POSITIVE IMPACT
THROUGH BIOTECHNOLOGY

VESPER

BIOTECHNOLOGIES

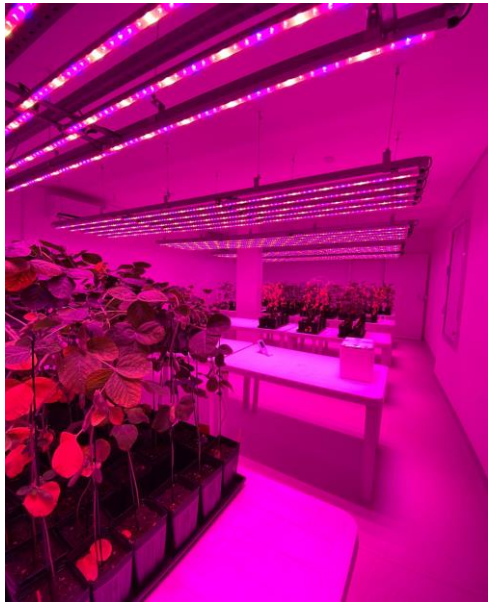
Corporate Presentation

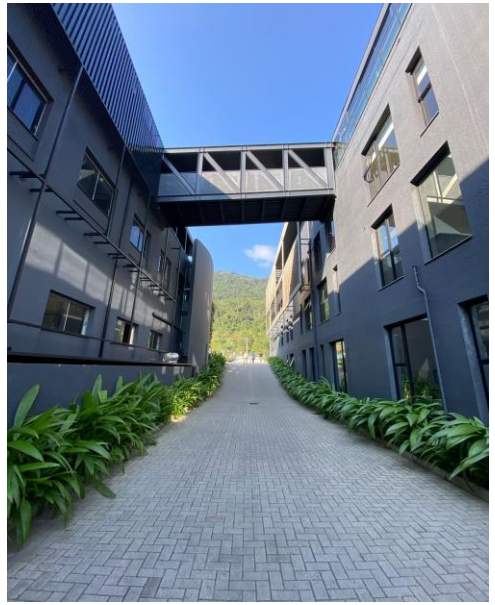
April.2025

OUR HUB

BIOTECH HUB IN FLORIANOPOLIS/ SC BRAZIL, WITH 2,400 m2 OF OFFICE AND LAB SPACE

VESPER BIOTECHNOLOGIES




AGING POPULATION &

RISING DISEASES

GLOBAL WARMING &

FOOD PRODUCTION CHALLENGES

EXPERIENCED LEADERSHIP WITH PROVEN TRACK RECORD OF DRIVING VALUE

Rogerio Vivaldi, MD, MBA

Executive Chair

Patient-centered executive, former CEO of Sigilon, pioneer in Rare Diseases with 4 IPOs and several large exits.

GENZYME (1994 – 2013)

- ✓ Treated 1st patient w/ GD - More than 1,250 pt diagnosed in Brazil
- ✓ Founded Genzyme Brazil in 1997 (1st Biotech in Latam) and then Head of Genzyme Latam (10% of World Revenue for Genzyme)
- ✓ President of Rare Disease Global BU (2010 – 2014) - +U$4 B / year

Nasdaq (2014 – 2023)

- ✓ CEO & Director - Minerva Neurosciences (NERV) – IPO – June/14
- ✓ CCO & Director - Spark (ONCE) – IPO – Jan/15 → Acq in 2019 by Roche ($4.8Bn)
- ✓ COO - Bioverativ (BIVV) – IPO – Feb/17 → Acq in 2018 by Sanofi ($11.6Bn)
- ✓ CEO & Director - Sigilon (SGTX) – IPO – Dec/20 → Acq in 2023 by Eli Lilly (up to $ 345M)

Gabriel Bottos

Co-founder, CEO

Serial entrepreneur with 20 years of experience, co-founder of startups in laser technology, software, biotech, and more.

Jonas Sister

Co-founder, CFO

Over 20 years of experience in corporate development, private equity and venture capital.

Julio Moura Neto

Co-founder, Director

Seasoned executive with C –level experience in several national and international companies.

Dieter Weinand

Director

Former global CEO of Bayer Pharma AG and former president of several pharmaceutical companies.

WORLD CLASS ENTREPRENEURIAL SCIENTISTS AT THE OPERATIONAL LEVEL

In Edita Bio

Dr. Paulo Arruda, Founder & CEO

More than 100 scientific articles published in international journals of impact, member of the Brazilian Academy of Sciences, The World Academy of Sciences and the Academy of Sciences of the State of São Paulo. He was one of the founding partners and Scientific Officer of the plant biotechnology company Alellyx Applied Genomics, sold to Monsanto in 2008.

Dr. Viviane Silva, CSO

Expert in Plant Genetics and Molecular Biology, with extensive experience in transgenics, CRISPR/Cas9 genomic editing, tissue culture, genetic transformation, protein biochemistry and biophysics, and microbiology.

HapiSeeds

Dr. Adriana Hemerly, Founder & Sc. Advisor

PhD in Biotechnology from Rijksuniversiteit Gent, Belgium with maximum distinction - Summa cum Laude, with a Post Doctorate in Molecular and Cellular Biology - Cold Spring Harbor Laboratory, NY, USA and in Plant Biotechnology at the VIB Department of Plant Systems Biology, Ghent, Belgium. She is currently a Full Professor at the Leopoldo de Meis Institute of Medical Biochemistry (IBqM), at the Federal University of Rio de Janeiro (UFRJ). Dr. Adriana is a director member of the International Society of Plant Molecular Biology (I-PMB).

She has experience in the area of Plant Genetics and Biotechnology, with an emphasis on Plant Molecular Genetics and Plant Molecular Biology. She studies regulatory mechanisms of plant development, and how they are integrated with genetic and environmental signaling. Her work focuses on unraveling (i) mechanisms that regulate the plant cell cycle and (ii) genetic controls that regulate the association of plants with beneficial endophytic diazotrophic bacteria. Ultimately, the work seeks to develop biotechnological tools that lead to an increase in plant biomass and productivity, as well as better adaptation to environmental changes.

Symbiomics

Dr. Rafael S. de Souza, Founder & CEO

His main line of research involves the study of association mechanisms and functional roles of microbial communities colonizing plants. He has experience in genome assembly, sequencing and analysis of microbial communities.
He is currently the Brazilian representative at MicrobiomeSupport, a 26-country network funded by the EU focused on boosting the bioeconomy using microbiome technologies.

Dr. Jader Armanhi, Founder & CSO

His line of research is focused on the development of disruptive methods for the isolation and identification of microorganisms associated with plants, as well as tools for investigating the microbial impact on plant responses to environmental stresses.
Travel Award Winner, Phenome 2018 / ASPB (American Society of Plant Biologists).

VYRO Biotherapeutics

Dr. Mayana Zatz, CSO (Founder)

Molecular biologist and geneticist, professor at the Institute of Biosciences at USP. Researcher in human genetics with contributions mainly in the field of neuromuscular diseases, in which she is a pioneer.

Dr. Keith Okamoto (Founder)

Full Professor at the University of Sao Paulo (USP) and Principal Researcher at The Human Genome and Stem Cell Research Center (HUG-CELL) at USP, where he directs the Translational Genomics Laboratory since 2010.

