

FALLING WALLS VENTURE

REPORT 2025



THE INTERNATIONAL PITCH COMPETITION FOR SCIENCE-BASED START-UPS

Falling Walls Venture is a pitch competition for the most promising science start-ups nominated by outstanding academic institutions from around the world. Watch pioneering founders who have successfully turned science into business demonstrate how entrepreneurial solutions can help solve today's most pressing challenges.

Carefully selected by a scientific Advisory Board, the 25 best start-ups present their innovative solutions as part of the Falling Walls Science Summit, an international forum that brings together the world's most forward-thinking scientists, innovators, and decision-makers. A high-level Jury selects three winners and among them the "Science Breakthrough of the Year".

THE PROCESS

311 start-ups
were nominated and endorsed by outstanding institutions from around the world.

187 shortlisted start-ups from 37 countries
were carefully screened by our Advisory Board.



"FALLING WALLS VENTURE WAS A GAME CHANGING WEEKEND IN OUR COMPANY HISTORY. WE GOT SO MUCH ATTENTION DURING THE CONFERENCE AND AFTERWARDS."

HANS MARIA HEYN, COLLIMATE HEALTH

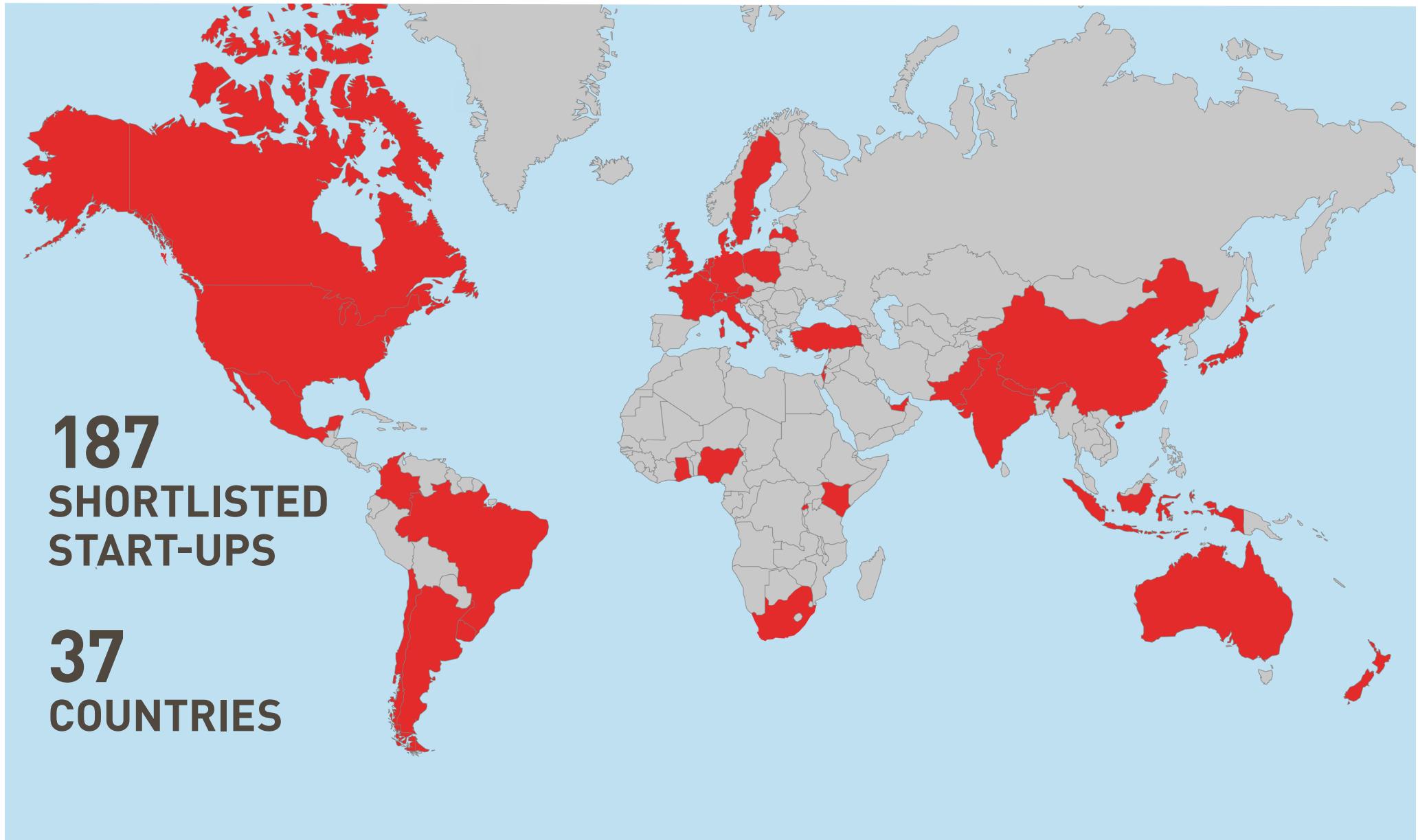
25 Finalists
were chosen to pitch in front of a high-level Jury at the Falling Walls Science Summit

