



August 2024

BLAVATNIK FUND FOR INNOVATION AT YALE
ANNUAL REPORT



Develop life science innovations that impact the world's greatest health challenges

Yale is deeply grateful to the

BLAVATNIK
FAMILY FOUNDATION

*without whose support this program
would not be possible*

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PORTFOLIO HIGHLIGHTS

- 8 application cycles yielded 534 applications, leading to the funding of 81 unique projects
- 28 startups formed
- \$310M of external funding secured to advance Blavatnik technologies
- 5 INDs received FDA approval
- 5 clinical trials initiated
- Diverse modalities, incl. small and large molecules, RNAs, PNAs, ADCs, phage, nanoparticles, exosomes, devices, digital health and platform technologies
- Funding opportunities increased to twice/year with accelerator awards feeding the early pipeline
- 24 Blavatnik Fellows and 63 graduate students and post-doctoral scientists participated in the Blavatnik Fellowship & Associates program
- All Blavatnik Fellow graduates have advanced their careers in influential life science positions
- 10 Blavatnik Fellows have contributed through senior leadership roles at Yale startups



Dear Blavatnik Family Foundation,

It is with great pleasure that I welcome you to the FY24 annual report of the Blavatnik Fund for Innovation at Yale. We are celebrating our 8th year of awards and the first year of the grant extension.

The Fund continues to be transformative, enhancing faculty awareness of innovation and entrepreneurship while facilitating the translation of their research.

This report summarizes the Fund's impact through FY24 and highlights its impact on the university's innovation ecosystem, featuring stories of faculty driving groundbreaking research and entrepreneurial ventures. Thanks to your generous support, the Fund remains dedicated to helping faculty and researchers translate their discoveries into solutions that address some of the world's most pressing health challenges.

This year, as the fund matures, we have witnessed significant advancements toward impacting patients' lives. This includes four FDA regulatory interactions, an IND approval, and the initiation of two clinical trials. These milestones underscore the progress the funding has enabled, allowing Yale technologies to move closer to making a tangible impact on unmet medical need.

Michael Crair, PhD | Vice Provost for Research



Dear Blavatnik Family Foundation,

It has been another banner year for the Blavatnik Fund, with transformative ideas from a diverse range of exceptional faculty resulting in a steady stream of promising award winners. The future is bright.

This year the funding market remains tight, making these awards even more critical to translating science for commercialization.

Because of this and to support the most promising projects, we have provided additional bridge awards to help them move closer to external funding. This support is crucial during the current downturn, ensuring our startups are not casualties. I look forward to seeing the new applications this year and the continued impact of our efforts.

Tim Shannon, MD | Chairman, Investment Advisory Board

DIRECTOR'S REFLECTIONS FY24 LEVERAGING EXPERIENCE TO DRIVE INNOVATION

In FY24, we deployed the first year of funding from the extended Blavatnik Family Foundation grant. With a **record-breaking 122 applications**, we took an aggressive approach to funding. With the guidance of our board, and input from expert industry reviewers and judges, **we awarded \$3.9M, the highest level of annual funding to date**, to the most promising technologies. This was achieved by awarding unutilized funds from years 1-7 and, using our experience from previous award cycles, we were able to confidently award 105% of our annual budget based on historical underutilization data. **This additional funding has allowed us to further diversify our portfolio in therapeutic areas and modalities, maximizing the chances of success through innovation and supporting the extended Yale community.**



Morag Grassie, Director of the Blavatnik Fund, Innovation Summit 2024

INSIDE THIS YEAR'S ANNUAL REPORT



Meet the FY24 Awardees

In response to the challenging funding climate for early-stage technologies, we have enhanced our support for awardees as they achieve proof of concept or deliver their next inflection point. We have reserved funds for rolling booster awards to further de-risk projects and bridge funding for these technologies as they seek external investments or partnerships and prepare for a more robust funding environment.

[Read more about our new Awardees on page 4](#)

Strengthening the Startup Ecosystem

To increase the exposure of our startups, we launched the Blavatnik-funded "Emerging Company Spotlight" at the Yale Innovation Summit (2,200+ attendees). They also received additional support through our new Director of Investor Networks. A **highlight of this year is 2022 Awardee Anne Eichmann who successfully spun out D²B³** - a company led by a Blavatnik Fellow and winner of a competitive platinum ticket, securing funding and lab space in New Haven.

[Read all of our Startup Highlights on page 8](#)

BREAKING BARRIERS IN CNS DRUG DELIVERY
D²B³

With over 98% of drugs unable to cross the Blood-Brain Barrier (BBB), D²B³'s technology offers a groundbreaking solution by transiently and selectively opening the BBB. This innovation enables the delivery of various therapeutics directly to the brain, unlocking new treatment possibilities for brain cancers, neurological disorders, and infections. D²B³'s monoclonal antibody (mAb) creates a temporary window of permeability after intravenous injection, enhancing the efficacy of drugs that would otherwise struggle to reach the brain.

D²B³'s lead asset has successfully delivered multiple drug classes across the BBB in preclinical *in vivo* models, including small molecules and biologics. By facilitating the use of off-patent therapeutics for brain conditions, the technology promises faster clinical development and fewer regulatory obstacles. Preclinical efficacy studies, including proof-of-concept in mouse models for chemotherapy delivery, have paved the way for lead optimization and IND-enabling studies, marking the next phase of advancement for D²B³'s breakthrough approach.

Timeline: 2022 (Blavatnik Awardee) → 2023 (In vivo POC Data Readout) → 2024 (Company Formation) → 2026 (Pre-Seed Secured)

FERRX
MARK FIELDS (FY22)
Ferrx is a research initiative focused on developing treatments for dry age-related macular degeneration (AMD). The team has identified and optimized three compounds that show efficacy in preclinical models. The Blavatnik award facilitated optimizing and characterizing the lead compound and the team secured additional booster funding to bridge towards a pre-clinical funding. With the new data in hand, Ferrx was able to engage productively with the FDA for IND feedback and obtain their next steps on their development plan.

C8 SCIENCES
BRUCE WEXLER (FY22)
C8 Sciences develops neuroscience-based digital programs aimed at improving cognitive functions, mental health, and emotional well-being for both children and adults. Their Blavatnik award has allowed the team to engage the FDA through the Q-Sub process and develop a clinical study to facilitate eventual regulatory clearance as a digital therapeutic.

SUSTAINED DRUG DELIVERY (SDD)
VICENTE DIAZ (FY23)
Sustained Drug Delivery has developed a drug delivery platform and are currently focused on commercializing a sustained release (semperpar) safer. The technology is based on collagen cross linking drug, as the collagen hydrolyzes the drug is released. This past year SDD successfully obtained FDA IND feedback, setting them up on a clear path to the clinic.

ENSIGHT-AI
ROHAN KHERA (FY23)
In February 2024, Ensign-AI received FDA Breakthrough Device Designation (BDD) for its SCIVision-TTRx technology, designed for early detection of ATTR-Cardiomyopathy, a life-threatening and often under-diagnosed condition. Being awarded BDD by the FDA accelerates the approval process for a device by prioritizing its review and potentially providing more support and guidance. Blavatnik funding has allowed Ensign-AI to regularly engage the agency to set it up on a clear path for eventual regulatory clearance.

Accelerating Translation

As our awardees from previous years progress toward the clinic, company formation, and/or successful exits, we continue to expand our support of early-stage technologies, particularly those that were unsuccessful in their first application, ensuring a healthy pipeline. **The Blavatnik funded projects have become synonymous with innovation and quality to incubators, VCs, industry partners, and CROs** seeking these technologies as promising opportunities for their pipeline.