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Rafael M. Bottós, CEO

Experienced entrepreneur, he cofounded companies that are leaders in their market segments. Rafael is a mechanical engineer, with specialization in business management from the Harvard Business School, and was a researcher at the Fraunhofer Institute, in Germany.

Caio Bruno Q. S. Leal, Founder

Caio has more than 10 years of experience in the field of Biotechnology, with an emphasis on Computed Aided Drug Design (CADD) associated with methods of computational biology and genetic engineering.

FUTR bio

Dr. André Báfica

Founder & Sc. Advisor

Director of the Brazilian Society of Immunology, he has 20 years of experience in research and development in the field of immunology. Graduated in Medicine at UFBA (2001), PhD in Human Pathology at Fundação Oswaldo Cruz (2006). Postdoctoral fellow at NIH, USA (2007) and Rockefeller University, USA (2018). He has received several awards, including the Howard Hughes Medical Institute Early Career Scientist (2011).

Dr. Daniel Mansur

Founder & Sc.Advisor

20 years of experience in R&D projects in the field of immunology. He was a postdoctoral fellow at Imperial College London (2007-2009) with main interest in DNA sensors of innate immunity and the study of the evasion of the immune system by the Vaccinia virus. Postdoctoral studies at Imperial College London (2009), UFMG (2010), and University of Cambridge (2014).

Cellertz bio

Dr. Edroaldo Lummertz da Rocha

Founder & Sc.Advisor

Completed his Ph.D. at Harvard University (Wyss Institute for Biologically Inspired Engineering) and post-doctoral fellowship at Mayo Clinic Rochester and at the Boston Children's Hospital/Harvard Medical School, where he received training in stem cells, cancer, and systems biology in the laboratory of George Q. Daley.

His studies focused on developing systems biology approaches to reconstruct cell differentiation trajectories and gene regulatory networks to reprogram cell identity. In 2015, he was awarded CAPES' Thesis Prize in the "Materials" category and CAPES' Thesis Grand Prize Aziz Nacib Ab'Sáber, in the "Materials and Biotechnology" category.

STRONG SCIENTIFIC ADVISORS BACKGROUND

George Church, PhD

Professor of Genetics at Harvard Medical School and Professor of Health Sciences and Technology at Harvard and MIT. George is widely recognized for his innovative contributions to genomic science and his many pioneering contributions to chemistry and biomedicine. In 1984, he developed the first direct genomic sequencing method, which resulted in the first genome sequence (the human pathogen, H. pylori). He helped initiate the Human Genome Project in 1984 and the Personal Genome Project in 2005.

Aubrey De Grey, PhD

Dr. Aubrey de Grey is a biomedical gerontologist and Chief Science Officer of SENS Research Foundation, a charity focused on combating aging. He is also the Editor-in-Chief of Rejuvenation Research, a leading journal on aging intervention. Dr. de Grey holds a BA in computer science and a Ph.D. in biology from the University of Cambridge. His research focuses on identifying and repairing cellular and molecular damage associated with aging. He is a Fellow of the Gerontological Society of America and the American Aging Association and is a frequent speaker at various scientific and public events.

John Powers, PhD

Former principal scientist at Moderna, he is currently an Assistant Professor at Dell Medical School and a CPRIT Scholar. Dr. Powers is an alumnus from The University of Texas at Austin, Harvard Medical School and Boston Children Hospital.

Charles N. Serhan, PhD, DSc

Professor of Biochemistry and Molecular Pharmacology at Harvard Medical School and Professor of Oral Medicine, Infection, and Immunity at Harvard School of Dental Medicine. Director of the Center for Experimental Therapeutics and Reperfusion Injuries at Brigham and Women's Hospital.

Ruslan M. Medzhitov, PhD

Professor of Immunobiology at the Yale School of Medicine, Fellow of the Yale Cancer Center and Investigator at the Howard Hughes Medical Institute. He has several awards in recognition of his prolific contributions to the field of immunological research and was elected to the US National Academy of Sciences.

Maurice Moloney, PhD

Experienced scientist and entrepreneur, inventor of a landmark patent on transgenic Brassica plants, the basis of RoundUp Ready Canola, the first ever transgenic biotech trait in commercial agriculture.

Jorge Kalil, MD, PhD

Full Professor and Head of Clinical Immunology and Allergy at USP. Member of the Brazilian Academy of Sciences. Former director Butantan Institute. Doctor Honoris Causa by the Sorbonne Universités, Paris and Fellow of the Royal College of Physicians London FRCP.

Solon C. Araújo

Entrepreneur, pioneer in the field of inoculants for soybeans.

OUR BUSINESS MODEL

CREATION OF NEW TECHNOLOGY PLATFORMS THROUGH IDENTIFYING AND INVESTING
IN WORLD CLASS BRAZILIAN SCIENTISTS

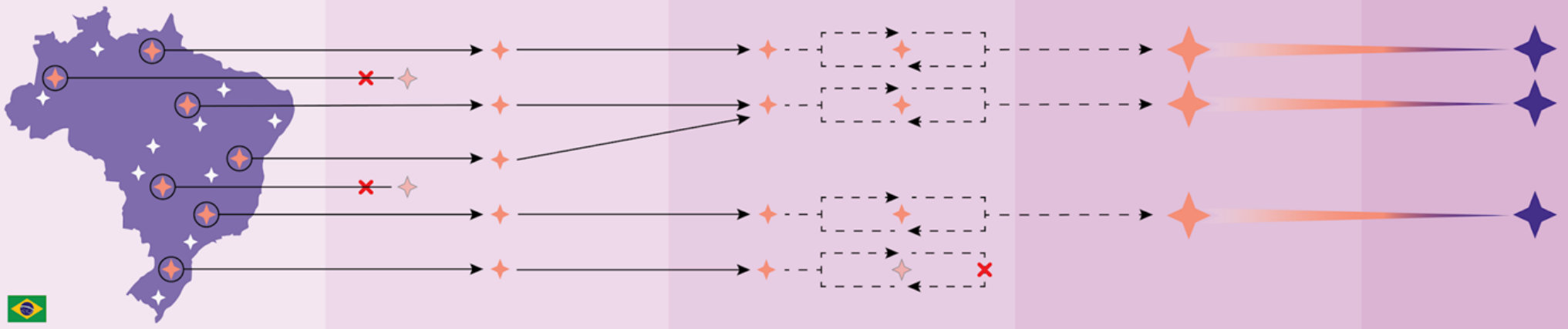
Identify
- Connect with Scientists
- Biotechnology Mapping
- Trend Analysis

Select
- Opportunity Assessment
- In-Depth Analysis
- Expert Validation (KOL)