- **3 Cluster Winners**
- **1 Science Breakthrough of the Year 2025 in the Science Start-ups category**

GLOBAL REACH

187 SHORTLISTED START-UPS

37 COUNTRIES



OUR ULTIMATE SUCCESS FACTOR THE ACADEMIC NOMINATIONS

2024

**200
NOMINATIONS**

2025

**311
NOMINATIONS**

**+55%
GROWTH**

OUR TRACK RECORD SINCE 2013

**1800+
NOMINATIONS**

**275+
FINALISTS**

**95%
SURVIVAL RATE**

A SELECTION OF NOMINATING INSTITUTIONS

Arizona State University, US
Badr University Cairo, EG
CNRS, FR
ETH Zürich, CH
Harvard, US
King George's Medical University, IN
KU Leuven, BE
KTH Royal Institute of Technology, SE
McGill University, CA
McMaster University, CA
MIT, US
Riga Technical University, LV
Stanford University, US
Strathmore University, KE
Technion, IL
Tsinghua University, CHN
Universidade Minas Gerais, BR
Universitas Indonesia, IN
University College London, UK
University of Cambridge, UK
University of Hong Kong, HK
University of Osaka, JP
University of Oxford, UK
University of Texas, US

OUR WINNERS

SCIENCE BREAKTHROUGH OF THE YEAR 2025

ENGINEERING OF THE FUTURE



SUSTAINABILITY: UNBOUND POTENTIAL



DAVID TAYLOR

Nominated by ETH Zurich

Breaking the Wall of Unsustainable Battery Energy Storage.

Unbound Potential is developing a hyper scalable flow stack platform for flow batteries enabling the fastest production speed in the entire battery domain. This will be key, as the demand for batteries surges exponentially.

**“FALLING WALLS IS THE BEST EVENT IN EUROPE
WHEN IT COMES TO EARLY-STAGE
DEVELOPMENT.”**

MICHEIL SCHEFFER, PRESIDENT OF THE EUROPEAN INNOVATION COUNCIL

LUMAI JAMES SPALL

Nominated by LIFTT

Breaking the Wall of Inefficient AI Computation.

Digital-only chips are approaching their physical and energy efficiency limits. Lumai is pioneering 3D optical computing to build scalable, ultra-efficient AI accelerators. Their technology performs dense linear algebra – at the core of modern AI – using light-based computation within a 3D volume rather than a 2D chip surface. They have demonstrated both

optical training and inference with advanced optical neural networks and are now building the world's largest and fastest optical AI accelerator. Built by a highly skilled founding team of AI, compute and optical experts, Lumai's technology was spun out of world-leading research at the University of Oxford. They are developing a fundamentally more scalable and sustainable computing solution to meet the growing AI performance demand while minimising cost and energy consumption. Lumai's unique optical technology will enable AI to reach new scales simply unattainable with current digital electronic processors.

HEALTH SOLUTIONS: COLLIMATE HEALTH



HANS MARIA HEYN

Nominated by Technical University
Munich

Breaking the Wall of Collateral Damage in Tumor Therapy.

Collimate Health transforms radiation therapy into an immunotherapy booster and pharmaceutical application. This targeted cancer treatment is made possible by multiple, hair-wide, high-dose radiation fields (“microbeams”).

SUSTAINABILITY

FINALISTS



Unbound Potential

MARJA SEIDEL

Nominated by BMW Foundation Herbert Quandt

Breaking the Wall of European Energy Dependence. TURN2X produces renewable natural gas by combining green hydrogen with biogenic CO₂ in a patented honeycomb reactor. Our modular, containerised units scale like solar panels—proven by a pilot already injecting RNG into the gas grid.



PHLAIR™

**DAVID TAYLOR**

Nominated by ETH Zurich

Breaking the Wall of Unsustainable Battery Energy Storage. Unbound Potential is developing a hyper scalable flow stack platform for flow batteries enabling the fastest production speed in the entire battery domain. This will be key, as the demand for batteries surges exponentially.