[Read more about new translational milestones met on page 12](#)

INTRODUCING FY24 DEVELOPMENT AWARDEES

UNPRECEDENTED AWARD DISTRIBUTION



**DYNAMIC 3D
MORPHOMETRIC ANALYSIS**
Frank Buono, PhD



**NON-INVASIVE
FETAL ELECTROENCEPHALOGRAM**
Jose Cortes-Briones, PhD (Co-Awardee)



FIMMTI THERAPEUTICS
Craig Crews, PhD



**RESA THERAPEUTICS:
ENGINEERING THERAPEUTIC MRNAS**
Antonio Giraldez, PhD



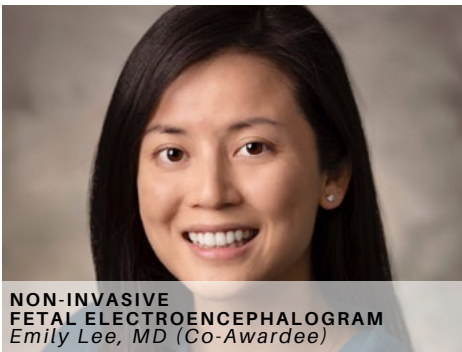
ALTERA THERAPEUTICS
Peter Glazer, MD, PhD



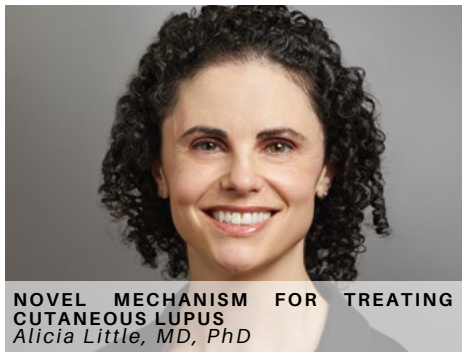
**BIO THERAPEUTIC FOR
SYSTEMIC SCLEROSIS**
Raymond Johnson, MD, PhD



**ASTERYKS THERAPEUTICS: DEVELOPING
THE FIRST ROS1 BIOLOGICS FOR CANCER**
Daryl Klein, MD, PhD



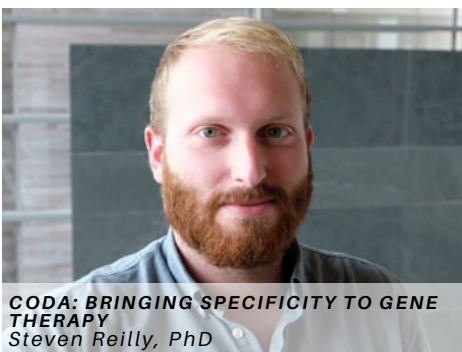
**NON-INVASIVE
FETAL ELECTROENCEPHALOGRAM**
Emily Lee, MD (Co-Awardee)



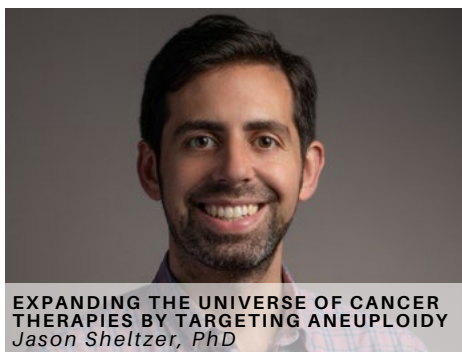
**NOVEL MECHANISM FOR TREATING
CUTANEOUS LUPUS**
Alicia Little, MD, PhD



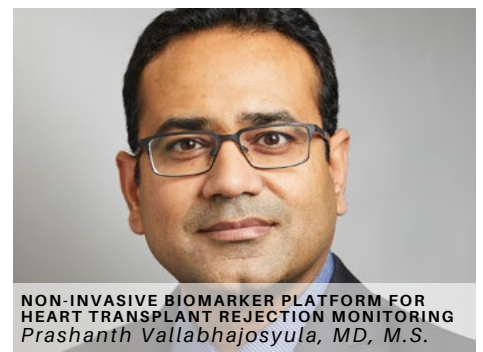
**NUFOLL: PROGRAMMING SKIN CELLS TO
REGROW NATURAL HAIR**
Peggy Myung, MD, PhD



**CODA: BRINGING SPECIFICITY TO GENE
THERAPY**
Steven Reilly, PhD

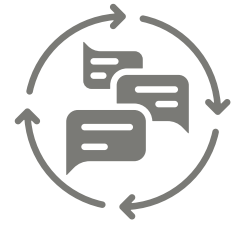
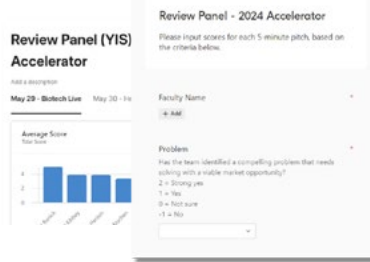
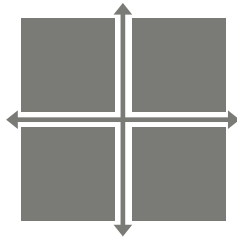
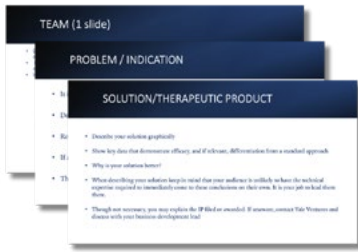


**EXPANDING THE UNIVERSE OF CANCER
THERAPIES BY TARGETING ANEUPLOIDY**
Jason Sheltzer, PhD



**NON-INVASIVE BIOMARKER PLATFORM FOR
HEART TRANSPLANT REJECTION MONITORING**
Prashanth Vallabhajosyula, MD, M.S.

TRANSPARENCY AND ROBUST FEEDBACK ENHANCING THE APPLICATION PROCESS



Applications Templates

Levelled the playing field so all faculty addressed the same questions. Customized templates for therapeutics and health solutions.

Simplified Judging Rubric

Scoring rubric used at each review point focused on four areas: Commercial Potential, IP, Problem, and Solution. Data captured and feedback shared with our Board.

Digitized Scoring

Easy score submission into a portal allowed more judges to participate, allowing for more diverse feedback. This also facilitated quick turnarounds for applicant feedback.

100% Feedback

Broader Yale Ventures support and improved processes allowed all applicants to receive customized feedback.

This year's application cycle was enhanced by the addition of Yale Ventures' **Venture Lab** workshop. The program offers a comprehensive platform designed to support Yale faculty entrepreneurs. Through a combination of executive mentorship, resources, and business analysis, faculty members can accelerate their discoveries into successful ventures.

Blavatnik Fund awardees were able to participate in 1:1 workshops or engage with a panel of Entrepreneurs in Residence (EIRs) to address key business and preclinical development questions, ultimately leading to a more robust project plan, indication or target selection. We are currently piloting this process with FY24 Accelerator awardees, with every awardee offered the opportunity to confidentially review their early data, project goals and path to impact with subject matter EIRs, thereby increasing their chances of success when applying for a full award.



VENTURE LABS

INCREASING REACH IN SEARCH OF INNOVATION DIVERSIFYING THE PORTFOLIO IN FY24

This year, we significantly expanded the diversity of our portfolio and extended our reach within Yale, resulting in a **25%** increase in applicants. We are especially proud of two statistics. First, we made substantial strides in supporting women, increasing their funding allocation from **12% to 28%**. Second, we are now funding **11 different modalities** and **15 therapeutic areas** in FY24.

122

APPLICATIONS

We received applications from over 100 **unique technologies**, including 53 new submissions from those who had never applied to Blavatnik before and 23 individuals engaging with Yale Ventures for the first time (43% increase from 2023).

23

AWARDS

We awarded a **record breaking \$3.95M** this past award cycle. We continue to address the challenge of delivering gender parity with 30% of FY24 awards given to women, and 28% of funds allocated to women.

11

MODALITIES

We diversified the modalities we support, allowing us to suggest alternative modalities to awardees to increase their success. This year, 40% of awards were allocated to traditional modalities like small molecules and antibodies, and we introduced two new ones: exosomes and organoids.