Validate
- Platform Validation
- Proof of Concept
- Patent Generation

Develop
- Business Development
- Team Expansion
- Fundraising

Scale
- Licensing
- Go-To-Market
- Fundraising



IDENTIFYING AND INVESTING IN WORLD CLASS BRAZILIAN SCIENTISTS

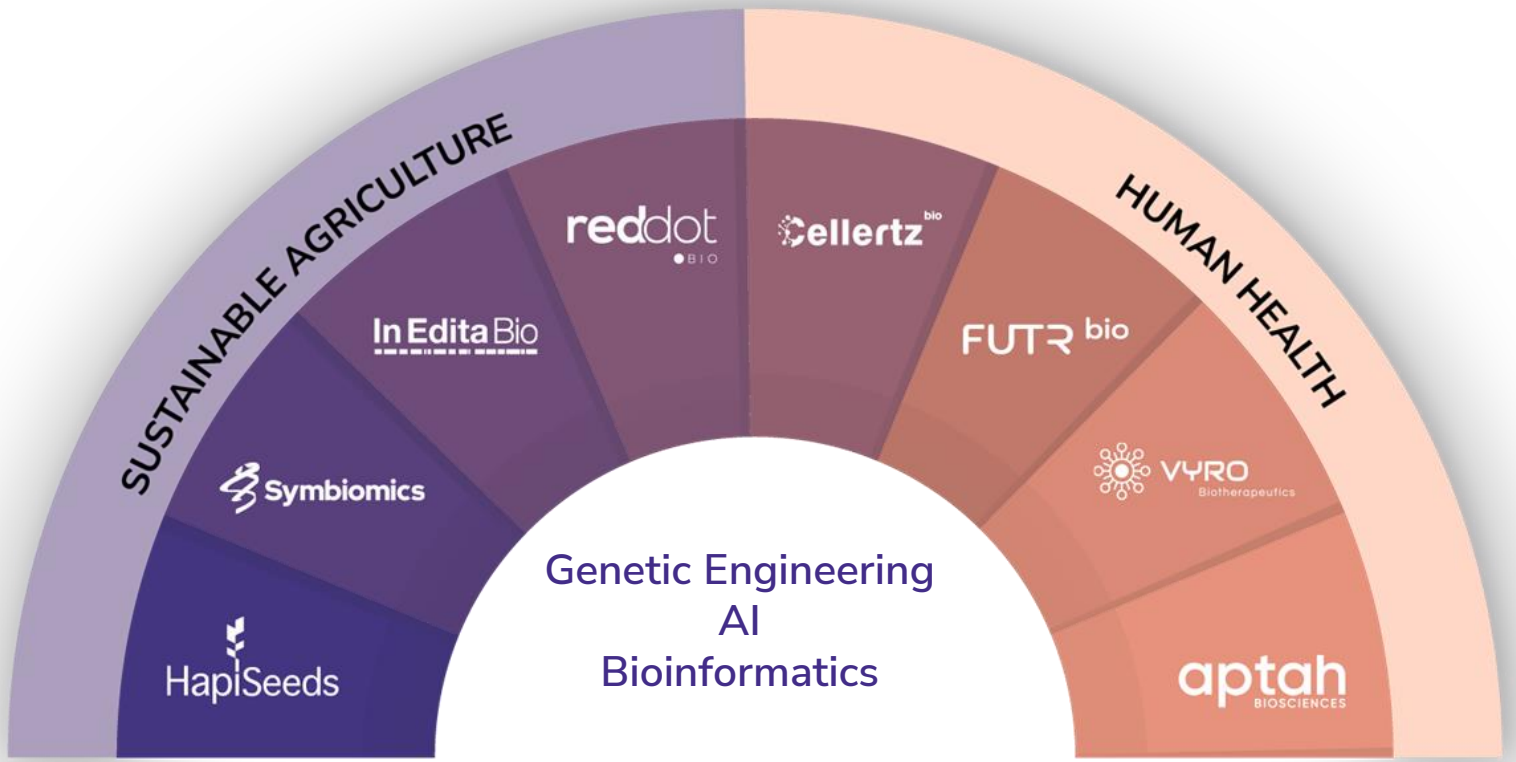
WITH AN EYE TOWARDS LARGE MARKETS AND OPPORTUNITIES

Selection Criteria

1. Team of top-tier scientists.
2. Global and patentable innovation (currently 16 patents).
3. Address significant, unsolved problems.
4. Technological platform.
5. Potential to exceed USD 1 billion in 7 years.