GABRIELE PUPO

Nominated by Oxford University Innovation

Breaking the Wall of Fluorochemical Manufacturing. By entirely rethinking a 250 years-old process, FluoRok reinvents fluorochemical manufacturing to access key materials to the world's electrification, health and food supply in a safer, greener, and cost-efficient way.

STEFFEN GARBE

Nominated by Stella Capital

Breaking the Wall of Inefficient Direct Air Carbon Capture. Phlair captures CO₂ directly from the air using electricity, water, and salt. Our patented system runs on solar energy and can even store excess power like a chemical battery, making it a part of a sustainable, future-ready infrastructure.

LEANDRO SANCHEZ

Nominated by GRIDX

Breaking the Wall of Toxic Crop Protection. Nat4Bio develops biological coatings for post-harvest fruit protection. Their proprietary formulations are based on novel microbial polymers that can compete in cost-effectiveness with polyethylene-based waxes and synthetic fungicides.

**MARCEL GAUSMANN**

Nominated by Volkswagen Foundation

Breaking the Wall of Linear and Wasteful Fashion. re.solution develops a chemical recycling process that runs on water and electricity. This technology enables a circular economy for textiles, offers a sustainable disposal option and recovers clean raw materials which we sell to fiber manufacturers.

**MATI SHANI**

Nominated by Technion - Israel Institute of Technology

Breaking the Wall of Power Plant and Mining Pollution. Ceal enhances the efficiency of seawater-cooled, thermal power plants using an electrochemical water softening process, while sequestering atmospheric CO₂. Byproducts are sustainable carbon-negative minerals, significantly boosting the plant's revenues.

VERÓNICA GARCIA-ARTEAGA

Nominated by Embassy of Mexico in Germany

Breaking the Wall of Eggstinction. Neggst reinvents the egg without the chicken. They offer a plant-based raw egg that looks, cooks, and tastes like a real egg, using 75% less water, 70% less land, and emitting 35% fewer CO₂ emissions.

FINALISTS



RICHARD TOMSETT
Nominated by G-Force

Breaking the Wall of Conventional Materials Discovery. Matnex uses AI to discover new, more sustainable materials that are cheaper, safer and easier to source. Our technology helps various industries solve material challenges much faster than traditional trial-and-error methods.



MICHAEL JOHANNING
Nominated by Universität Siegen

Breaking the Wall of Small-Scale Quantum Computing. eleQtron develops, builds and runs quantum computers. They sell both quantum computing hardware and access to quantum computers in a cloud solution.



MICHAEL VAN BEIRENDONCK
Nominated by KU Leuven

Breaking the Wall of Insecure Data Processing. Belfort makes it possible to compute on encrypted data, without ever decrypting it. Our chip and cloud accelerator enable secure, privacy-preserving AI and data processing at unprecedented speed.



NICLAS LEHNERT
Nominated by BMW Foundation Herbert Quandt

Breaking the Wall of EV Battery Performance Limits. PULSETRAIN is pioneering transformative battery management and inverter technology for a new era in electric vehicles. Software-based life time extension of up to 80% and easy reuse for batteries in mobility.



JOSE PABLO FOLCH
Nominated by The Creator Fund

Breaking the Wall of Unpredictable Chemical Reactions. Enabling more efficient process scale up for production of small organic molecules through tandem automated data generation and machine learning methods. SOLVE derisks decision making moving from the first milligram of a chemical to production scale.



ABDESSALEM ARIBA
Nominated by Empa – Swiss Federal Laboratories for Material Science

Breaking the Wall of Energy Storage Limitations. ETH spin-off BTRY develops ultra-thin, fast-charging all-solid-state batteries that are safe, temperature resistant and solvent-free. Using scalable, resource-efficient production methods, BTRY powers next-gen IoT, MedTech, and consumer electronics.



THOMAS ZIMMERMANN
Nominated by RWTH Innovation

Breaking the Wall of Edge AI Limitations. Local AI models will bring the next wave of disruption in spaces like physical AI, but building these products without Nvidia is painful. Roofline offers a software based on a novel AI compiler that enables running any model on different hardware.



JAMES SPALL
Nominated by LIFTT

Breaking the Wall of Inefficient AI Computation. Lumai's energy-efficient, high-performance compute hardware will forerun AI models at scale. Empowered by our optical computing technology, our AI processor will dramatically reduce the cost and energy required to deploy AI across all industries.