15

THERAPEUTIC AREAS

In our commitment to diversifying the portfolio, we aim to fund a broad range of therapeutic areas. While oncology remains a key focus, making up 20% of this year's technologies awarded, we have also funded four new areas: nephrology, endocrinology, hematology, and transplant

FY 2024 ACCELERATOR AWARDEES

BIOTECH



SMALL MOLECULE VIMENTIN INHIBITOR FOR TREATMENT OF HYPERTROPHIC AND KELOID SCARS
Chris Bunick, MD, PhD



DNA SAWS FOR ANTIBODY-DRUG CONJUGATES.
Seth Herzon, PhD



INCRETIN HORMONE AMPLIFIERS: A NOVEL APPROACH TO TREAT DIABETES AND OBESITY
Richard (Dick) Kibbey, MD, PhD



RATIONAL DESIGN OF A NOVEL CLASS OF SELECTIVE GSK3B INHIBITORS FOR REFRACTORY B-CELL MALIGNANCIES
Markus Müschen, MD, PhD

HEALTH



A URINE-BASED LIQUID "BIOPSY" FOR DIAGNOSIS AND PROGNOSTICATION OF FSGS AND PROGRESSIVE KIDNEY DISEASE
Madhav Menon, MBBS, MD



SIMULATED PSYCHEDELIC VIRTUAL REALITY "HEADSET" EXPERIENCE INTERVENTION (SI-PHI)
Mohini Ranganathan, MBBS



STROKECLASSIFIER
Richa Sharma, MD, MPH



UNLOCKING HUMAN EMBRYO IMPLANTATION AND REPRODUCTIVE SUCCESS THROUGH SYNTHETIC EMBRYOLOGY
Berna Sozen, PhD

FUNDING BREAKTHROUGH INITIATIVES DIVERSIFYING THROUGH OUR EARLY PIPELINE



The Accelerator Awards have given the fund an opportunity to support ideas that are more on the cutting edge of research and give them the opportunity to create validating data and confirm translational potential.

Dr. Madhav Menon and team receiving their Health Accelerator Award from Dr. Megan Ranney (Dean, YSPH) at the 2024 Innovation Summit

The Accelerator Awards, introduced in 2023, were designed to front-load the pipeline with early-stage technologies needing additional validation. These awards draw a significant number of faculty who have not previously applied for Blavatnik, and for many, this is their first time considering how to translate their basic research to have an impact beyond the lab. In the most recent cycle, **51 unique applicants** (26 Biotech, 25 Health) participated, with **24 new to Blavatnik** and **7 new to Yale Ventures**.

In addition to robust reviews by Yale Ventures and judges, the finalists and semifinalists also receive exposure through presentations at the Innovation Summit -- attended by over 2,200 participants. This year we featured sixteen finalists who pitched onstage, and seven semifinalists who showcased their work through ePosters.

The winners were awarded \$30K to substantiate novel concepts with supporting data in a rapid six-month window, with the expectation that successful validation will be presented as a full project proposal in the fall. Last year's pilot was a resounding success! **All six Accelerator Award recipients successfully completed their proposed experiments**, providing the fund with invaluable insights into the translational potential of these groundbreaking technologies. **Gratifyingly, two of these projects went on to win a full award**, demonstrating the strength of the Accelerator program. Moreover, feedback given to one of the FY23 Accelerator finalists transformed their pitch, resulting in one of the highest-scoring awardees in FY24. A third accelerator project is securing commercial interest that will result in a successful exit of the technology, consequently the board did not allocate additional funding. EpiTET, a fourth Accelerator Award winner, secured an acting CEO to drive fundraising as they pivot to a new indication as recommended by our board of industry experts.

Building on this momentum, we have granted Accelerator Awards to 8 cutting-edge technologies this year, spanning diverse fields. These range from pioneering therapeutics for major diseases like diabetes, to innovative organoids that predict fertility treatment efficacy, and even ventures into "Si-PHI," a VR system that mimics the effects of psychedelics to treat treatment-resistant depression. As we look to the future, our focus in FY25 will be on expanding our reach deeper across the university, consolidating transparency and feedback, and continuing to enhance diversity through strategic partnerships with university affiliate groups. The Accelerator Awards will continue to serve as a vital pipeline for future Development Awards, increasing awareness, driving innovation and impact across the board.

Our next wave of innovators

We invite you to explore our investment opportunities featured in the side bars:

Allagium | Novel therapeutic solutions to address unmet medical needs for diseases driven by protein tyrosine phosphatase pathway defects. Allagium's lead compound is a MKP5 inhibitor for Duchenne muscular dystrophy
emmanuel.aisabokhae@allagium.com

D²B³ | D²B³'s patent-protected, fully human monoclonal antibody offers a breakthrough in drug delivery across the Blood-Brain Barrier
manuel.mohr@yale.edu

ENSIGHT-AI | Proprietary deep-learning algorithms analyze ECG images to identify signatures of structural heart disorders, enhancing diagnostic capabilities using widely available and low-cost data streams
rohan.khera@yale.edu

EpiTET | EpiTET aims to treat endometriosis and overcome immunotherapy resistance to enable cancer cures by eliminating disease associated macrophages
erika.smith@epitettx.com

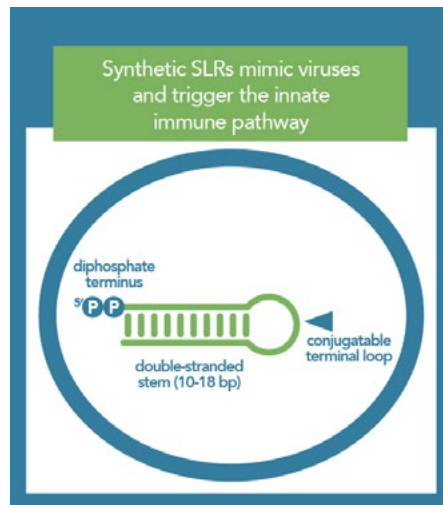
FerRx | A once-a-day prescription eyedrop being developed to prevent the progression of intermediate AMD to late-stage AMD. It activates an enzyme to prevent ferroptosis and inflammation
leroux.jooste@gmail.com

STARTUP HIGHLIGHTS SUCCESS STORIES IN A CHALLENGING LANDSCAPE

This past year, the biotech sector faced significant headwinds. Many investors focused on their existing portfolios or later stage and larger rounds, leaving a seed funding gap. Against this backdrop, our featured companies secured crucial funding, highlighting their transformative potential. We have concentrated on readying emerging technologies for market recovery and bolstered support through non-dilutive government, foundation, and accelerator funding. **To date our Blavatnik Startups have raised \$310M from both dilutive and non-dilutive sources.**

PIONEERING RNA THERAPEUTICS FOR RESPIRATORY HEALTH RIGIMMUNE

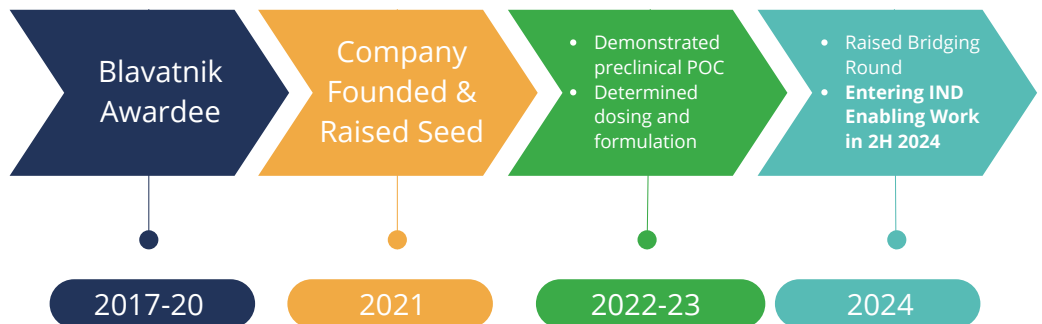
Founded in 2020 by renowned Yale University scientists Dr. Anna Marie Pyle and Dr. Akiko Iwasaki, **RigImmune is at the forefront of developing innovative RNA-based therapies** that harness the body's innate immune system.



RigImmune specializes in stem loop RNA therapeutics (SLRs) that activate the Type I interferon pathway to stimulate both innate and adaptive immune responses.

