challenges in health and agriculture. To be successful, we need to work together.

How does Leaps fit into Bayer's vision of health for all, hunger for none?

Breakthrough innovation and sustainability are critical to Bayer as a whole, and Leaps is one way for us to tackle

that. Their focus on making big bold paradigm shifts, like moving from treating to preventing diseases, and growing better food with fewer resources, is exactly the kind of strategy we need to realize our long-term vision.

In 2022, Leaps announced a commitment to invest another €1.3B through 2024. Why is Bayer doubling down on Leaps even as the broader biotech markets have cratered?

It's a high risk, high reward proposition. Regardless of this year's challenges, the technologies we are investing in are those we urgently need in the years and decades to come. I am personally very dedicated to growing Leaps for this reason. Yes, 2022 was a year with extremely worrying news, in particular a war in the heart of Europe that caused shockwaves around the globe and serious consequences in food and energy supplies. It's true that this also had an impact on markets and business decisions. But if we were to only play it safe, would we be able to feed 10 billion people in 30 years, or cure the diseases we have a shot at curing? Leaps is about much more than the market's ups and downs. It's the bet we must make for a sustainable future.

Are the technologies from the Leaps investments in competition with Bayer's own R&D?

No, in fact it's quite the opposite. They are highly complementary. Leaps only invests in tech where we



Werner Baumann
CEO of Bayer AG

don't have existing IP. There's great appreciation from our teams in pharma and crop science R&D because they know these technologies may come their way at some point. For example, once research-focused startups finish phase 2b or phase 3 trials, they often need a bigger commercial partner to advance their assets. That could be a clear win-win.

Leaps is all about breaking through seemingly impossible challenges, like curing cancer and reducing the environmental impact of agriculture. How realistic is it that their investments will actually pay off?

Many of the Leaps' investments are seed rounds and Series A. Therefore, we anticipate fairly long timelines before any products or therapies are commercialized. These longer runways are a key part of the Leaps model, freeing up the companies to focus on the development work rather than constant fundraising. That said, we have already seen exciting milestones.

BlueRock, for example, was one of Leaps' first investments, and was acquired fully by Bayer in 2019 to

build up our cell and gene therapy capabilities. The lead program is in Parkinson's disease, engineering stem cells to replace damaged neurons, and enrollment in the Phase 1 trial has now completed. On the Ag side, CoverCress is a Leaps portfolio company that Bayer acquired a majority stake in this year. By gene editing a common winter weed that normally wouldn't provide farmers with much value, they've created a new kind of cash crop that produces an oil useful as both a low carbon aviation fuel source and animal feedstock, giving farmers a new revenue stream and a really interesting approach to decarbonizing agriculture.

We don't realistically expect to achieve every single one of the 10 Leaps in the near future. That's the nature of high risk, high reward. But if only a few technologies are successful, helping to reduce disease and improve our food system, that would provide a meaningful return for humanity.

It's thrilling to imagine a future of abundant, affordable food and healthier, longer lives for future

generations. Which of the Leaps is most personally important to you, if you could achieve only one?

That's like trying to pick a favorite child! (laughs) No, really, it's hard to choose, as they are each necessary and would be enormously impactful. But if I had to choose one, I'd probably pick Leap 7, provide next-generation healthy crops. The challenge of feeding the world in the next few decades will be increasingly difficult in the face of climate change, population growth, limited arable land, and other factors. Not to mention, 1 in 5 deaths worldwide are connected to a poor diet. If we can figure out how to grow more and better food with fewer resources, that would be a huge success for all of us.

Portfolio

Overview new additions 2022

Health

From treatment to cure

Exponential technology in health is enabling advances that once seemed impossible – restoring lost tissue function like dopaminergic neurons for patients suffering from Parkinson’s disease or tackling the organ shortage through xenotransplantation. Through our investments and collaborations, which are aligned with our areas of expertise, we target paradigm-shifting ideas in human health. We partner with the brightest minds in biotech. We are prepared to learn from failure. If even one of these ideas works, together we will transform the world for the better.

Agriculture

From more to better

From data science and sensors to synthetic biology, emerging technologies are poised to fundamentally transform modern agriculture. We invest in companies pursuing breakthroughs that could decrease the intensive inputs of farming—energy, land, chemicals—while increasing productivity, nutrition, and quality. Nitrogen fixation, truly sustainable crop protection, and disruptive digital business models. The scale of agriculture is massive and our planet is diverse. Change will not happen overnight. The companies in our portfolio are a lighthouse. Through technology, science, and collaboration, we believe we can both nourish our expanding population and preserve our global ecosystem.