FINALISTS



ALEXANDER STEINKASSERER
Nominated by Flixfounders

Breaking the Wall of Hair Loss Through Immune Modulation. Mallia Therapeutics is a biopharmaceutical company developing soluble CD83 (sCD83) for the treatment of hair loss.



ALISTAIR IRVINE
Nominated by Science Creates Ventures

Breaking the Wall of Blood Type Barriers. Scarlet's mission is to pioneer the use of our universal red blood cells, unmodified & modified, for the benefit of human health. Scarlet aims to transform transfusion and revolutionize treatment of many diseases using their modified red blood cells.



CAROLINE KNIEBS
Nominated by RWTH Innovation

Breaking the Wall of Lung-Dependent Respiratory Solutions. Lung disease often leads to a build-up of CO₂ in the blood, a potentially fatal condition. o11 biomedical allows breathing via the gut: drinkable microparticles absorb the dangerous CO₂ in the human intestines.



STEFAN MAZY
Nominated by MedTech Actuator

Breaking the Wall of Biopsy-Dependent Skin Cancer Diagnosis. DermR Patch is a world-first microneedle patch and genetic test that replaces invasive biopsies with a painless, non-invasive method to diagnose skin cancer—addressing global inefficiencies where over 60% of skin biopsies are benign and avoidable.



SOMER BABUREK
Nominated by Embassy of Mexico in Germany

Breaking the Wall of Diagnostic Gaps in Women's Health. Hera Biotech features MetriDx™ and HeraFem®. MetriDx™ is a non-surgical test for the definitive diagnosis and staging of endometriosis, and HeraFem® is a point-of-care cervical cancer diagnostic device that delivers real-time results.



BIOTHRUST

KONSTANTIN KURZ
Nominated by RWTH Innovation

Breaking the Wall of Inaccessible Cell Therapies. BioThrust develops a next-generation bioreactor to revolutionize the production of biopharma products. The core innovation is the disruptive Membrane Stirrer technology—the first worldwide to achieve bubble-free aeration with sufficient gas transfer.



LIOR SHALTIEL
Nominated by Technion - Israel Institute of Technology

Breaking the Wall of Irreversible Nerve Damage. NurExone's ExoPTEN is a groundbreaking therapy that uses exosomes to deliver RNA to damaged nerves. This minimally invasive approach has shown promising results in spinal cord and optic nerve injuries, offering real hope where few treatments exist.



RAINER BLASZYK
Nominated by Niedersachsen.next

Breaking the Wall of Organ Rejection. Allogenetics offers a completely new solution to the problem of organ rejection. A first-in-class therapeutic engineers donor organs to become immunologically invisible, eliminating the need for lifelong immunosuppression after transplantation.



HANS MARIA HEYN
Nominated by Technical University Munich

Breaking the Wall of Collateral Damage in Tumor Therapy. Collimate Health transforms radiation therapy into an immunotherapy booster and pharmaceutical application. This targeted cancer treatment is made possible by multiple, hair-wide, high-dose radiation fields ("microbeams").

SUCCESS STORIES

We monitor the growth and performance of our start-ups by collecting data on their funding rounds and other growth indicators. The following success stories are examples of the impact of our work.

ACQUIRED BY PARTNER



T3 Pharma, presented by their founder & CEO Simon Ittig, was awarded **Falling Walls Science Breakthrough of the Year** in the Science Start-ups category in **2018**. Following initial investments and ongoing support from our valued partner Boehringer Ingelheim Venture Fund, the company was **acquired by Boehringer Ingelheim in 2023 for 450 million CHF**. Their innovative cancer therapy platform harnesses the natural behaviours of live bacteria and is now undergoing clinical studies.

8.0 BILLION ACQUISITION



In 2013, Ton Logtenberg pitched Merus at the first ever edition of Falling Walls Venture. In September 2025, Merus reached an agreement with Genmab to be acquired in an all-cash transaction for a total consideration of **8.0 BILLION USD**, making it one of the largest acquisitions of a European biotech company to date. This serves as a great example of the promise posed by Falling Walls Venture – **12 years before this big acquisition, Merus was pitched on stage at the Falling Walls Science Summit**.

“THERE’S SO MUCH ENTHUSIASM, SO MUCH BREAKTHROUGH INNOVATION IN SCIENCEPRENEURSHIP, THAT’S REALLY INSPIRING.”