STRATEGICALLY ALIGNED PORTFOLIO DESIGNED FOR COLLABORATION AND INNOVATION

Portfolio	I.P.	Team	Pipeline
8 companies	16 patents	50+ PhDs	30 products

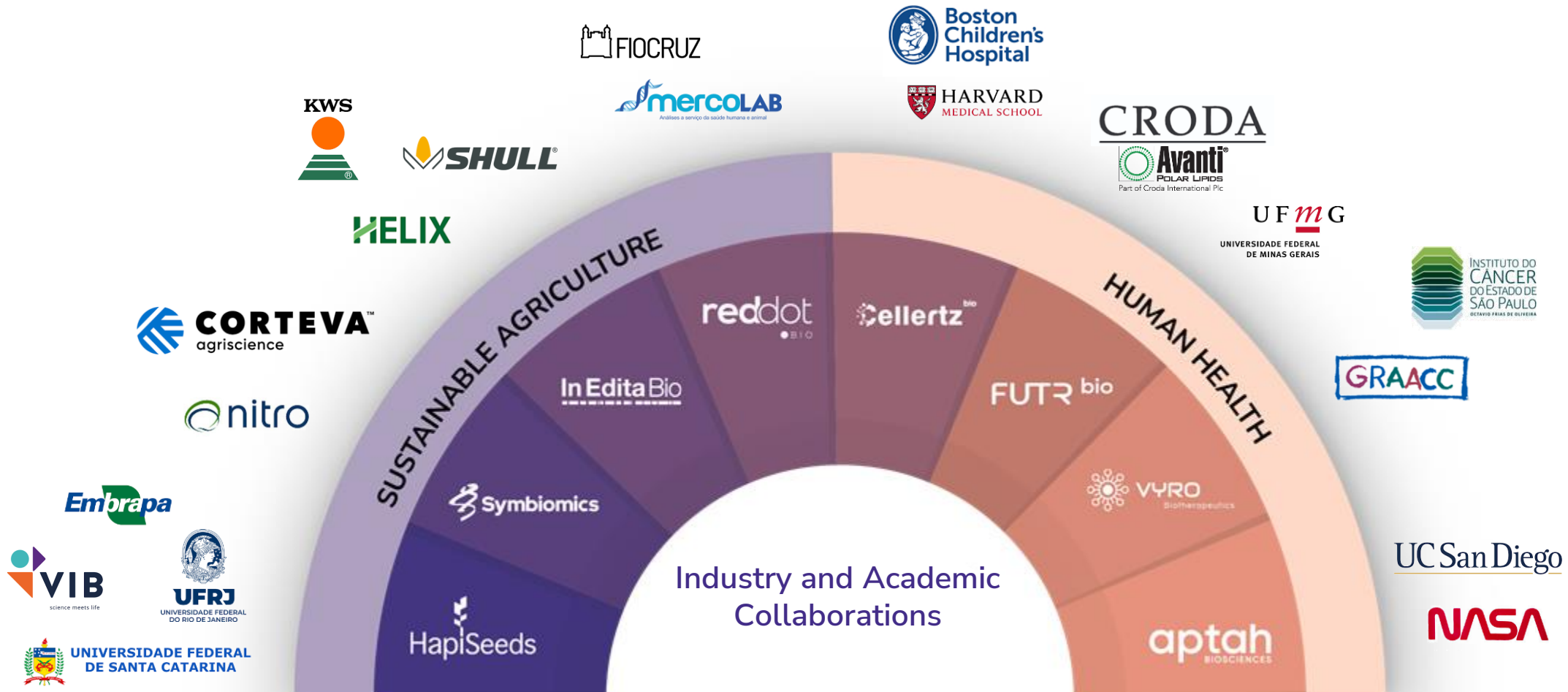


$12M invested in the portfolio

$10M Grants recently approved

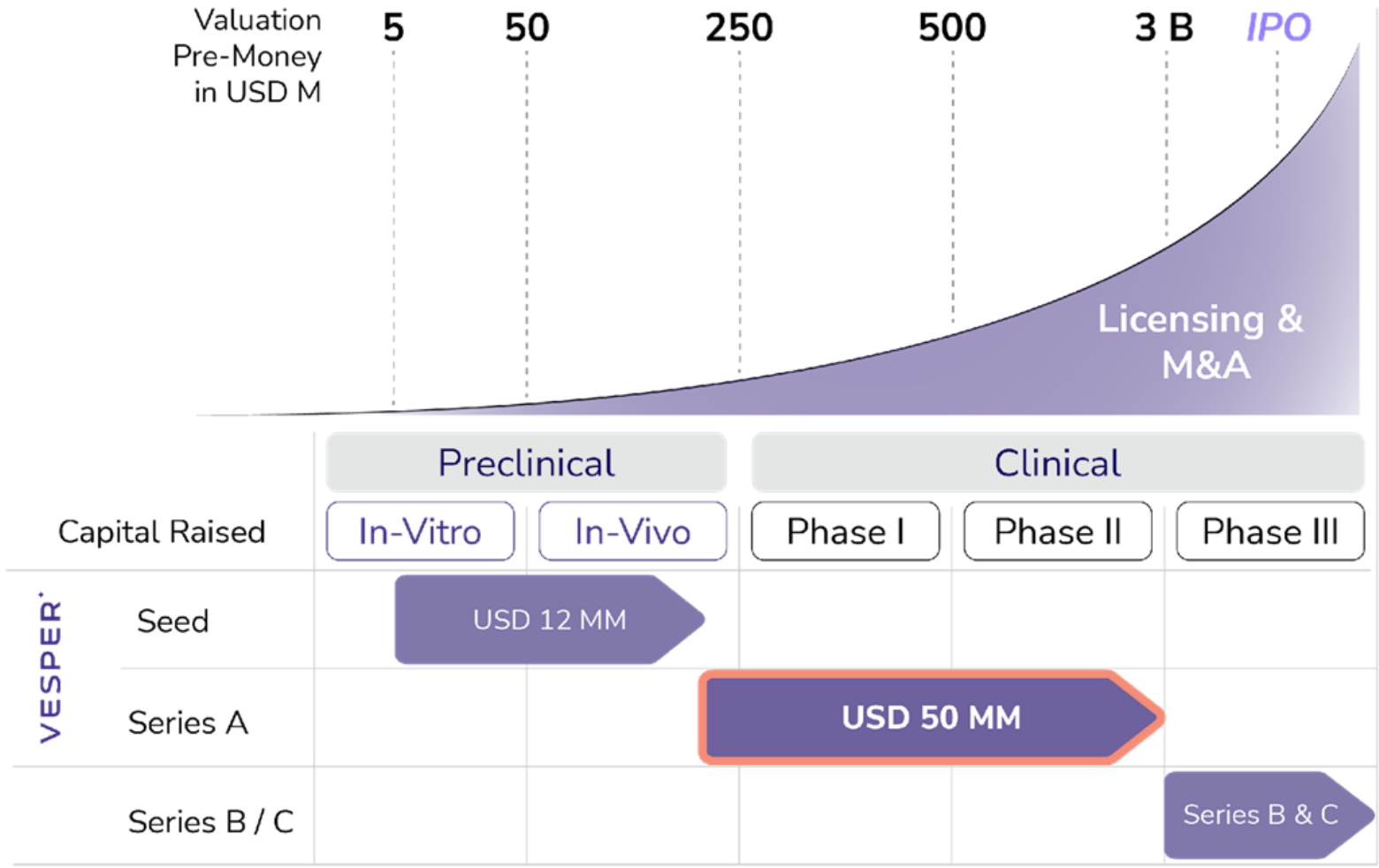
1 to 2 New ventures per year

STRATEGICALLY ALIGNED PORTFOLIO DESIGNED FOR COLLABORATION AND INNOVATION



OUR STRATEGY

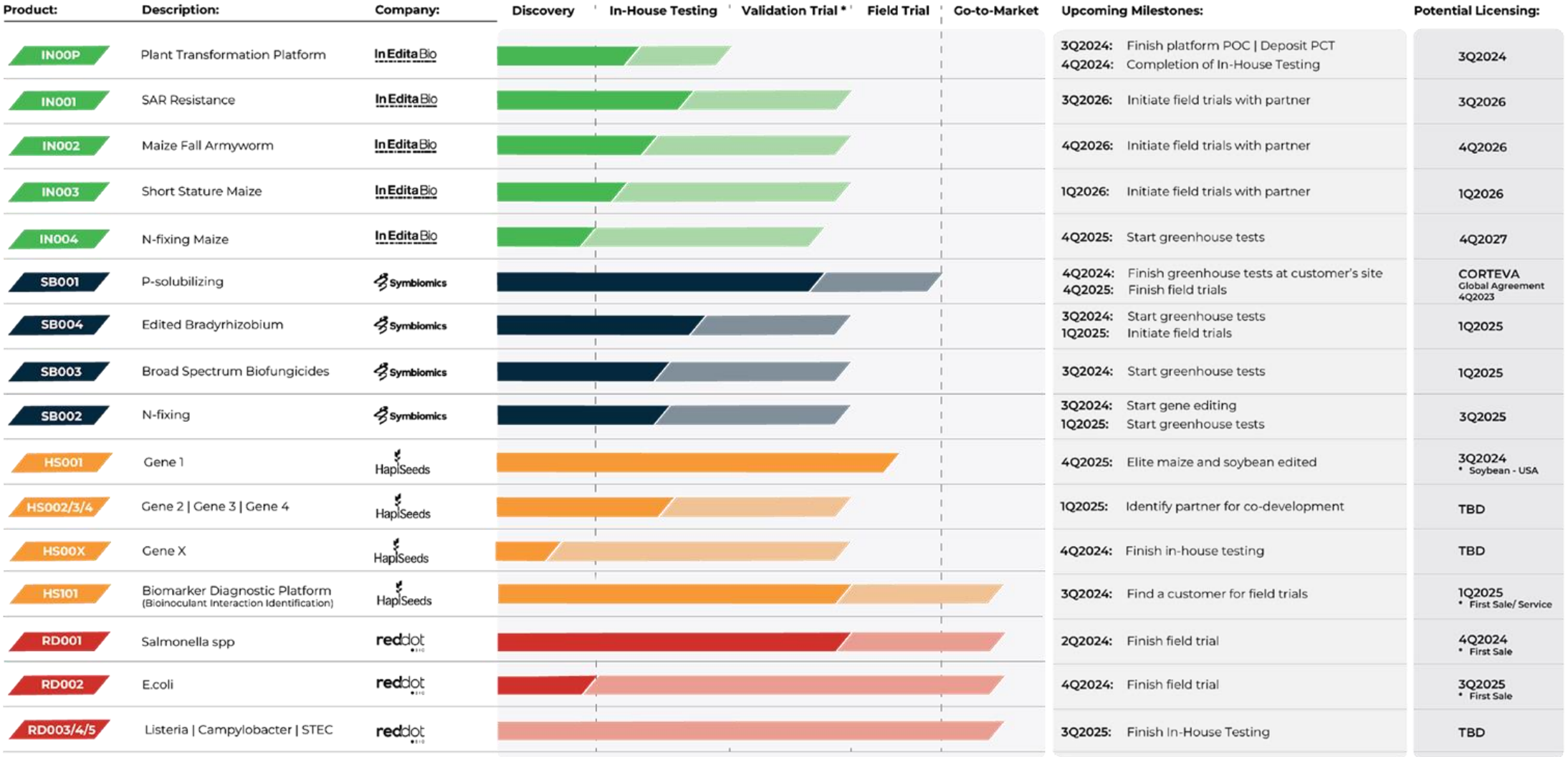
OUR STRATEGY



STRATEGY

- **Select**
  the best scientists and platform technologies.
- **Invest**
  in tranches and conditioned to milestones.
- **File Patents**
  in the US and later globally.
- **Support**
  the portfolio companies in:
  - Strategic guidance;
  - Hands-on management;
  - Operational assistance;
  - Access to a broad network of resources.
- **License / Exit / IPO**
  in Phase 2/ Small-scale field trials.

MULTIPLE VALUE CREATION MILESTONES
WITHIN 18 MONTHS ACROSS BROAD AGRICULTURE PIPELINE



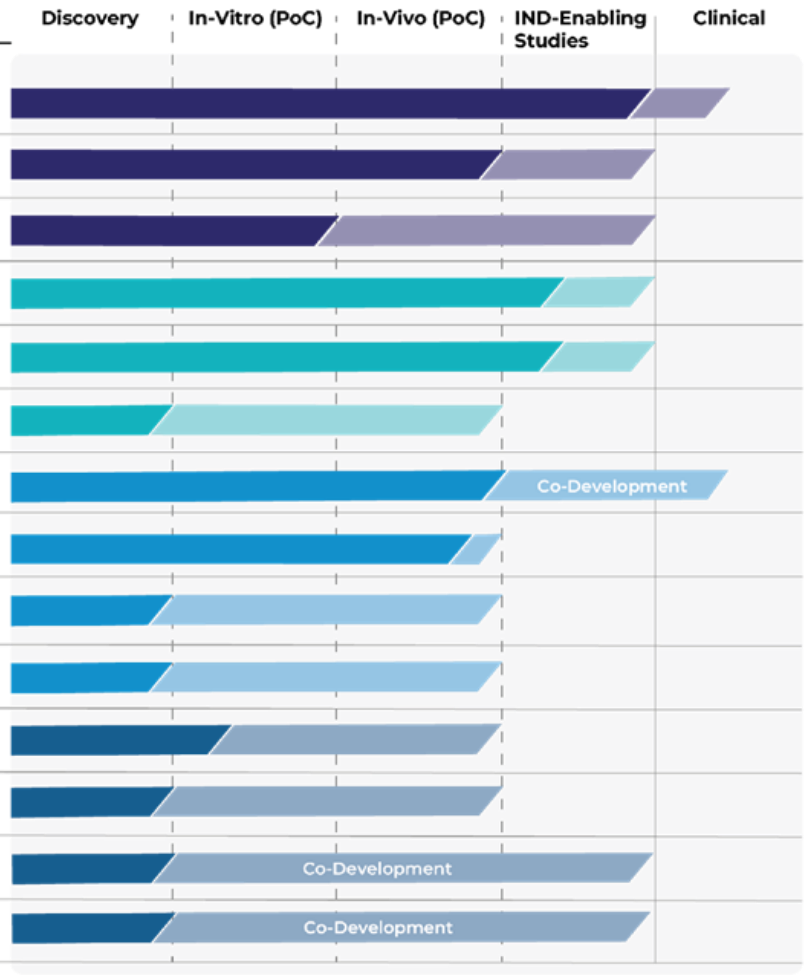
Product:	Description:	Company:	Upcoming Milestones:	Potential Licensing:
IN00P	Plant Transformation Platform	InEditaBio	3Q2024: Finish platform POC | Deposit PCT 4Q2024: Completion of In-House Testing	3Q2024
IN001	SAR Resistance	InEditaBio	3Q2026: Initiate field trials with partner	3Q2026
