

A Glimpse Into the Mind of the Investor

Tips & Tricks to Raising Your Series A

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Global Solution to Support Innovation

Join The **JLABS** Movement

Apply today: jlabs.tv/apply



Company incubation

We understand the challenges of getting a life sciences company up and running, which is why Johnson & Johnson Innovation provides a number of company incubation options for our partners around the globe, through our JLABS and JPODS

- 13 sites across the globe
- 650+ companies, including current resident companies and alumni
- 156+ companies with at least 1 collaboration with Johnson & Johnson

Innovation acceleration

Johnson & Johnson Innovation Centers are focused on accessing innovation from all sources from inception to early stages of development

- 4 Innovation Centers on three Continents
- 500+ collaborations executed over the past seven years
- >\$1B deployed since 2013

Strategic Investing

Johnson & Johnson Innovation – JJDC (JJDC) is the strategic venture capital arm of Johnson & Johnson and a long-term investment partner to healthcare entrepreneurs

- 46+ years of strategic healthcare investing
- 40+ investments in 2019
- \$500M+ capital deployed in 2019

Business Development

Our goal is to form an active partnership where we can bring the full strength of Johnson & Johnson to bear to create a long and valuable relationship.

- 40+ years leading licensing and M&A deals driving R&D portfolio
- Licensing, M&A Expertise and Alliance Management

Silicon Valley Bank



**BEN
JOHNSON**
Head of Early Stage
Life Science
Silicon Valley Bank

Agenda

8:30 am – 8:45 am PT | Introductions

8:45 am – 9:45 am PT | SVB Pitch Challenge

- **Endogena Therapeutics**
- **Gabi Smartcare**
- **Origami Therapeutics**
- **Stream Biomedical**
- **SyntheX**
- **Vincere**

9:45 am – 10:15 am PT | Tips & Tricks to Raising Your Series A

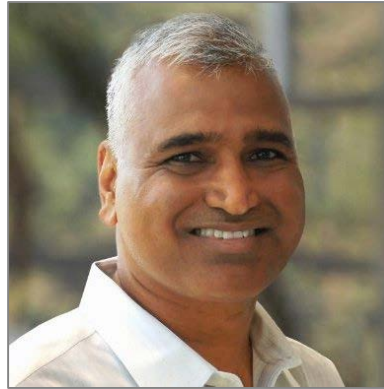
10:15 am – 10:45 am PT | Audience Q&A, Awardees Announced and Closing Remarks

Judges



**HEATHER
BEHANNA**

Principal
SR One, Ltd



**SHAILENDRA
MAHAJAN**

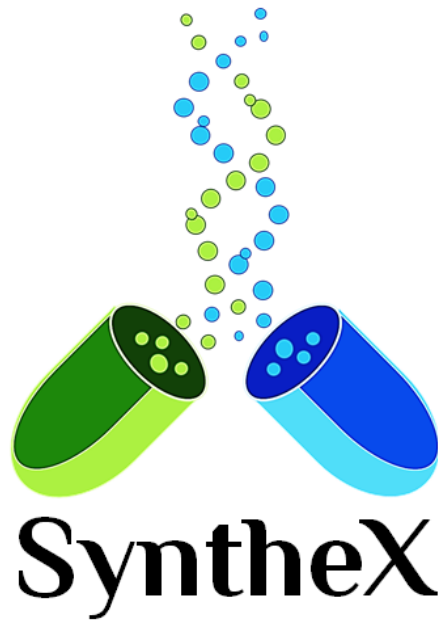
Co-Founder and
Managing Director
Maxim Ventures