ANDREAS ZABY, SPRIN-D

REPEATED SUCCESS



In 2019, Alessandro Grillini-Kromm embarked on his Falling Walls journey as a Finalist from **Falling Walls Lab** with a pitch on his PhD research “Breaking the Wall of Neuro-Visual Diagnosis”. In 2020, he founded Reyedar, a start-up that has developed an innovative system for detecting neurovisual disorders. In 2023, he also convinced the Falling Walls Venture Jury and was awarded **Falling Walls Science Breakthrough of the Year 2023 in the Science Start-ups category**. The company’s first product, the SONDA Screener, is now CE Certified and was officially launched in 2024.

2025 FUNDING ROUNDS OF OUR ALUMNI

We help connect our Finalists to investors and monitor their growth and performance by collecting data on funding rounds and other milestones. The endorsement by renowned academic institutions and corporates, the careful evaluation by our scientific Advisory Board, and the connections to our high-level Jury contribute to a **95% survival rate** of our Finalist start-ups. Below, we collected a selection of **funding rounds above 10 million euro** that Falling Walls Venture Alumni have raised in 2025 after pitching on stage in previous years.

2025	ALUMNI (YEAR)	SIZE (€)	2025	ALUMNI (YEAR)	SIZE (€)	2025	ALUMNI (YEAR)	SIZE (€)
January	ELECTRALITH (2024)	16.5 MILLION	March	ATLANT 3D (2020)	12.9 MILLION	September	XAMPLA (2019)	12 MILLION
January	QUANTUM BRILLIANCE (2021)	17.2 MILLION	April	TAU SYSTEMS (2024)	17.2 MILLION	October	TUBULIS (2022)	344 MILLION
January	OFFGRID ENERGY LABS (2020)	10.3 MILLION	April	PUNA BIO (2022)	17.2 MILLION	October	RELECTRIFY (2016)	14.3 MILLION
February	ALICE & BOB (2021)	100 MILLION	June	PROXIMA FUSION (2023)	145 MILLION	November	CHEMIFY (2022)	43 MILLION
February	INERATEC (2017)	70 MILLION	June	LIDROTEC (2021)	12.5 MILLION	November	ECOG (2017)	16 MILLION
February	LAVA (2023)	12.5 MILLION	June	MERUS (2013)	296 MILLION	December	AI PROTEINS (2024)	35.6 MILLION
March	CARBON ONE (2022)	20 MILLION	June	BIOMX (2018)	34.3 MILLION	December	QPHOX (2022)	10 MILLION
March	REVERION (2023)	17.6 MILLION	July	Q.ANT (2022)	68.9 MILLION			

1.4+ BILLION EURO RAISED IN 2025

4.5+ BILLION EURO RAISED SINCE 2013

ADVISORY BOARD

Our Advisory Board consists of experts from diverse scientific fields with an expertise in the evaluation of start-ups. They evaluated all 187 shortlisted start-ups and selected our 25 Finalists.

“WE HAVE PEOPLE FROM SOUTH AMERICA, FROM ALL OVER EUROPE, ALL SHARING SCIENTIFIC IDEAS. THE CHANCE TO ACTUALLY HAVE POLICY MAKERS POTENTIALLY ADOPT THOSE IDEAS AND SEE HOW REALISTIC THEY COULD BE TO IMPLEMENT – THAT'S A HUGE OPPORTUNITY AND IT'S A VERY, VERY RARE THING TO EXPERIENCE.”

STEFAN MAZY, DERMR HEALTH

OUR SELECTION CRITERIA

- 1) LEVEL OF INNOVATION (25%)
- 2) SCOPE OF IMPACT (25%)
- 3) COMMERCIAL POTENTIAL (25%)
- 4) BUSINESS MODEL, TEAM, AND PRESENTATION (25%)

AGATA BARYZEWSKA
Investor
Plug & Play

ALINA BASSI
Investment Manager
Ananda Impact Ventures

JOHANNA BRAUN
Advisor
Venture & Sustainability

JESSICA BURLEY
Investor
Planet A Ventures

ALLISON DRING
Co-Founder and CEO
Made of Air

CLARE EGAN
Head of Sustainability
rebuy

KATE HACH
Senior Advisor
Start2 Group

MAIKE HENNIGSEN
VP Women's Health
Helios | M.D.