With the acquisition of SubIntro in 2022, RigImmune has advanced its mission by creating the NEED™ (Nano-Emulsion Enhanced Delivery) platform, which delivers RNA therapeutics directly to the respiratory tract without the need for lipid nanoparticle encapsulation.

RIGImmune is backed by major venture funds such as F-Prime and grant funding from the Bill and Melinda Gates Foundation.



SERIES A INVESTMENT OPPORTUNITY: \$45-50M
POST-SEED VALUATION: \$18.25M

Contact: Susan Sobolov | President, COO | ssobolov@rigimmune.com

VIRTUS THERAPEUTICS

Virtus Therapeutics is leading the charge in developing **innovative therapies for pantothenate kinase-associated neurodegeneration (PKAN)**, a rare genetic disorder that impairs the body's use of vitamin B5 and is lethal in childhood or young adults. This condition, which primarily affects children and young adults, causes progressive neurological decline, including muscle stiffness, coordination difficulties, speech impairments, and cognitive issues. **By addressing the genetic mutations that cause PKAN, Virtus is working to create novel treatments that could potentially halt or reverse the disease progression.**

Virtus's technology was a 2021 Blavatnik Awardee, which completed its milestones in identifying promising leads and validating them in *in vivo* PKAN models. The company is currently operating at BioCT in Groton, CT with Scientific Director, Dr. Jessica Regan leading the preclinical program.

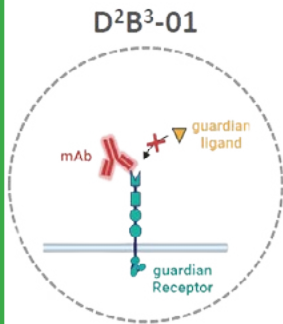


PKAN patients gathered at the 2024 Neurodegeneration with Brain Iron Accumulation (NBIA) Advocacy Meeting

INVESTMENT OPPORTUNITY: SEED ROUND AND SERIES A SBIR PHASE 1 AWARDED IN SEPTEMBER 2023

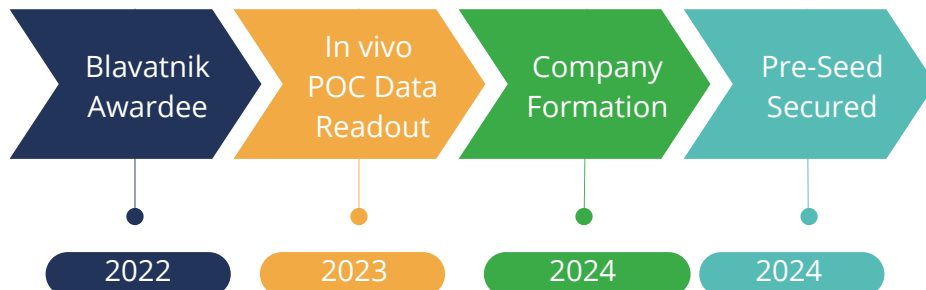
Contact: Choukri Ben Mamoun
choukri.benmamoun@yale.edu

BREAKING BARRIERS IN CNS DRUG DELIVERY D²B³



With over 98% of drugs unable to cross the Blood-Brain Barrier (BBB), **D²B³'s technology offers a groundbreaking solution by transiently and selectively opening the BBB.** This innovation enables the delivery of various therapeutics directly to the brain, unlocking new treatment possibilities for brain cancers, neurological disorders, and infections. D²B³'s monoclonal antibody (mAb) creates a temporary window of permeability after intravenous injection, enhancing the efficacy of drugs that would otherwise struggle to reach the brain.

D²B³'s lead asset has successfully delivered multiple drug classes across the BBB in preclinical *in vivo* models, including small molecules and biologics. By facilitating the use of off-patent therapeutics for brain conditions, the technology promises faster clinical development and fewer regulatory obstacles. Preclinical efficacy studies, including proof-of-concept in mouse models for chemotherapy delivery, have paved the way for lead optimization and IND-enabling studies, marking the next phase of advancement for D²B³'s breakthrough approach.



RAISING SEED ROUND: \$5M

Recent Awards: Mission BioCapital Platinum Ticket, MassBioDrive Fall 2024 Cohort
Contact: Manuel Mohr | CEO | manuel@d2b3.bio

Investment Opportunities (Cont.)

KaryoVerse | KaryoVerse Therapeutics focuses on targeting aneuploidy, the most frequent genetic alteration in cancer, including Y-linked cancers, which has not been addressed by current therapies.
ali.fattaey@karyoverse.com

Pangolin | Chemistry-driven platform to design novel intrinsically disordered protein therapeutics targeting mis-assembly of toxic protein oligomers during disease pathogenesis
enrique@pangolintherapeutics.com

StraDEFY | Innovative site-directed therapeutics for non-melanoma skin cancer and has a lead candidate with promising *in vivo* proof of efficacy.
jgoldberg@stradefybio.com

Sustained Drug Delivery | Developing collagen wafers with Latanoprost for sustained drug delivery in glaucoma treatment
vicente.diaz@yale.edu

EMERGING STARTUPS BUILDING THE FUTURE

Launching a startup is a challenging journey that demands perseverance, ingenuity, and an unwavering commitment to innovation. Our emerging startups this past year have navigated the complexities of securing both dilutive or non-dilutive funding, initiated negotiations for licenses, and embarked on the formidable task of assembling skilled teams and advisory boards with additional support from our Entrepreneurs-in-Residence (EIRs). These innovators are laying the foundation for the future of life sciences, but they can't do it alone.

We invite you to support these pioneering ventures—whether by providing the financial resources they need to grow or by lending your expertise as they build their teams and advisory boards. Join us in shaping the future by empowering those who are creating it.

PLAYBL

Empowering the Next Generation Through Digital Health Innovation



Lynn Fiellin
Scientific Co-Founder



Kirby Salerno
CEO



Mission-Driven Innovation: Playbl is dedicated to improving youth health outcomes by combining the power of gaming with evidence-based strategies.



Collaborative Development: Each game is the result of a collaborative effort between the play2PREVENT Lab, adolescents, community partners, and game developers, ensuring relevance and effectiveness.



Proven Impact: Playbl's games are not just popular; they are backed by scientific research demonstrating their significant positive impact on players' health and decision-making abilities.



Supported by Leading Foundations: With funding from organizations like the NIH, Chan-Zuckerberg Initiative, and CVS Health Foundation, Playbl's work is well supported in the field of digital health innovation.

RAISING SEED ROUND

Contact: Kirby Salerno | kirby.salerno@playbl.com

ENSIGHT-AI

Innovating Cardiovascular Diagnostics with AI



Rohan Khera
Scientific Co-Founder



Natalie Makableh
Chief of Staff



Transformative Technology: Enight-AI's proprietary deep-learning algorithms analyze ECG images to identify signatures of structural heart disorders using widely available and low-cost data streams.



FDA Breakthrough Device: The ECGvision-ATTR© technology, capable of diagnosing Transthyretin Cardiomyopathy from ECG photos, received FDA Breakthrough Device Designation in February 2024.



Recognized Science: Enight-AI's technology has garnered recognition and funding from prestigious organizations, including the American Heart Association, Doris Duke Charitable Foundation, and Bristol Myers Squibb.



Health Equity: Enight-AI aims to reduce clinical disparities and support pharmaceutical companies in accelerating trial enrollment and patient identification.

RAISING SEED ROUND

Contact: Rohan Khera | rohan.khera@yale.edu



Ian Odell
Scientific Co-Founder



Paul Fonteyne
CEO

PLYTHERA

Leading the next era of fibrosis medicine

Plythera is at the forefront of fibrosis medicine, focusing on epiregulin (EREG) inhibition to treat systemic sclerosis (SSc) and SSc-related interstitial lung disease (ILD). Founded by leading scientists and managers with significant experience in developing treatments for pulmonary fibrosis, Plythera aims to bring innovative, effective therapies to patients suffering from fibrotic conditions.