NuCicer
Capstan Therapeutics
Affini-T Therapeutics
Gandeeva Therapeutics
Cellino Biotech
Indapta Therapeutics
ReCode Therapeutics
Woebot Health

Portfolio

New health & agriculture additions 2022

NuCicer

Leap 08 / 03 /

NuCicer has developed a machine learning and genome-guided breeding platform, which aims to revolutionize the plant protein industry by increasing the protein content of chickpeas, a high-demand yet high-cost protein source, to reduce production costs, and fulfill consumer demand. The agri-food technology company partners with growers who are attracted to chickpea's capacity for nitrogen fixation and interested in NuCicer's potential to increase the crop's environmental resilience, but also with top ingredient manufacturers and food and beverage companies who recognize the potential of chickpea as a sustainable, functional ingredient.



Capstan Therapeutics

Leap 04 / 01 / 06 /

Capstan Therapeutics is advancing precision in vivo cell engineering to develop therapeutics for a broad range of disease categories with unmet or underserved clinical need. To enable engineering or ablation of pathogenic cells in the body, the company is combining the power of cell therapy with the precision of genetic medicines to develop new treatment options for patients for oncology, fibrosis, inflammation-related diseases, and monogenic blood disorders.



Cellino Biotech

Leap 02 / 10 /

Cellino Biotech aims at significantly expanding patient access to stem cell-based therapies with autonomous end-to-end manufacturing. While large scale production of stem cell therapies is currently challenging due to extensive manual handling, high variability, and expensive manufacturing costs, Cellino is on a mission to make stem cell-based regenerative medicines accessible for all eligible patients.



Gandeeva Therapeutics

Leap 04 / 10 /

Gandeeva Therapeutics is dedicated to harnessing the power of cryogenic electron microscopy and machine learning to advance the discovery and development of novel therapeutics at scale. The precision biotechnology company seeks to achieve transformative societal impact on public health by revolutionizing drug discovery and lowering risks of late-stage clinical failures.



Our 10 Leaps Our Huge Challenges

01 /
Cure
genetic
diseases

02 /
Provide
sustainable organ and
tissue replacement

03 /
Reduce
environmental impact
of agriculture

04 /
Prevent
and cure cancer

Indapta Therapeutics

Leap 04 /

Indapta Therapeutics focuses on developing and commercializing a proprietary allogeneic cell therapy to treat multiple types of hematologic cancers and solid tumors. To address the limitations of currently available autologous T-cell therapies, the biotechnology company has developed allogeneic FcRγ-deficient natural killer cells (known as G-NK cells) and is working to bring this off-the-shelf cell therapy to patients.

INDAPTA
THERAPEUTICS

Affini-T Therapeutics

Leap 04 /

Affini-T Therapeutics is committed to developing potentially life-changing medicines for patients with intractable solid tumor cancers, who represent a critical unmet need as current treatment options lack durability and efficacy. The company's proprietary platform discovery engine has the potential to deliver transformative therapies for patients with mutant variants of KRAS, the most prevalent oncogenic driver mutation in solid cancers.

affini 

Woebot Health

Leap 05 / 10 /

Woebot Health has developed a behavioral health platform that combines sophisticated artificial intelligence, decades of clinically-proven therapeutic research and an engaging relational agent called Woebot, which together form the foundation for delivering continuous care via purely digital, empathic, and personalized apps. This promises to provide products that put personal growth in people's hands, while fitting right into people's lives.

 **Woebot Health**[™]

ReCode Therapeutics

Leap 01 / 04 /
05 / 06 /

ReCode Therapeutics is a genetic medicines company using superior delivery to power the next wave of mRNA and gene correction therapeutics. ReCode's selective organ targeting (SORT) lipid nanoparticle (LNP) platform is a next-generation, genetic medicines technology, helping to expand the company's pipeline with therapeutics that use mRNA-mediated replacement and gene correction in target organs with precision targeting of disease-relevant cells.

 **ReCode**
THERAPEUTICS

05 /
Protect

brain and mind

06 /
Reverse

autoimmune diseases and
chronic inflammation

07 /
Provide

next-generation
healthy crops

08 /
Develop

sustainable
protein supply

09 /
Prevent

crop and
food loss

10 /
Transform

health with
data



LEAP FORWARD



leaps 

Community Engagement 2022

We are very proud that in this past year, we have been part of several impact-driven events that shape and spearhead the biotech industry and beyond.