**GAURAV
SATAM**

Department of
Business Development
Mayo Clinic Ventures

Company Pitches



Event Partner





e n d o g e n a



**MATTHIAS
STEGER, PhD MBA**
Co-founder & CEO
Endogena Therapeutics



e n d o g e n a

ENDOGENOUS REGENERATIVE MEDICINE
FOR OPHTHALMOLOGY AND BEYOND



ENDOGENA THERAPEUTICS

EXECUTIVE SUMMARY

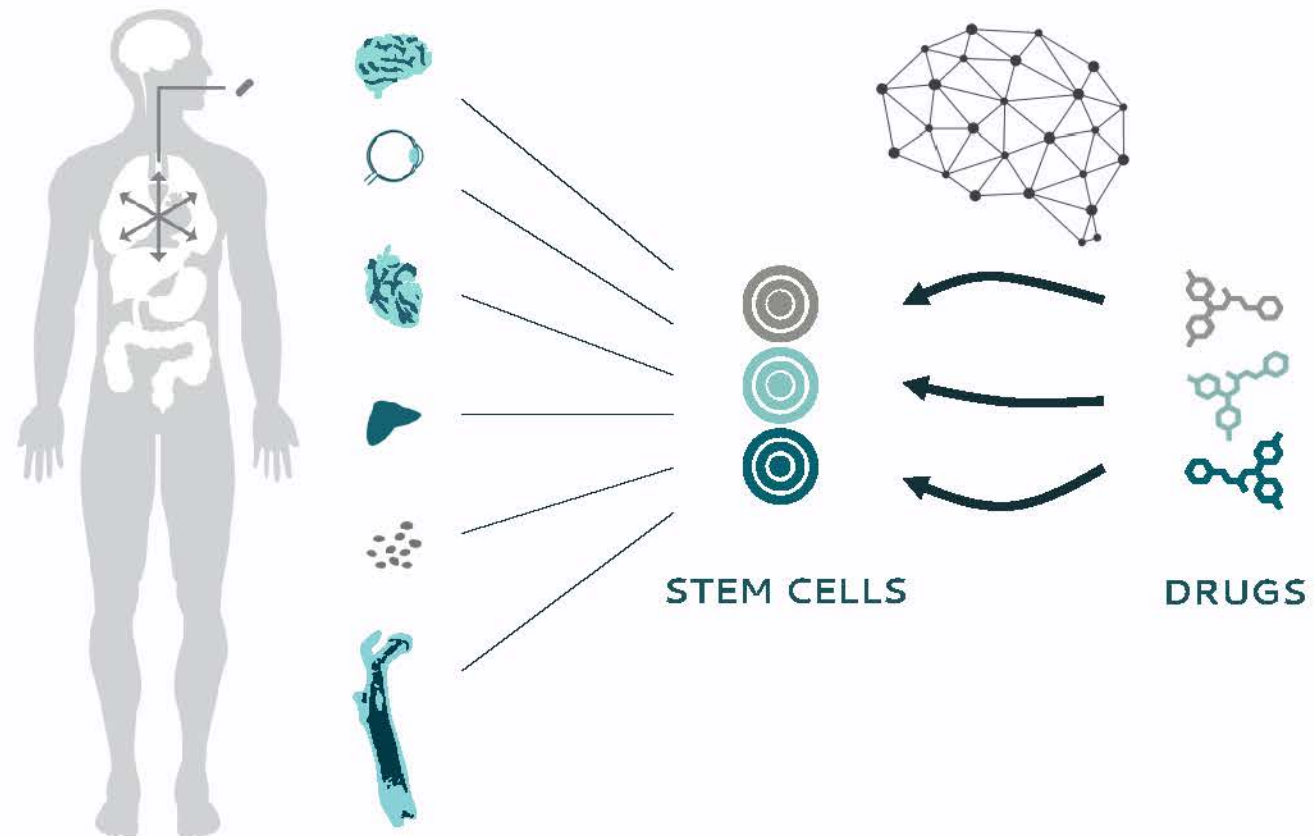
- Novel therapeutic paradigm - endogenous regenerative medicines
 - AI driven platform, tissue & organ specificity
- Two advanced projects in ophthalmology
 - Retinitis Pigmentosa (RP) – FDA pre-IND meeting scheduled
 - Dry AMD – Clinical candidate selection stage
- High-profile founders, drug discovery expert team and collaborations with world-leading academic labs
- US-incorporated August 2016 / funding raised >\$10mio
- Raising Series A of \$15mio
 - Clinical proof-of-concept for RP program by 2022
 - Pre-clinical development for dry AMD program





ENDOGENA'S DRUG DISCOVERY PARADIGM

ACTIVATING ENDOGENOUS STEM CELLS FOR REGENERATION



➤ Endogene discovers & develops drugs that regulate patients' endogenous stem cells to repair and regenerate organs and tissues.