Innovative Mechanism: Plythera’s approach targets EREG, which plays a key role in fibrosis, offering a novel treatment pathway distinct from broad anti-inflammatory methods.



Preclinical Evidence: Treatment with EREG-neutralizing antibodies has shown reduction in fibrosis markers and improvement in SSc-derived skin biopsies and idiopathic lung fibrosis samples.



Strong Leadership: Led by experienced professionals including former executives from Boehringer Ingelheim, the team has a proven track record in developing therapeutics for fibrotic diseases.



Momentum to the Clinic: Secured \$26 million of \$40M Series A, led by Canaan. On track with a fast, capital-efficient plan for clinical proof of mechanism in SSc patients once Series A closes.

RAISING SERIES A: \$40M

\$26MM committed from two major investors, seeking third investor to close round

Contact: Paul Fonteyne | pfonteyne@canaan.com



Yingqun Huang
Scientific Co-Founder



Erika Smith
CEO

EPITET

Eliminating pathogenic disease-associated macrophages

EpiTET Therapeutics is a pre-clinical stage Yale Spinout combining AI-enabled patient selection with targeted therapeutics. EpiTET aims to treat endometriosis and overcome immunotherapy resistance to enable cancer cures by reprogramming disease associated macrophages in a precise subset(s) of patients.



Innovative Approach: EpiTET’s patented small molecule targets the dual specificity of TET3 and VHL to induce cell death in inflammatory macrophages.



Pre-Clinical Success: EPI100, has shown promising results in reducing endometriosis burden and improving NSCLC survival in mouse models



Strong IP Portfolio: The company holds a US composition of matter patent and a methods patent for treatment, with a library of over 60 compounds.



Experienced Team: EpiTET is led by experts in OB/GYN, epigenetics, and life sciences, including advisors with significant industry and academic experience.

RAISING SEED ROUND: \$8M

Seeking Advisors: Clinical Oncology, Epigenetics, and Inflammation experts

Contact: Erika Smith | erika.smith@epitettx.com

PATH TO THE CLINIC INITIAL REGULATORY INTERACTIONS IN FY24



FERRX

MARK FIELDS (FY22)

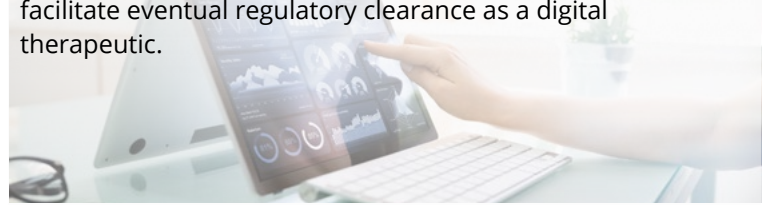
FerRx is a research initiative focused on developing treatments for dry age-related macular degeneration (AMD). The team has identified and optimized three compounds that show efficacy in preclinical models. The Blavatnik award facilitated optimizing and characterizing the lead compound and the team secured additional booster funding to bridge towards a pre-seed/seed funding. With the new data in hand FerRx was able to engage productively with the FDA for PIND feedback and obtain clear next steps in their development plan.



C8 SCIENCES

BRUCE WEXLER (FY22)

C8 Sciences develops neuroscience-based digital programs aimed at improving cognitive functions, mental health, and emotional well-being for both children and adults. Their Blavatnik award has allowed the team to engage the FDA through the Q-Sub process and develop a clinical study to facilitate eventual regulatory clearance as a digital therapeutic.



SUSTAINED DRUG DELIVERY (SDD)

VICENTE DIAZ (FY23)

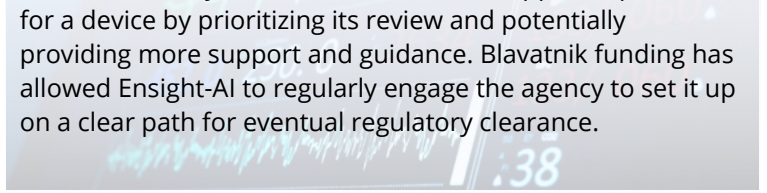
Sustained Drug Delivery has developed a drug delivery platform and are currently focused on commercializing a sustained release latanoprost wafer. The technology is based on collagen cross linking drug, as the collagen hydrolyzes the drug is released. This past year SDD successfully obtained FDA PIND feedback, setting them up on a clear path to the clinic.



ENSIGHT-AI

ROHAN KHERA (FY23)

In February 2024, Enight-AI received FDA Breakthrough Device Designation (BDD) for its ECGvision-TTR© technology, designed for early detection of ATTR-Cardiomyopathy, a life-threatening and often under-diagnosed condition. Being awarded BDD by the FDA accelerates the approval process for a device by prioritizing its review and potentially providing more support and guidance. Blavatnik funding has allowed Enight-AI to regularly engage the agency to set it up on a clear path for eventual regulatory clearance.



As our awards mature, Blavatnik funding has been used for regulatory work. The outcomes of these interactions result in credible non-clinical plans to build their fundraising ask and make ready for the funding recovery.



PLATFORM TECHNOLOGY (FY19) ADVANCING MULTIPLE MOLECULES TO CLINIC

MOLECULAR DEGRADERS OF EXTRACELLULAR PROTEINS (MODE™)



biohaven.com/pipeline

Molecular Degraders of Extracellular Proteins (MoDE™) are being developed for multiple diseases, including autoantibody-driven diseases, neurological disorders, and oncology.

MoDE™ are bifunctional small molecules that bind to circulating targets and deliver them to hepatocytes via the asialoglycoprotein receptor (ASGPR), leading to rapid degradation in hepatic lysosomes.



Developed by David Spiegel, the MoDE™ platform was a 2019 Blavatnik Awardee. In 2021 MoDE™ was licensed to BioHaven.

BioHaven has since moved forward multiple molecules derived from the platform and announced the first clinical data from a MoDE™ degrader at their Investor Day in 2024.

BHV-1300 Clinical Data Highlights



Safety Profile: BHV-1300 is well-tolerated, with no severe adverse events, significant ECG changes, or hepatotoxicity observed in the ongoing Phase 1 study.



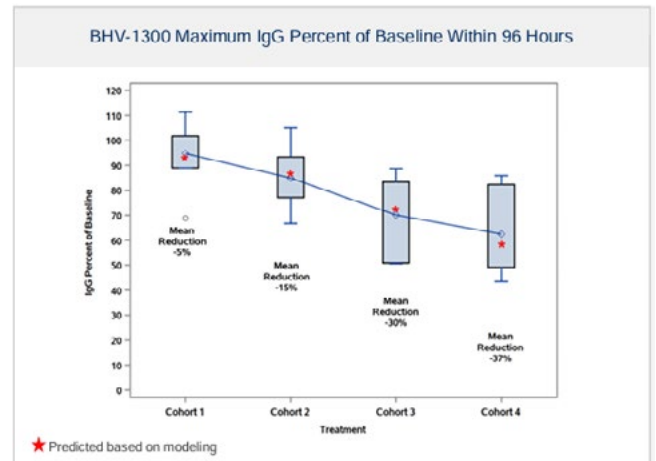
IgG Degraders: BHV-1300 rapidly, selectively, and safely lowers IgG levels in a dose-dependent manner in healthy subjects, without significantly affecting other immunoglobulins or causing severe adverse effects.



Efficacy: The treatment shows a rapid onset of IgG lowering within hours, with sustained effects through the follow-up period.



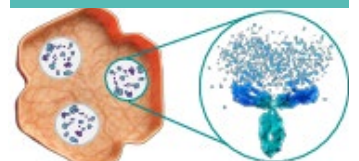
Selectivity: BHV-1300 specifically targets IgG, with no meaningful reduction in IgM, IgA, or IgE levels, and no impact on albumin or low-density lipoprotein cholesterol.