Through joining leading industry events, we've experienced first hand the paramount importance of exchanging ideas, cross-pollinating with like-minded peers, and tapping into the often complementary knowledge of others. Collaborating with well-established institutions was even more delightful this year, since all encounters took place in person and truly felt like a homecoming after all those years spent online and apart.



EmTech

We collaborated with MIT Technology Review for the EmTech 2022 conference. EmTech constitutes MIT Technology Review's flagship event where global changemakers, innovators, and industry veterans discuss what's probable, plausible, and possible about tomorrow's breakthrough technologies. Our 10th Leaps Talk 'Tackling Huge Challenges Together' was part of the event, as well as the premiere of Chapter III: Leap Forward.



SynBioBeta

SynBioBeta is the premier innovation network for biological engineers, investors, innovators and entrepreneurs who share a passion for using biology to build a more sustainable universe. Under the motto 'Built with Biology', cutting-edge advancements in synthetic biology were showcased that are currently transforming the ways in which we fuel, heal, and feed the world. Our 9th Leaps Talk took place at SynBioBeta 2022, probing whether people around the world are ready for cultured meat.



World AgriTech

The World Agri-Tech Innovation Summit has become the annual meeting place for the global agtech ecosystem. In 2022, 2000+ growers, agribusiness leaders, technology pioneers, and investors came together to exchange insights, get inspired, and identify future collaboration partners.

Photo: Chris Constantine/World Agri-Tech

Breakthrough Innovation Forum

Hosted by Bayer, the Breakthrough Innovation Forum showcased Bayer’s commitment to accelerating innovations in life sciences. The event featured a range of TED talk style presentations from Bayer leaders, like Werner Baumann, Stefan Oelrich, Sarena Lin, as well as from external speakers, such as Jamie Metzl and John Dombrosky. Leaps contributed to the event with a presentation from Juergen Eckhardt, and with videos from three portfolio companies (Andes, Cellino, Ukko), highlighting their work in driving breakthrough innovation.



Gonzalo Fuenzalida
Co-founder & CEO, Andes



Nabiha Saklayen
Co-founder & CEO, Cellino



Anat Binur
Co-founder & CEO, Ukko

CLICK OR SCAN THE QR CODE TO WATCH ALL THE VENTURE VIDEOS



Our social media performance in 2022

	FOLLOWER GROWTH	VIDEO VIEWS + IMPRESSIONS
	40%	70.1 M
	40%	31.9 M
	47%	38.3 M
	1608%	3.7 M

Bayer US Science and Innovation Forum

For the Bayer US Science and Innovation Forum, top-tier German and US media were invited to Cambridge near Boston. They were introduced to how Bayer, Leaps by Bayer, and the latter’s portfolio companies and collaboration partners are tackling some of the biggest challenges of our time in healthcare and agriculture. They also learned about the role Boston plays as an innovation hub, offering a unique environment to drive and enable breakthrough ideas. The attending journalists could directly engage with leaders from Bayer, Leaps by Bayer as well as the latter’s portfolio companies and partners, and Bayer’s CEO Werner Baumann.



Chapter III of our Spirit Film Series

Leap Forward



CLICK OR SCAN THE
QR CODE TO WATCH
FULL CHAPTER III FILM



Kite surfing world record holder
Olivia Jenkins leaping over the
International Date Line

We aim to enable, so others can fly.

To illustrate this belief that infuses everything we do, we embarked on an ambitious journey in the middle of the Pacific Ocean, demonstrating the power of science in making the seemingly impossible become possible.

In Chapter III, Leaps brought together the world record holder Olivia Jenkins and a team of weather experts led by scientist and Olympic weather coach Dr. Alicia Ageno on the remote Pacific Island of Samoa. After months of careful planning, amidst unpredictable weather conditions, Olivia became the first person to kite surf from today into tomorrow, leaping over the International Date Line which separates Samoa and American Samoa.

This feat achieved on August 14th, 2022, exemplifies how collaboration can enable the brightest minds to realize what seems impossible today, thereby leaping into a better future.