MATTHIAS HÖLLING
Director Foundation
Technopark Zurich

INGO KLÖCKNER
Investor
Leaps by Bayer

CARSTEN MAHRENHOLZ
Founder and CEO
Coldplasmatech

MAXIMILIAN OCHS
Investor
First Momentum Ventures

MARÍA RENNER
General Partner
GRIDX

STEFAN SCHERER
Head Tech Transfer
Helmholtz Centre for
Infection Research (HZI)

VALERIE SCHUSTER
Managing Director
Livalta

ARNDT SCHWAIGER
Consultant & AI Expert

FIONA WONG
Managing Partner
Zaz Ventures

THE SELECTION PROCESS

JURY 2025

Our esteemed Jury, chaired by Stefan von Holtzbrinck, consisted of 13 highly distinguished international scientists, investors, and corporate innovation leaders this year. These experts selected our winning start-ups.

“I’VE BEEN ON A RANGE OF JURIES, BUT I’VE RARELY SEEN SO MANY HIGH-QUALITY TECHNICAL IDEAS THAT HAVE BEEN TESTED LIKE I HAVE HERE. WE LOOKED AT 24 DIFFERENT IDEAS TODAY AND IF ONLY HALF OF THEM WORK OUT, THE WORLD WILL BE A MUCH BETTER PLACE.”

CYRIAC ROEDING, EARLI



STEFAN VON HOLTZBRINCK
CEO
Holtzbrinck



MALI BAUM
CEO
WLOUNGE | ICBF VC



LUCA BEVERINA
Professor
University of Milano-Bicocca |
MUSA



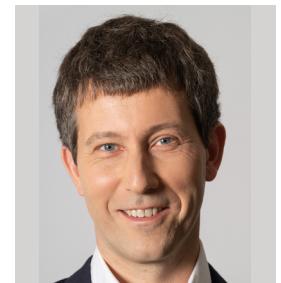
KLEMENS BRUNNER
Group Executive Vice
President Semiconductor &
Electronics
Heraeus Group



IRIS TEN HAVE
Founding Principal
Visionaries Tomorrow



INGA VOM HOLTZ
Director Investments
UnternehmerTUM



PAWEL KONZAL
Venture Executive Europe
Chevron Technology Ventures



DETLEV MENNERICH
Global Head
Boehringer Ingelheim
Venture Fund



CYRIAC ROEDING
Co-Founder & CEO
Earli



MILENA STOYCHEVA
Co-Founder & CEO
The Edge



ANDREW TAUHERT
Chief Impact Officer
XPRIZE Foundation



ANDREA TÜTTENBERG
Founder & CEO
ActiTREXX



ANDREAS ZABY
Innovation Manager
Federal Agency for Disruptive
Innovation (SPRIND)

BECOME A PARTNER

YOUR OPPORTUNITY TO GET INVOLVED

There are many opportunities for you to get involved as a partner. Below are some of our ideas. We are open to your ideas as well!

REVERSE PITCHES

As an investor, you are invited to take part in our Reverse Pitches and introduce your fund to our start-ups and the wider audience.

FALLING WALLS GLOBAL CALL

Nominate science-based start-ups from your network for our pitch competition and get invited to the Falling Walls Science Summit to introduce your nominee if they get selected as a Finalist.

GLOBAL CALL FOR SPECIFIC START-UPS

We reach out to our large international network of universities, research institutes, investors, corporations etc. to help you find the start-ups you are looking for.

SEAT ON THE FALLING WALLS VENTURE JURY

You get first access to our shortlisted start-ups and will select the winners of the competition. We will arrange introductions and meetings between you and the start-ups.

SEAT ON THE FALLING WALLS VENTURE ADVISORY BOARD

Get access to all startup applications and select the 25 Finalists who will pitch on stage at the Falling Walls Science Summit.

**“I WOULD SAY THAT IF YOU ARE REALLY
INTERESTED IN UNDERSTANDING WHAT THE NEW
AND NEXT INNOVATIONS ARE THAT ARE COMING
OUT, THIS IS A CAN’T MISS SUMMIT.”**

SOMER BABUREK, HERA BIOTECH



FALLING WALLS CIRCLE

The discussion formats at the Science Summit are a great way to put specific topics on the agenda of the event, to increase visibility, and bring together leading experts and decision-makers from different fields, providing a rare opportunity for them to meet and exchange ideas.

NETWORKING EVENTS AT THE FALLING WALLS SCIENCE SUMMIT

Bring your network to the Science Summit and we bring them together with our high-level guests from science, business and politics.

SAVE THE DATE: 6–9 NOV 2026 IN BERLIN



GET IN TOUCH

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OUR PARTNERS

FALLING WALLS VENTURE IS A COLLABORATIVE EFFORT, GENEROUSLY SUPPORTED BY