Single Doses of BHV-1300 Reduce IgG in Dose-Dependent Manner in Ongoing SAD Study in Healthy Subjects. Preliminary data from ongoing Phase 1 Study (as of May 28, 2024). BioHaven Investor Deck August 2024

	2024	2025
IgG-Driven Disease: BHV-1310	IND	Ph 1
IgA Nephropathy: BHV-1400	IND	Ph 1
B1AR Cardiomyopathy: BHV-1600	IND	Ph 1
Anti-Proinsulin Type 1 Diabetes		IND
Anti-Insulin Anti-drug Antibody		IND
IgG4-Mediated Diseases		IND
PLA2r Membranous Nephropathy		IND

3 MODE™ ON SCHEDULE FOR IND IN 2024




DEVELOPING THE NEXT GENERATION

THE BLAVATNIK FELLOWSHIP

The Blavatnik Fellowship is a one-year fellowship designed for high-potential life science industry professionals with advanced technical skills who have an interest in joining the Yale and New Haven life sciences entrepreneurial ecosystem. Blavatnik Fellows assist Yale faculty members and their research teams to fully explore the commercial potential of their breakthrough life science technologies. They work closely with staff and faculty teams to develop and translate Yale's groundbreaking research into innovative healthcare solutions.


Meet the 2024-25 Cohort




Jonathan Birabaharan
PhD, MBA

 **Field of Study:** Pharmaceutical Sciences


 **Key Prior Experience:** UPMC, PPD, Rockland


 **Specialty Areas:** Translational science, pharmacokinetics


Jonathan Birabaharan holds a PhD in Pharmaceutical Sciences and an MBA from the University of Pittsburgh, where he specialized in translational science and pharmacokinetics, conducting drug studies in pre-clinical models of traumatic brain injury. He gained industry experience at GSK through PPD and Rockland Immunochemicals, focusing on clinical stability testing and antibody development. Additionally, Jonathan contributed to the Pittsburgh life sciences ecosystem through involvement with LifeX, Resilient Life Sciences, and UPMC Enterprises.




Anjali Ramaswamy
PhD

 **Field of Study:** Immunology


 **Key Prior Experience:** Co-Founder Nucleate New Haven, JHTV


 **Specialty Areas:** T cell biology, omics, human immunity


Anjali Ramaswamy holds a PhD in immunology from Yale University with expertise in T cell biology, omics, and human immunity. She co-founded Nucleate New Haven, a biotech accelerator, served on the executive team of the global Nucleate initiative, consulted for a clinical-stage immunology pharmaceutical company, and gained valuable operational experience as part of the Blavatnik team. Prior to Yale, she helped build academic technologies into startups at Johns Hopkins University Technology Ventures (JHTV) and is now focused on supporting academic founders in developing innovative biotherapeutics.




Julia Rosander
MS

 **Field of Study:** Machine Learning and AI


 **Key Prior Experience:** gRED Data Scientist, miLEAD Consultant


 **Specialty Areas:** Neuroscience, bioinformatics


Julia is a machine learning and artificial intelligence specialist with a strong background in developing models for neuroscience and bioinformatics. She has experience supporting digital health technologies, including diagnostics, devices, and software, in both academic and industry settings. Julia's expertise covers all stages of technology development with her machine learning insights significantly contributing to the advancement of digital health solutions for healthcare challenges



Robert Williams
PhD

 **Field of Study:** Molecular Genetics

 **Key Prior Experience:** Startup operations; pre-seed and seed fundraising

 **Specialty Areas:** Immunology, metabolic diseases

Robert is an early-stage therapeutics entrepreneur and operator with over five years of experience in drug discovery and development at biotech startups. As former Director of R&D at Pelagos Pharma and co-founder of Aumenta Biosciences, he led multiple preclinical development programs for both small molecule and biologics ranging from discovery stage to completion of IND-enabling studies. Robert joins Yale Ventures with a passion for supporting academic innovators transform their scientific concepts into novel therapeutics.

FORWARD MOMENTUM**NATALIE
MAKABLEH**Chief of Staff,
ENSIGHT-AI

I am a regulatory affairs expert with extensive experience in navigating government approvals for pharmaceutical products, spanning all phases of drug development and commercialization. As a Blavatnik Fellow at Yale, I have leveraged my regulatory knowledge, financial insights from healthcare investment banking, and strategic expertise to advance ventures in life sciences, digital health, and medical devices. **Enight-AI:** I led fundraising, regulatory compliance, and strategic planning for Enight-AI, successfully securing a Phase I SBIR grant and advancing investor discussions. I integrated a Quality Management System (QMS) to meet regulatory standards and am poised to transition to a full-time Chief of Staff role contingent on successful fundraising. **VOICES: Elder Abuse Prevention:** I guided the commercialization strategy for VOICES, leading the team through the I-Corps application process, refining the pitch deck, and researching payer landscapes to identify partnership and funding opportunities. **M-Select:** I provided strategic guidance on business development, regulatory pathways, market positioning, financial modeling, and identifying key business partners for M-Select, a digital platform that helps providers implement measurement-based care (MBC) for adolescent depression.

The Blavatnik Fellowship at Yale has been a transformative experience, shaping my journey as a scientist-entrepreneur. I began the fellowship with the goal of exploring diverse scientific disciplines, despite my strong background in gene therapy and gene editing. Throughout the fellowship, I engaged with a wide range of projects, from developing perinatal care centers for Black expecting mothers to exploring novel CRISPR-RNP delivery technologies, cancer treatments, and advanced imaging technologies. This broad exposure allowed me to understand different scientific challenges and commercialization strategies across various startups. As the fellowship progressed, I refined my focus and ultimately spun out a high-potential startup, D²B³, which is focused on drug delivery across the blood-brain barrier. Leading D²B³ has been a rewarding and educational experience, with the company receiving several prestigious awards that have opened doors to new opportunities. The fellowship equipped me with the skills, knowledge, and network essential for this journey, and I am excited to continue driving D²B³'s development, committed to making a meaningful impact on healthcare.