IN002	Maize Fall Armyworm	InEditaBio	4Q2026: Initiate field trials with partner	4Q2026
IN003	Short Stature Maize	InEditaBio	1Q2026: Initiate field trials with partner	1Q2026
IN004	N-fixing Maize	InEditaBio	4Q2025: Start greenhouse tests	4Q2027
SB001	P-solubilizing	Symbiomics	4Q2024: Finish greenhouse tests at customer's site 4Q2025: Finish field trials	CORTEVA Global Agreement 4Q2023
SB004	Edited Bradyrhizobium	Symbiomics	3Q2024: Start greenhouse tests 1Q2025: Initiate field trials	1Q2025
SB003	Broad Spectrum Biofungicides	Symbiomics	3Q2024: Start greenhouse tests	1Q2025
SB002	N-fixing	Symbiomics	3Q2024: Start gene editing 1Q2025: Start greenhouse tests	3Q2025
HS001	Gene 1	HaplSeeds	4Q2025: Elite maize and soybean edited	3Q2024 * Soybean - USA
HS002/3/4	Gene 2 | Gene 3 | Gene 4	HaplSeeds	1Q2025: Identify partner for co-development	TBD
HS00X	Gene X	HaplSeeds	4Q2024: Finish in-house testing	TBD
HS101	Biomarker Diagnostic Platform (Bioinoculant Interaction Identification)	HaplSeeds	3Q2024: Find a customer for field trials	1Q2025 * First Sale/ Service
RD001	Salmonella spp	reddot	2Q2024: Finish field trial	4Q2024 * First Sale
RD002	E.coli	reddot	4Q2024: Finish field trial	3Q2025 * First Sale
RD003/4/5	Listeria | Campylobacter | STEC	reddot	3Q2025: Finish In-House Testing	TBD