ENDOGENA'S TEAM

LEADERSHIP TEAM



MATTHIAS STEGER
PhD MBA
CEO



- >20 years industry experience
- Entrepreneurial track record
- Former Roche Global Head Research & Technology Partn.
- Built & Lead Roche's Stem Cell Research



MORENO MENGHINI
MD – USZ
CMO



- Vitreoretinal Surgeon
- Nighstar Therapeutics / Biogen RP Trial Investigator
- Former Oxford University (Prof. R. MacLaren)



DAPHNA MOKADY
PhD
JLABS @ Toronto
Discovery Biology, Site Head TO

- 15 years of leading biomedical research projects
- Expert in Molecular and Cell Biology
- Former University Health Network, Toronto



MAURO MARIGO
PhD
Medicinal Chemistry



- 15 years experience in drug discovery
- Expert in Fragment- and Structure-Based Drug Discov.
- Former Lundbeck and Nuevolution



SUSANNE RAAB
PhD
In vivo Pharmacology



- Leading successful IND application
- 18 years of pharmaceutical industry experience
- Former Roche *in vivo* pharmacology leader ophthalmology and CVM



MANFRED SCHNEIDER
PhD DABT
ADME / PK, Toxicology



- Certified toxicologist and ADME/PK specialist
- 25 years pharmaceutical R&D experience
- Former Amgen, Merck Serono and Biotech

ADVISORS, ACADEMIC PARTNERS & BOARD DIRECTORS



MARK PENNESI
MD
Casey Eye Inst. Portland



- Lead investigator for Retinitis Pigmentosa program



GARY NOVACK
PhD
Regulatory



- Regulatory Expert in Ophthalmology, Clinical Professor Ophthalmology
- Conducted numerous successful IND applications
- Member and advisor of the foundation fighting blindness



DAN ZABROWSKI
PhD
Director of the Board



- > 20 years at Roche in executive positions
- Global Head of Regulatory Affairs; Development Operations; Pharma Partnering
- Board Member Chugai Pharmaceuticals



PETE COFFEY
Prof.
UCSB, UCL & Moorfield's



- AMD Program
- Retinal Pigment Epithelium regeneration



DEREK VAN DER KOOY
Prof.
University of Toronto



- Retinitis Pigmentosa Program
- Photoreceptor regeneration



ELONA BAUM
Attorney
Director of the Board

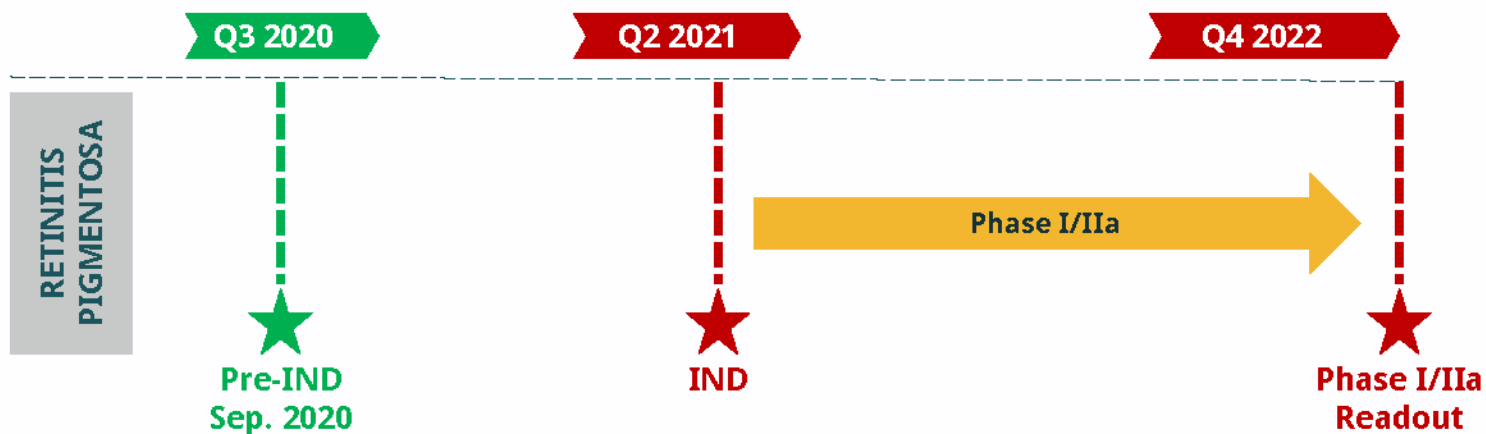


- Managing director at DEFTA Partners
- Former member of CIRM's executive team
- Former Associate General Counsel for legal matters at Genentech