Chapter III was a 100% carbon neutral production

Supporting Interview Film

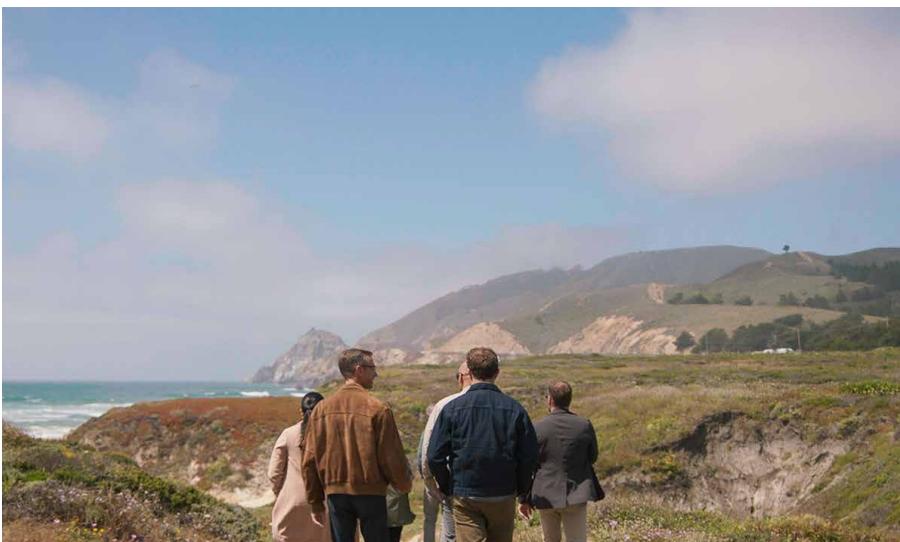
Breaking
through
impossible.
Together.



Collaboration is key to making breakthroughs in life science and beyond. From our first investment until today, this conviction remains unchanged. Together with our portfolio companies, we share a tireless pursuit of tomorrow.

To further reflect on our approach to investing in and enabling brilliant teams to transform ideas into breakthroughs, we've created another film, complementary to Chapter III: Leap Forward. The interview film 'Breaking through impossible. Together.' features conversations between leaders from Leaps and selected portfolio companies, in which they introduce their bold visions and the groundbreaking work they are doing.

It was an honor to have Brian Thomas, CEO at Metagenomi, Katie Fanning, CEO at Mozart Therapeutics, Travis Bayer, CTO at Sound Agriculture, and John Dombrosky, CEO at Oerth Bio, sit down with our team members Rakhshita Dhar, Lucio Iannone, and Derek Norman, and talk about their fascinating ideas. They also share how they experience Leaps' support in elevating and accelerating their work.



**CLICK OR SCAN THE
QR CODE TO WATCH
FULL INTERVIEW FILM**



Leaps Talk #9 at SynBioBeta

Culture and cultured meat: Is the world ready for cell-to-table?

Our first in-real-life Leaps Talk after the pandemic discussed how close scientists are to solving the 'scaling' challenge of cultured meat. While many urban eaters are embracing meat-free alternatives, global meat consumption is rising by 1% a year - a huge threat to worsening climate change.

At the same time, scientists are closer than ever to solving the 'scaling' challenge of cultured meat, reducing both costs and energy use. But in the age where farm-to-table dominates food culture, are consumers ready for steaks without cows?

Our 9th Leaps Talk takes a closer look at what we can learn from diverse cultural relationships with meat, how these have evolved in the past, and where tastes are going next. What other global trends in society can help us see where public appetite is heading? And what role will chefs and food culture leaders play in driving or stemming adoption?

From Left to Right: Niya Gupta / Amy Webb / JJ Johnson



Moderator:

John Cumbers

Founder of SynBioBeta

Speakers:

Niya Gupta

Co-founder & CEO
Fork & Good

Amy Webb

CEO, The Future Institute

JJ Johnson

Chef, Founder,
TV Personality & Author

CLICK OR SCAN
THE QR CODE
TO WATCH FULL
LEAPS TALK #09



Leaps Talk #10 at EmTech MIT

Tackling huge challenges together

CLICK OR SCAN
THE QR CODE
TO WATCH FULL
LEAPS TALK #10



Our 10th Leaps Talk took place at the EmTech MIT 2022 conference, the flagship pioneering event of MIT Technology Review. History tends to elevate lone heroes, while recent events have shown that enormous challenges can only be solved through team effort. Two celebrated leaders from science and sport discuss how collaboration and empathy have enabled some of their most recognizable achievements.