**MANUEL
MOHR**Co-founder, D²B³

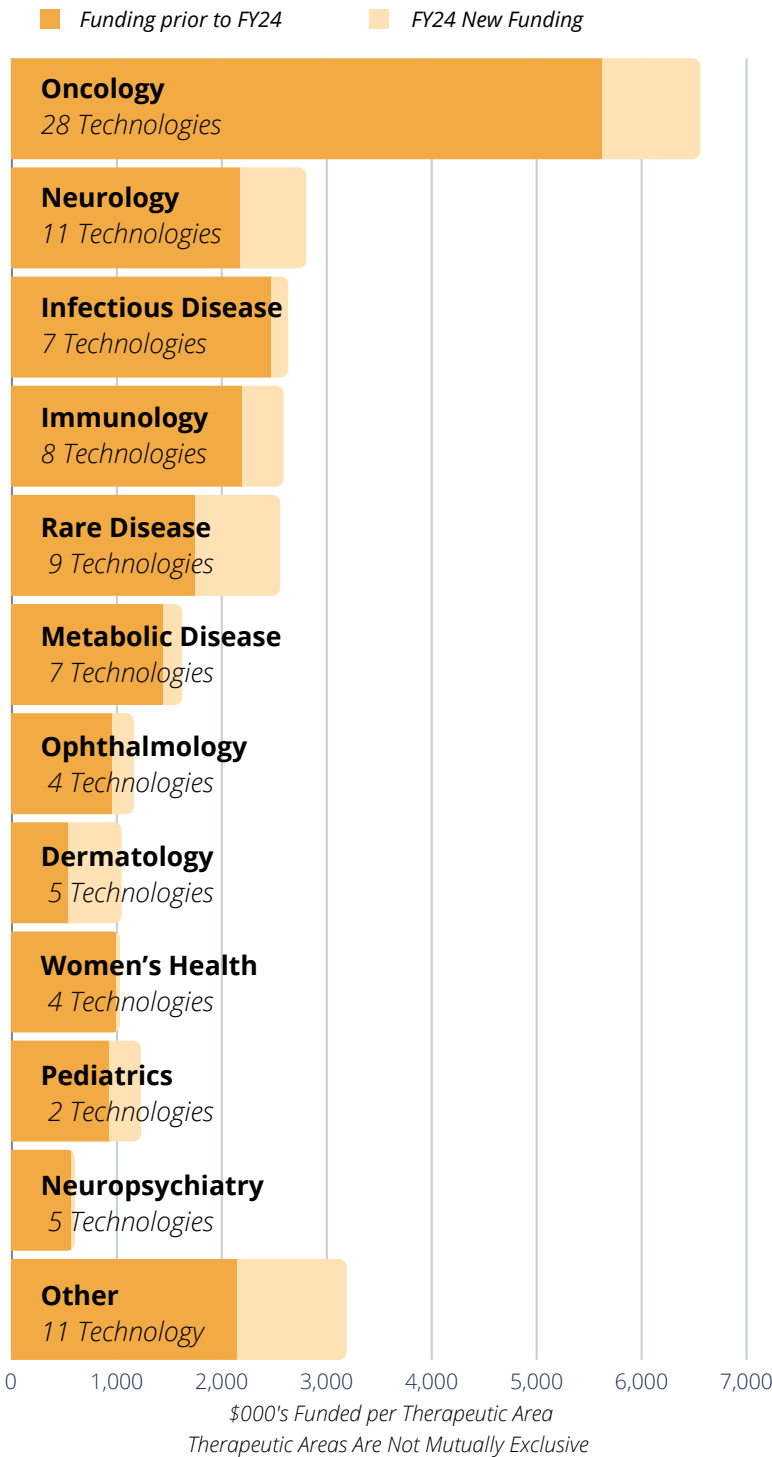
I am an early-stage life science entrepreneur with experience in building companies from scientific conception to growth-stage organizations. While an MD/PhD student, I co-founded Gennao Bio and served as a senior research advisor, where I conceived and developed the platform technology that underlies Gennao's innovation. During my fellowship, I contributed to several projects, including Faye Rogers' damage-inducing oligonucleotides, Jaime Grutzendler's axonal spheroid-targeted therapies, Thuy Tran's immuno-oncology bispecifics, and Yingqun Huang's small molecule for cachexia and cancer, now endometriosis. My role involved defining early therapeutic strategies, securing Blavatnik funding for these projects, and introducing them to VCs to initiate fundraising efforts. Through these pitching efforts, I secured a position as an associate at Northpond VC, where I now serve as a senior associate, contributing to diligence and venture creation of life science technologies.

**ELIAS
QUIJANO**Senior Associate,
Northpond Ventures

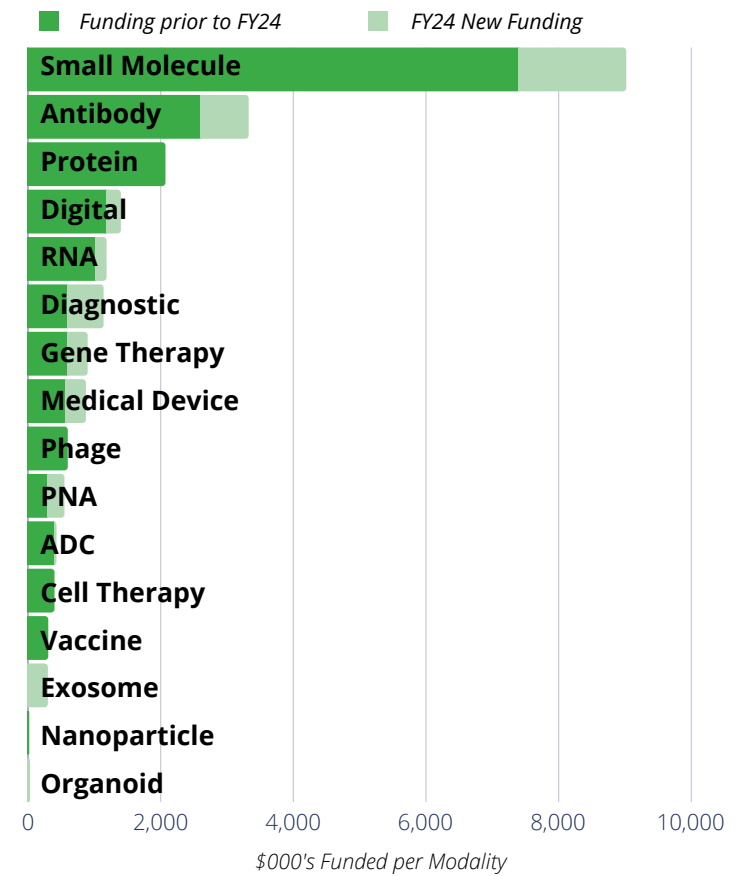
PORTFOLIO SNAPSHOT

DIVERSITY OF EARLY INNOVATION

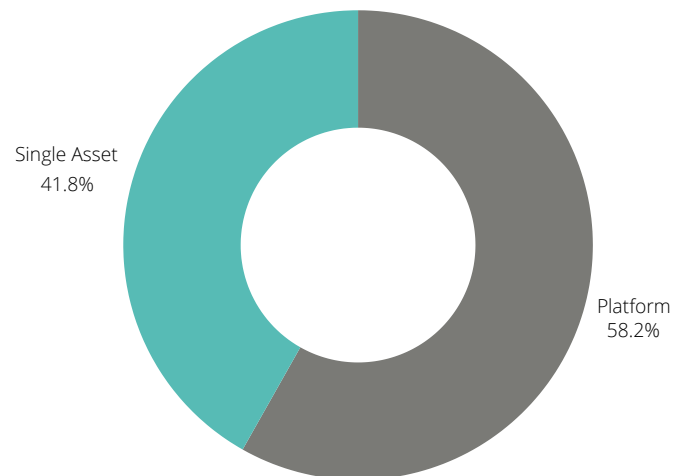
Therapeutic Areas Funded



Modalities Funded



Single Asset vs. Platform



97 AWARDS, 81 UNIQUE PROJECTS, \$20.6MM FUNDED

Blavatnik Startup FY24 Summary

As of the end of June 2024, the Blavatnik portfolio has **12 active startups**. All startups companies have a full license on the technology and have successfully raised a round of funding. Total fundraised amounts are reported in ranges.

Startup Name	Year Formed	Leadership	Founding PI	Current Raise	Amount Funded	Clinical Stage
Manifest Technologies	FY23	CEO - Alan Anticevic	Alan Anticevic	Not Actively Raising	\$1-5M	On Market
Simcha	FY19	CEO - Sanuj Ravindran	Aaron Ring	Not Actively Raising	\$25M+	Phase 2
C8 Sciences	FY17	CEO - Tim Kish	Bruce Wexler	Not Actively Raising	\$1-5M	QSub Complete
RIGImmune	FY23	CEO - Marty Driscoll	Anna Pyle Akiko Iwasaki	Raising Series A	\$6-25M	IND Enabling
Gennao	FY21	CEO - Chris Duke	Peter Glazer	Not Actively Raising	\$25M+	Advanced Preclinical
EvolveImmune	FY20	CEO - Stephen Bloch	Sidi Chen	Not Actively Raising	\$25M+	Advanced Preclinical
Alphina	FY22	CEO - Mark Cockett	Ranjit Bindra	Not Actively Raising	\$25M+	Advanced Preclinical
Cytosolix	FY23	CEO - Colin Foster	John Deacon	Not Actively Raising	\$6-25M	Advanced Preclinical
Stradefy & Nanosieve	FY19	CEO - Jeffrey Goldberg	Mark Saltzman Michael Girardi	Raising Series A	\$1-5M	Advanced Preclinical
Pangolin Therapeutics	FY23	Seeking CEO	Andrew Miranker	Raising Bridging Seed	\$1-5M	Preclinical
MagicTime Medicine	FY24	Seeking CEO	Sidi Chen	Raising Bridging Seed	\$1-5M	Preclinical
Pure Marrow	FY18	CEO - Paul Tessier	Elliott Brown	Not Actively Raising	\$1-5M	Preclinical

As of the end of June 2024, the Blavatnik portfolio has **9 emerging startups**. **All of these companies are seeking their first round of financing** and have either an option or a full license. In many cases these companies are also forming their initial leadership team.