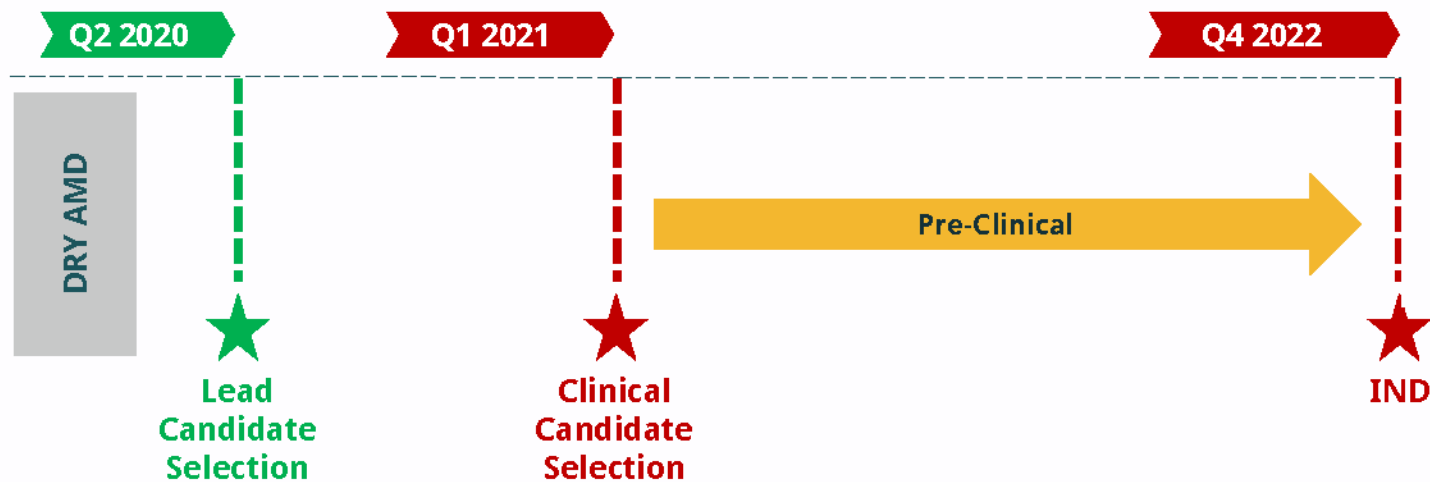


ENDOGENA'S PORTFOLIO

POTENTIAL FOR A MEDICAL TREATMENT PARADIGM CHANGE



RETINITIS PIGMENTOSA



AGE-RELATED MACULAR DEGENERATION

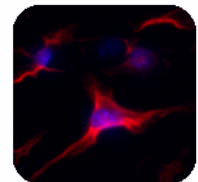
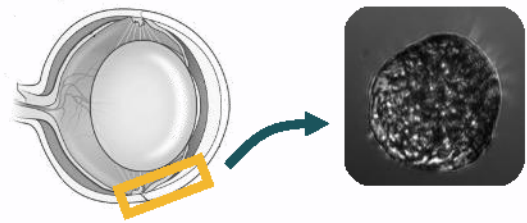




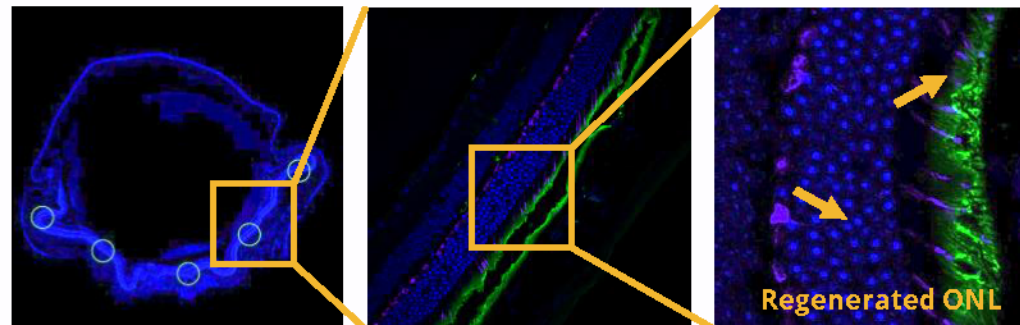
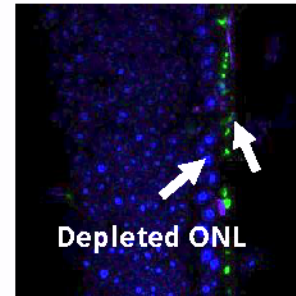
RETINITIS PIGMENTOSA