* e.g. Greenhouse Tests, Early PoC

MULTIPLE VALUE CREATION MILESTONES

WITHIN 18 MONTHS ACROSS BROAD HUMAN HEALTH PIPELINE

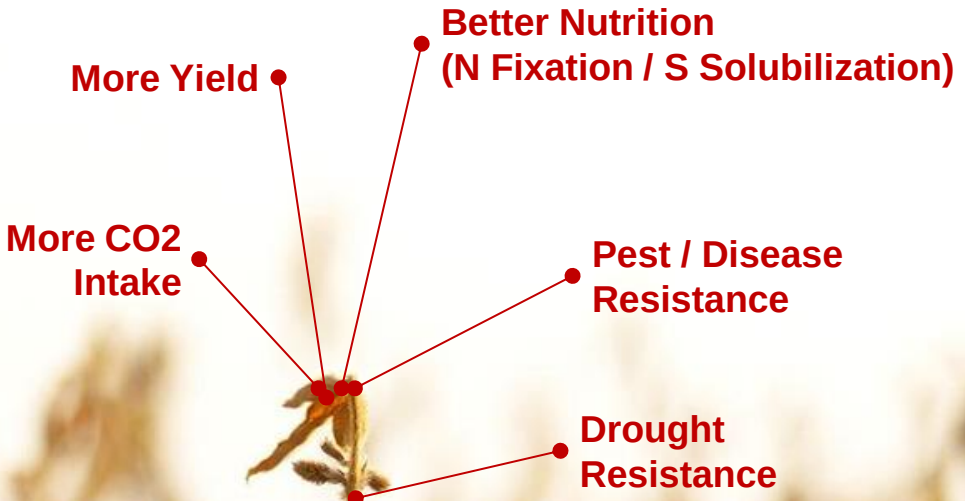
Program:	Indication:	Company:	Upcoming Milestones:	Potential Licensing:
VY001	GBM	VYRO	4Q2025: Completion of 1st In-Human 1Q2026: Initiate IND-enabling studies	4Q2028
VY00P	Viral Vector Platform	VYRO	Completion of Pre-IND	3Q2026
VY002	Embryonal CNS Pedriatic Tumor	VYRO	Completion of Pre-IND | Subject to partnership	4Q2029
AP001	Oncology - GBM	aptah	1Q2025: Finish in-vivo PoC / Pre-IND 3Q2025: Initiate Phase 0	4Q2028
AP004	CNS - FTD/ALS	aptah	4Q2026: Finish in-vivo PoC / Pre-IND	TBD
AP002	Ophthalmology - AMD	aptah	4Q2026: Finish in-vivo PoC	4Q2028
FT00P	Next Gen mRNA Vaccine Platform	FUTR bio	3Q2024: Finalizing safety studies 4Q2024: Initiate licenscing efforts	2Q2025
FT001	COVID-19	FUTR bio	3Q2024: Finish in-vivo	2Q2025
FT002	H5N1	FUTR bio	**Grant awarded** - Awaiting resources	TBD
FT003	Fluvid (H5N1+Covid)	FUTR bio	Awaiting grant result	TBD
CL002	mRNA-based CAR-T cell immunotherapy	Cellertz	2Q2024: Finish in-vitro	2Q2025
CL003	Antigen-agnostic immunotherapy	Cellertz	2Q2024: Finish in-vitro	TBD
CL00P	AI platform for mRNA-based vaccine optimization	Cellertz	4Q2025: Initiate Co-Development	TBD
CL10P	AI platform for mRNA-based cell therapy development	Cellertz	4Q2025: Initiate Co-Development	TBD



PORTFOLIO COMPANIES

CUTTING-EDGE BIOTECHNOLOGY EMBEDDED IN THE SEED

- Non-transgenic genome editing
- Bioinformatics
- Artificial Intelligence
- Microorganisms



HapiSeeds | Symbiomics | InEdita Bio

HapiSeeds

Higher yield for any crop

Non-transgenic trait development platform for the creation of plants with higher yield productivity, better resistance to abiotic stress and enhanced CO2 uptake.

Arabidopsis model plant

Algodão

Soybeans

60% increase in seeds per plant

Cotton

70% increase in flowers per plant

Corn

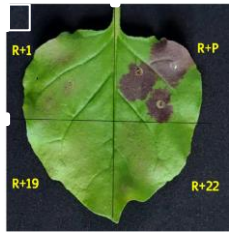
40% increase in carbon intake per plant

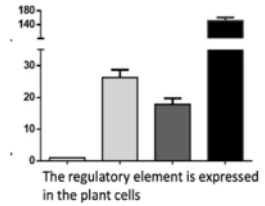
Non-transgenic trait development platforms

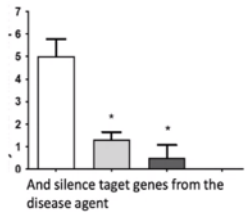
A non-transgenic plant resistant to any pest and plagues, potentially eliminating the need of chemical pesticides. An automated plant transformation technology that increases the success rate of genetic modifications.

Platform 1 – Gene Discovery

Discovery of multiple targets for regulatory elements that confer pest and disease resistance





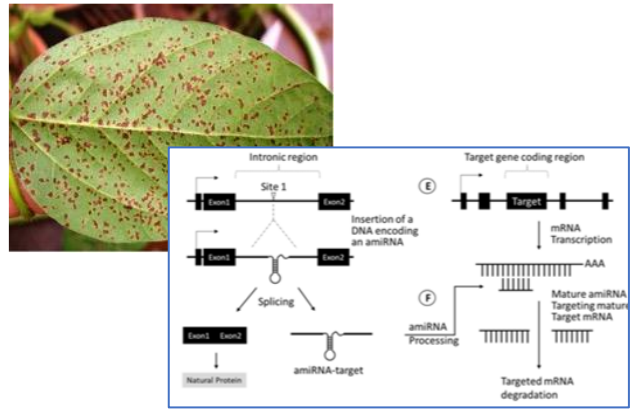


Platform 2 – Plant Transformation

Fast generation (30-40 days) of a large number (100+) events per experiment

Platform 3 – Gene Editing

Genome editing of highly expressed and constitutive genes to deliver regulatory elements



High Value Traits: Soybean Asian Rust resistance; Maize insect resistance; Maize short stature; Maize nitrogen fixation; Corn stunt resistance; Cotton bollworm resistance; Plant drought resistance; High cellulose eucalyptus

Next-generation microbiome solutions

AI and Bioinformatics combined with a deep know-how of microbiology, to unlock new ways of enhancing plant survival and productivity.