Startup Name	Leadership	Founding PI	Clinical Stage
Playbl	CEO - Kirby Salerno	Lynn Fiellin	On Market
Sustained Drug Delivery	Seeking CEO	Vicente Diaz	PIND Complete
ENSIGHT-AI	Seeking CEO	Rohan Khera	QSub Complete
Entelion	CEO - Ellis Arjimand	Demetrios Braddock	Advanced Preclinical
Virtus	Seeking CEO	Choukri Ben-Mamoun	Preclinical
Curatix	Seeking CEO	Choukri Ben-Mamoun	Preclinical
IntronX	Seeking CEO	Anna Pyle	Preclinical
Target Site Therapeutics	CEO - Adi Gottumukkala	Jeff Bender	Preclinical
Numeric Glob	Seeking CEO	Sidi Chen	Preclinical

BLAVATNIK FUND TEAM

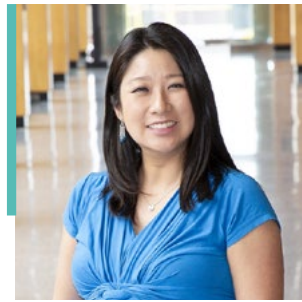
The Blavatnik Fund team drives The Fund's core operations, from identifying promising faculty, coaching, mentoring and guiding applicants through the process, to supporting awardees to achieve their translational milestones and ultimately securing external investment or partnership to commercialize their technology.

We benefit from the extended YV's team at all stages of the process for which we are extremely grateful.



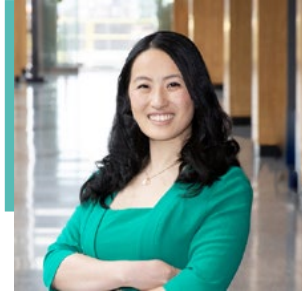
Morag Grassie, PhD
Director, Blavatnik Fund

Morag has over 30 years of experience in the pharma industry, entrepreneurship, and academic research. After graduating from Glasgow University with a BSc in molecular biology and PhD in virology, she held positions in academia, the pharmaceutical industry, and a Yale biotech startup before joining Yale in 2018.



Candy Hwang, PhD
Associate Director, Blavatnik Fund

Candy is trained as a medicinal chemist and former educator. She received her PhD from USC and was an NIH Postdoctoral Fellow working on pre-clinical vaccine development against drugs-of-abuse at Scripps Research. Prior to joining Yale, she was an Associate Professor of Chemistry at Southern Connecticut State University.



Jenn Beecham, M.S.Eng
Sr. Assc. Director, Blavatnik Fund

Jenn was previously the Brand Director for SKYCLARYS at Reata Pharmaceuticals (now Biogen). Prior to Yale, she held positions in cash equities, finance, market research, commercial operations, and marketing.



Jim Boyle, PhD
Executive Director, Faculty Innovation

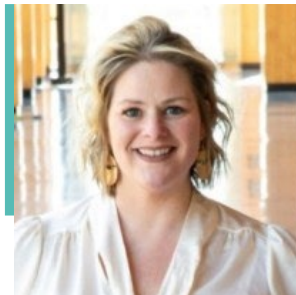
Jim Boyle, with over 30 years of experience in startups, currently leads Yale's efforts to identify and support new ventures in therapeutics, medtech, digital healthcare, and high technology. He previously founded the Yale Entrepreneurial Institute, advancing student-founded ventures that have collectively raised nearly \$1 billion.



Tim Opstrup, MBA
Director, Finance & Administration, Yale Ventures



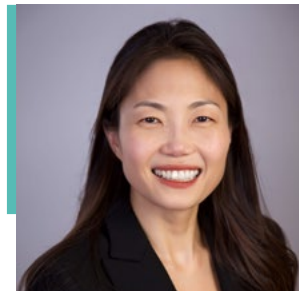
Lori Schragger
Senior Administrative Assistant, Blavatnik & Faculty Entrepreneurship Program



Michelle McQueen
Associate Director, Technology Marketing & Events



Susan Carr, MPH
Director, Faculty Engagement



Min Kim, MBA
Director, Venture Lab



Anida Kulla
Director, Investor Network

YALE VENTURES SUPPORT

The team is bolstered by the expanding Yale Ventures infrastructure, which provides support through faculty outreach, investor relations, and the expertise of our extensive network of Entrepreneurs-in-Residence (EIRs).

INVESTMENT ADVISORY BOARD

We are deeply grateful for the time and expertise that our advisory board share with us. Chaired by Tim Shannon, one of our founding Blavatnik Board members, the board is comprised of leaders in the biotech industry covering therapeutics and medtech, including digital health, devices, and diagnostics.



Tim Shannon, MD
General Partner, Canaan



Karthik Ardhanareeswaran
Principal, Google Ventures



Jennifer Carter, MD, MPH, MBA
Venture Partner, Sandbox Industries



Brenton Fagnoli, MD
General Partner, AlleyCorp



Jessica Federer
Board Member, Angelini Ventures



Sarah Milby
CEO, Valor Performance



Sara Nayeem, MD, MBA
Executive Vice President, Enavate Sciences



Kush Parmar, MD, PhD
Managing Partner, 5AM



Liam Ratcliffe, MD, PhD, MBA
Head of Biotechnology, Access Industries



Allyson Rinderle, MBA
Managing Director, Bain Capital



Stacey Seltzer, MBA
Managing Partner, Pontiva Healthcare Partners



David Singer, MBA
Managing Partner, Maverick Ventures

BOARD SPOTLIGHT

STACEY SELTZER



Since 2018, Stacey Seltzer has been an invaluable member of the Blavatnik Awards Board, where she has reviewed applications and prioritized awards for Yale's most innovative technologies. With her strong background in biotech, life sciences, and healthcare investments, she consistently provides deep industry insight. Stacey also mentors emerging innovators, helping them strengthen the value propositions of their technologies.

Stacey is currently Managing Partner and Founder of Pontiva Healthcare Partners, a venture firm that is focused on women's health. Previously, Stacey spent 16 years as a life sciences investor as a Partner at Aisling Capital and Gurnet Point Capital.

In addition to her role on the Board of the Yale Ventures Blavatnik Fund, Stacey continues to serve her alma mater as an advisory board member for the Yale School of Management. Her leadership and dedication greatly contribute to advancing Yale's mission in healthcare and business innovation. We are deeply grateful for her invaluable service and ongoing commitment to fostering the next generation of innovators and leaders.



YALE VENTURES

Helping Yale innovators impact the world's greatest challenges

YALE INNOVATION HAS THE POTENTIAL TO CHANGE THE WORLD.

Launched by Yale University in 2022, Yale Ventures seeks to foster and accelerate a vibrant entrepreneurship and innovation ecosystem that increases support, resources, and opportunities for Yale innovators as they translate their ideas and discoveries into new ventures that will positively impact the world's greatest challenges.

VENTURES.YALE.EDU

Innovation Training & Startups

Yale Ventures oversees a range of resources including accelerator funds, innovation centers, and industry mentorship to support faculty and students develop their ideas into new ventures.

IP & Licensing Services

Yale Ventures is responsible for Yale's technology transfer office, protecting and licensing the intellectual property developed at Yale, and helping to bring breakthroughs to market, with hands-on business development, intellectual property, and licensing services.

Corporate Strategy & Engagement

Yale Ventures leads the University's approach to corporate partnerships, working to develop private and industry sector connections and collaborations in support of Yale research and educational missions.

Innovation Community

As the home for Yale's innovation and entrepreneurship ecosystem, Yale Ventures takes the lead on connecting and promoting the people, spaces, and ideas that contribute to Yale's vibrant innovation and entrepreneurship community—at Yale, in New Haven, and beyond.



Annual Report

Read the Yale Ventures FY '24
Annual Report.

Yale

**YALE
VENTURES**