Top: Elizabeth Bramson-Boudreau
Right: Laurent Duvernay-Tardif
Left: Dr. Kizzmekia Corbett

Moderator:

Elizabeth Bramson-Boudreau

CEO & Publisher MIT Technology Review

Speakers:

Dr. Kizzmekia Corbett

Lead Scientist, COVID-19 mRNA Vaccine Development and Assistant Professor at Harvard T.H. Chan School of Public Health

Laurent Duvernay-Tardif

Graduate in Medicine & Super Bowl Champion

About Leaps Talks /

Leaps Talks is a speaker series that gathers leading minds from distinct disciplines to discuss the ethics, opportunities, and challenges in biotech innovation and investment. Organized with leading festivals and partners, the events feature moderated conversations by leaders from distinct domains of expertise.



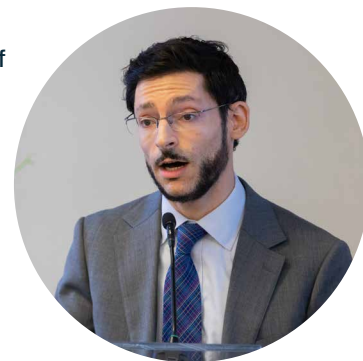
Rapid Fire with Matt Fuchs

Editor-in-chief, Leaps.org

Leaps.org is a not-for-profit initiative that publishes award-winning journalism, popularizes scientific progress on social media, and hosts events about innovation, ethics, and the future of humanity. Their mission is to rebuild public trust in science as a force for good and to foster dialogue about the ethical implications of new breakthroughs. Leaps.org is run by editor-in-chief Matt Fuchs, and is published by GOOD Worldwide, a global social impact company and its subsidiary Upworthy – a purpose-driven media company.

The initiative was initially called LeapsMag. In 2021, GOOD converted LeapsMag to the non-profit initiative Leaps.org to underscore its commitment to independence and to enable it to fulfill its mission on a larger scale.

Matt Fuchs
Editor-in-chief
leaps.org



Please describe in one sentence what Leaps.org is

Leaps.org is an online journalism platform that highlights progress in the life sciences, counters misinformation and encourages discussion about ethical challenges at the frontiers of science.

What exactly is your role at Leaps.org?

I get to work with great people at Leaps by Bayer, GOOD Worldwide and Upworthy as I commission, edit, and publish all articles for Leaps.org, host weekly podcasts, lead partnerships and business development, implement single-issue magazines and other special projects, oversee our social media, produce our videos, and write and publish the bimonthly newsletter.

Please name Leaps.org's biggest achievement in 2022

Continuing our successful collaborations with like-minded groups - for example, launching a special issue magazine in partnership with the Aspen Institute and Science Philanthropy Alliance, in which we focused on key intersections between climate change and infectious disease.

What has been your personal highlight at Leaps.org in 2022?

Quadrupling our podcast downloads and helping to build one of the most engaged science accounts on Instagram, with Leaps.org followers currently numbering 265,000.

What was the biggest challenge you or Leaps.org had to face in 2022?

The biggest challenge is also the most exciting opportunity: to find creative new ways of helping people to appreciate scientific discovery and inspiring them to think deeply about the future of science.

What's next for Leaps.org?

A new partnership on scientific breakthroughs for using tech for good, and we have a book in the works - an anthology of the year's best writing about health innovations, edited by Leaps.org.

The Happiness Research Institute (HRI) is an independent think tank committed to informing decision-makers of the causes and effects of human happiness, making subjective wellbeing part of the public policy debate, and improving the overall quality of life for citizens across the world.

Happiness Research Institute x Leaps by Bayer:

Started in 2018, our collaboration with the HRI is grounded on our shared vision of making the world a better place and sustainably increasing people's happiness.

Insights from our latest report with the HRI (Taking 10 leaps for humanity)

Our latest report with the HRI examines how much wellbeing we could create by solving each one of our ten Leaps. Together with the HRI, we have therefore co-developed a novel framework called Wellbeing Adjusted Life Years (WALYs) to assess and measure how investments can actually improve people's wellbeing. While investment funds track financial returns, impact funds must track positive impact. In the absence of a suitable existing framework, we have collaborated with the Happiness Research Institute to develop WALYs.



Mike Wiking (CEO, HRI) at the TNW Conference

THE WALY METRIC

The WALYs framework is an evidence-based impact metric intended to help better prioritize investment in breakthrough innovations.