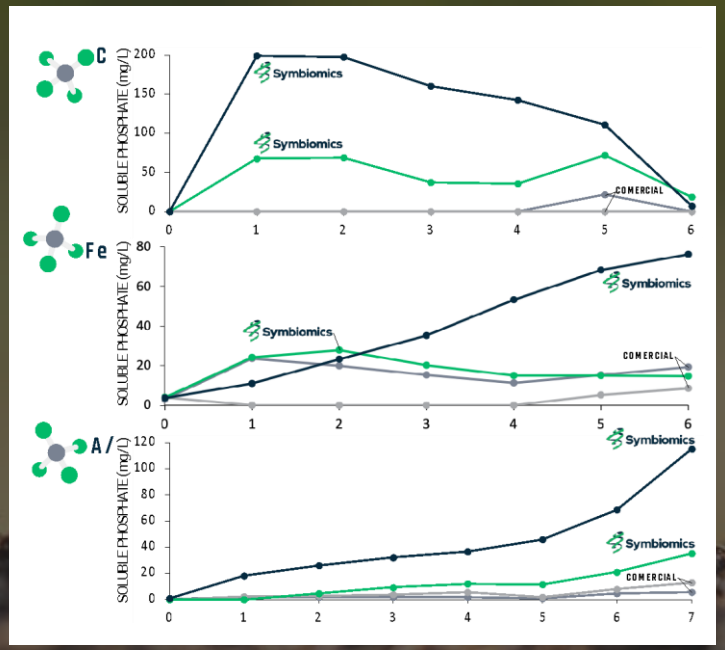
Phosphate Uptake

Control

Chemical fertilizer

EMBRAPA biofertilizer

SYMBIOMICS biofertilizer



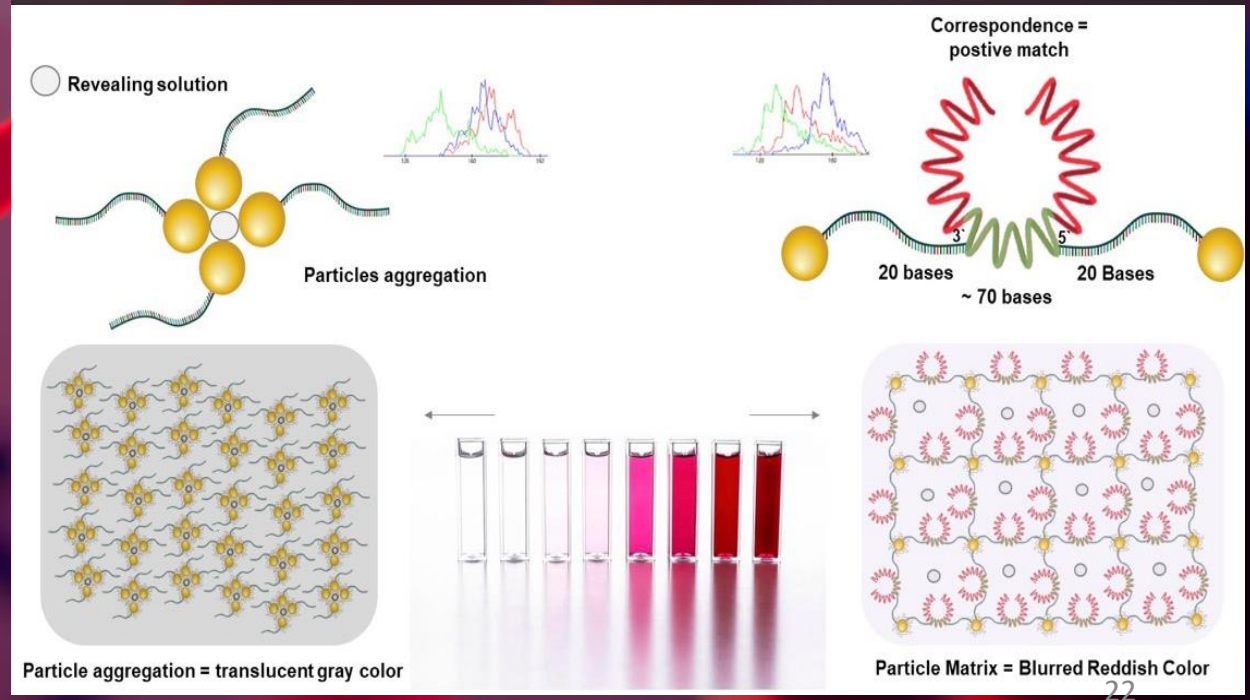
Drought Resistance

Video

Optimal Molecular Dx

Faster, more accurate, more affordable, point-of-care molecular diagnostics platform, that combines nanotechnology, rational molecular design and a proprietary algorithm for image processing.

Proprietary biosensor and light spectrum algorithm



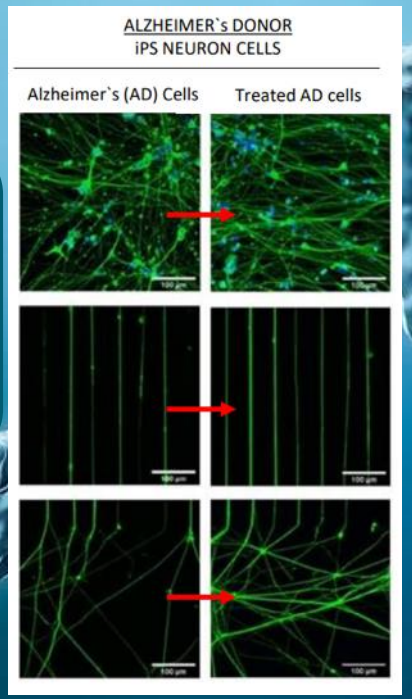
aptah BIOSCIENCES

RNA therapies for age-related diseases

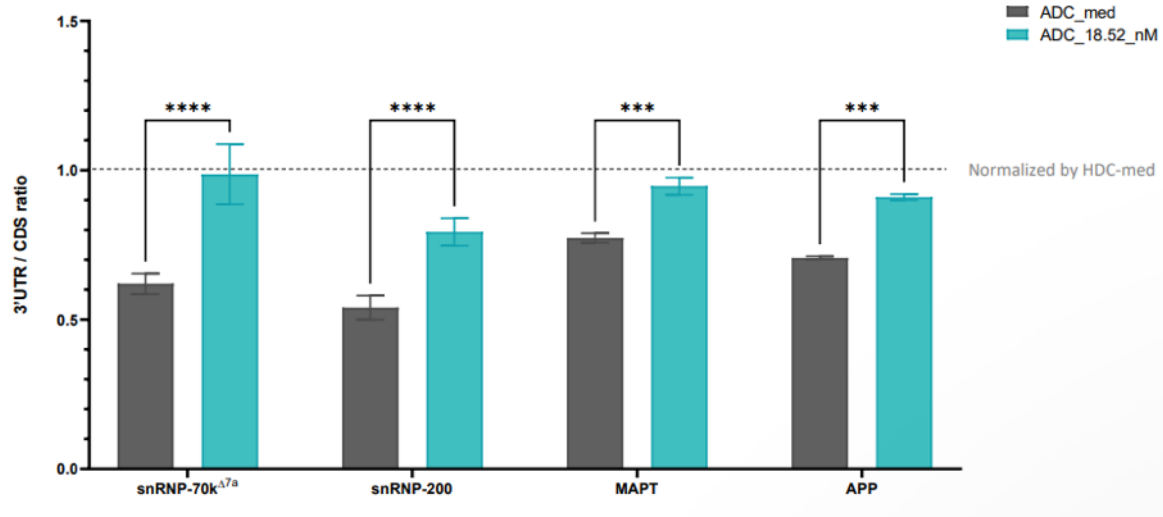
A unique RNA platform to correct the root cause of human cell aging and, therefore, treat and prevent dozens of sporadic genetic disorders such as dementia (incl. Alzheimer´s) and several types of cancer.

PIPELINE:

- GLIOBASTOMA IDH-WT GBM
- DRY AGE-RELATED MACULAR DEGENERATION
- FRONTOTEMPORAL DEMENTIA
- OTHER NEURODEGENERATIVE DX



Aptah's compound safely restores mRNA lenght and quality in iPS human neurons from Alzheimer's Disease patients, with no change in healthy neurons



Video

VYRO
Biotherapeutics

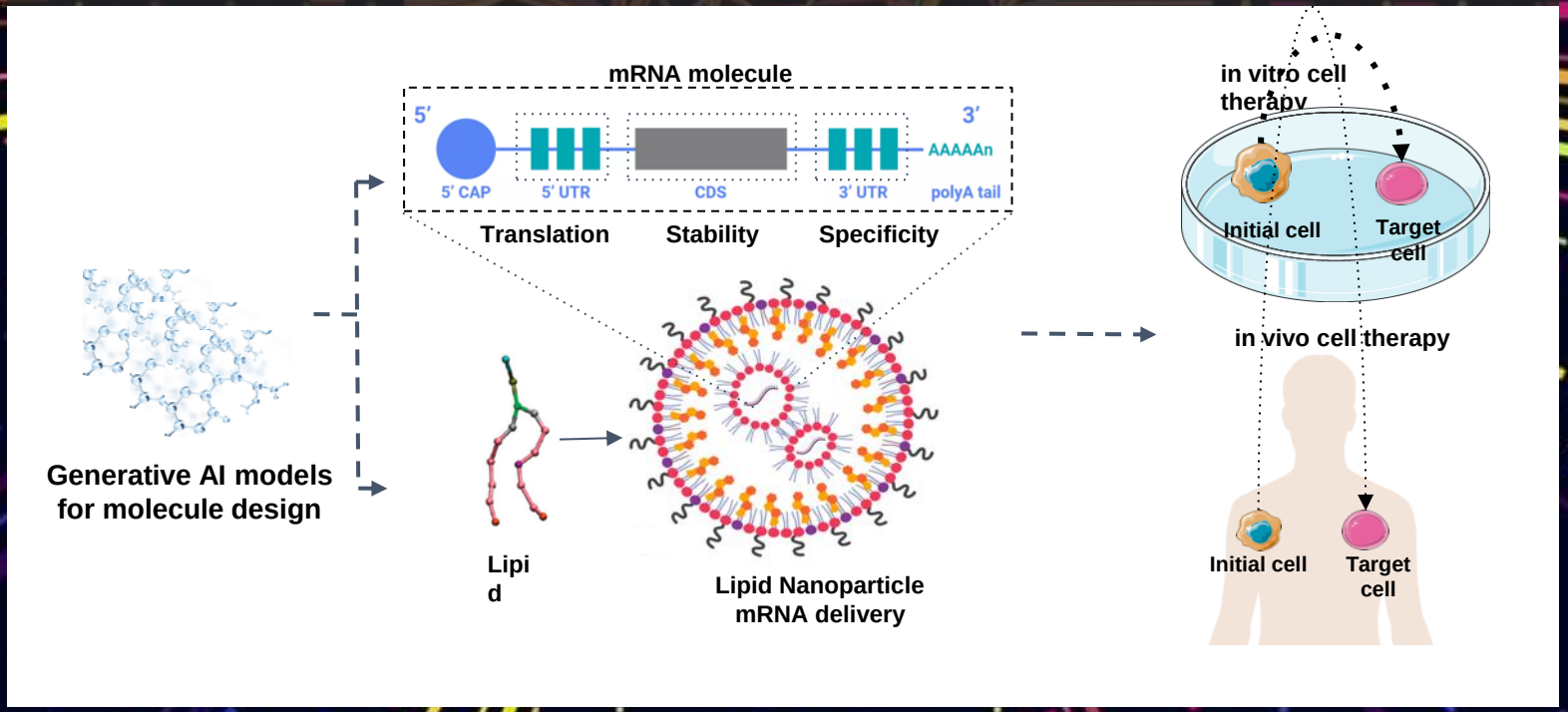
Zika virus therapy & gene delivery

Synthetic virus capable of crossing the BBB, and specifically target stem-like tumor cells such as GBM, TNBC and prostate. Vyro's platform can also be applied to vaccine development, including a vaccine against Zika infection.

Generative AI Discovery

Rational and precise mRNA optimization and cell identity control for therapeutic purposes.

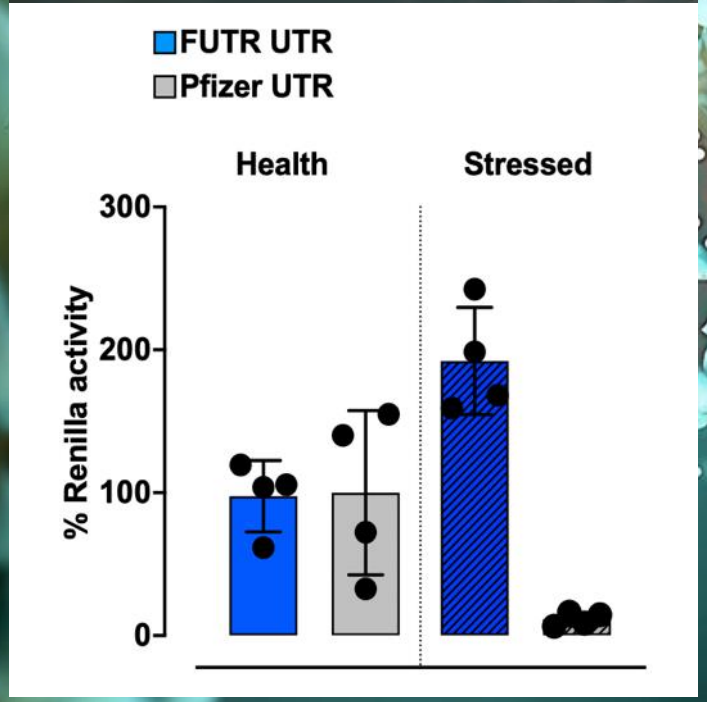
Cellertz's deep learning approach for mRNA therapeutics



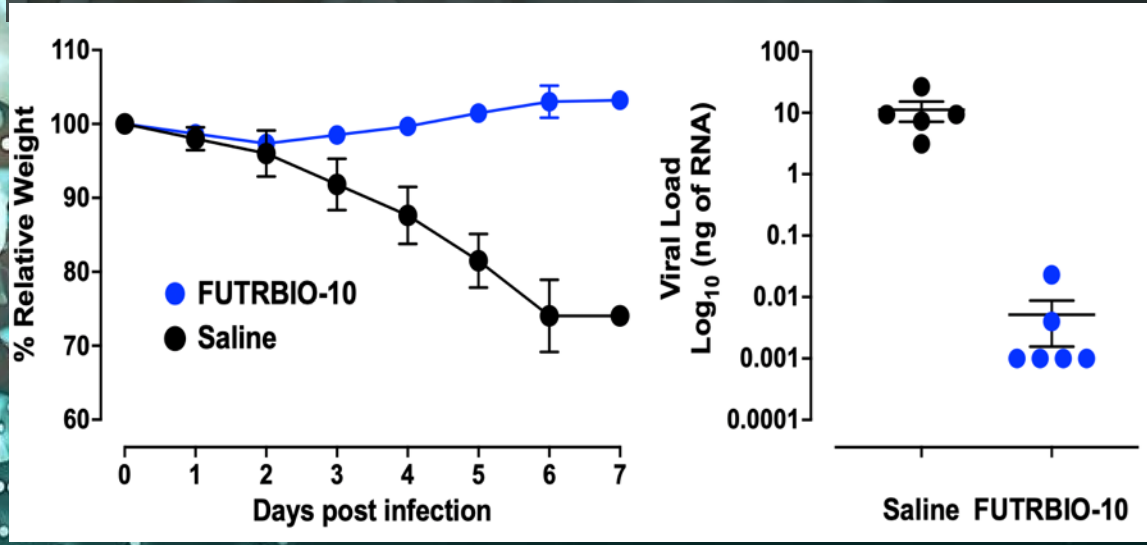
Next generation mRNA vaccines

mRNA platform for highly efficient single-dose vaccines even in immune-deficient patients, paving the way towards effective vaccines for cancer and highly endemic populations.

FUTR BIO UTRs are resistant to cellular stress in vitro and in vivo



FUTR vaccine protects K18-hAce2 mice against a SARS-Cov-2 challenge



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