WALYs are a measure of time, weighted by wellbeing. They are calculated on a 0 to 1 scale, where 1 WALY can be understood as one year lived in full wellbeing. Individual life satisfaction data – survey measurements of how pleased people are with their lives – serve as the foundation for the metric.

When calculating WALYs we make use of the following formula:

$$\text{WALYs lost} = 1 - (\text{actual life satisfaction} / \text{potential life satisfaction}).$$

“Actual life satisfaction” refers to the average life satisfaction of the target group (e.g., cancer patients or people exposed to the consequences of climate change) and “potential life satisfaction” refers to the level of wellbeing these people would experience in the absence of the respective condition (measured by the life satisfaction of a reference group).

Our latest
report with
the HRI /

Taking 10 leaps for humanity

How conquering ten
huge challenges
will have profound
impact on humanity

CLICK OR SCAN
THE QR CODE
TO READ FULL
HRI REPORT



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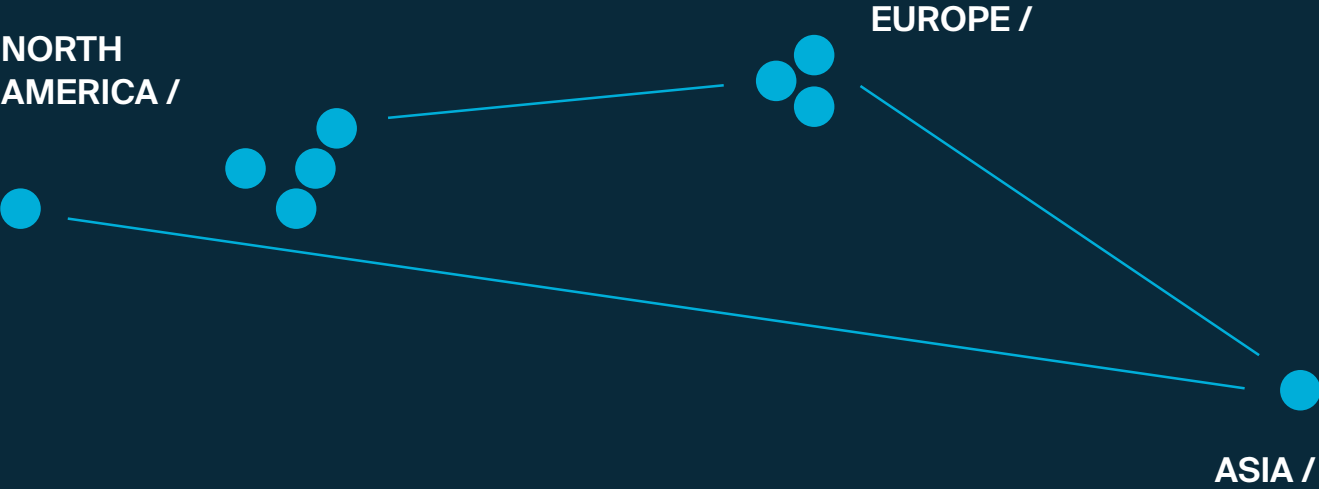


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Our Offices



**We are impact
makers and
innovators.
We are pioneers
and trailblazers.**



Manifesto /

**We believe in what we can prove.
In facts and figures. In evidence.**

**But at the same time we are fascinated
by the things we can't yet prove.**

**The small things – and the big
questions that move humankind.**

**Our achievements are the result of our
insatiable curiosity and our stubborn-
ness about never giving up.**

**We love the problem, but adore
the solution.**

**We are analytical and creative.
We are critical and passionate.
We scrutinize and practice.**

**We are architects of possibilities
where others only see limitations.**

**We are logicians finding riddles
worthwhile enough to spend a
lifetime pondering.**

**We are advocates for nothing less
than changing the world for the better.**

**Not because we're asked to do it,
but because we have to.**

Leaps by Bayer is the impact investment unit of Bayer. Leaps invests in paradigm-shifting advances in the life sciences and in technologies with the potential to change the world for the better. To date, Leaps by Bayer has invested over \$1.7 billion of minority equity into over 55 portfolio companies.

With portfolio companies in health and agriculture, Leaps is seeking to achieve ten ambitious goals – the 10 Leaps for humanity. The primary goal is to push the advancement of breakthrough technology through the creation of business models that balance profitability with sustainability.



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