IND 2021

Human (and Mouse)
Retinal Stem Cells



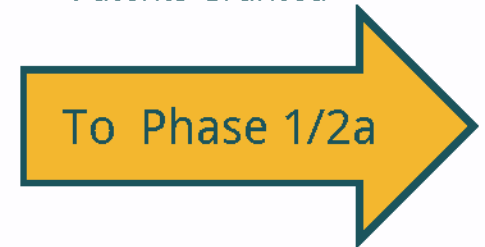
MNU-Induced Retinal Damage



Clinical Candidate



Patents Granted

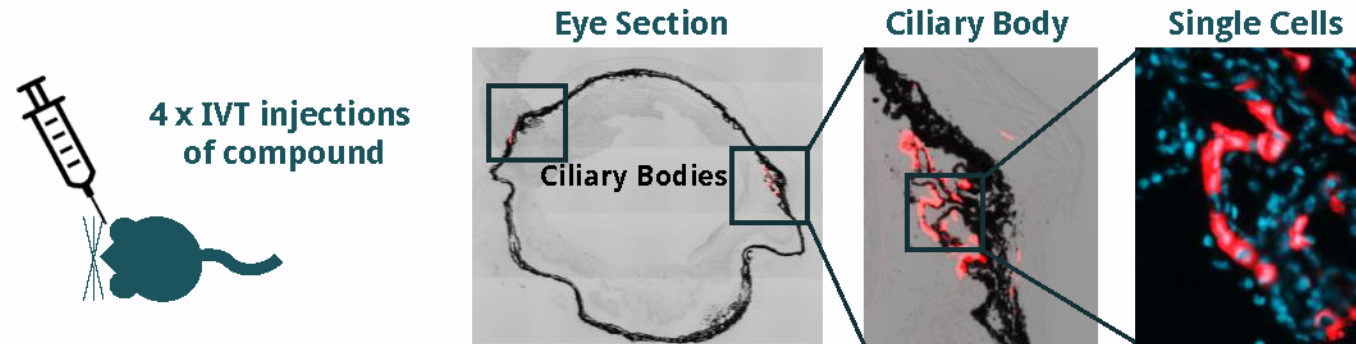


IND-Enabling
Studies
Ongoing

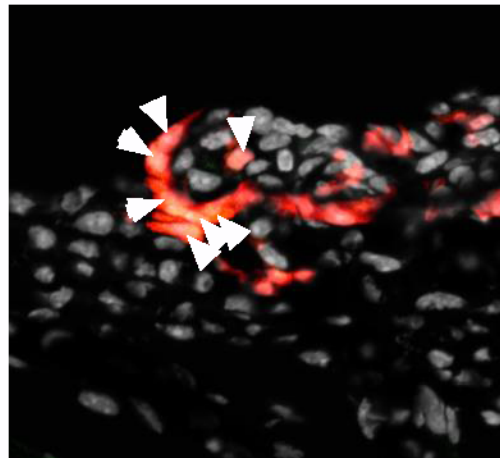


IN VIVO PROOF-OF-CONCEPT

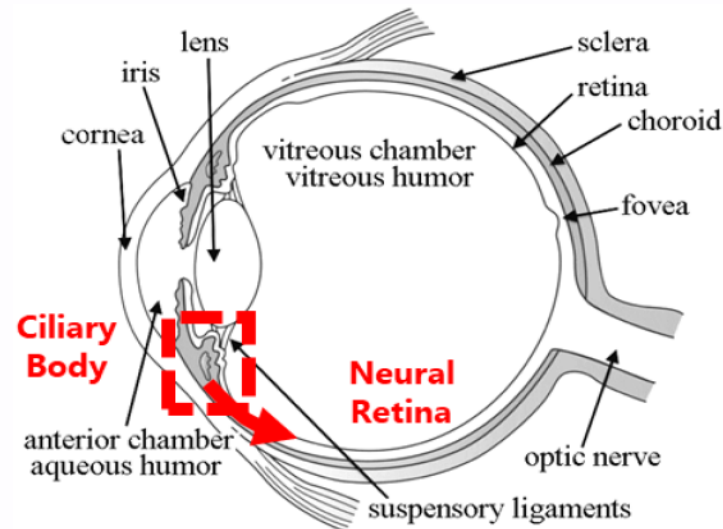
ACTIVATING QUIESCENT RETINAL STEM CELLS IN MICE



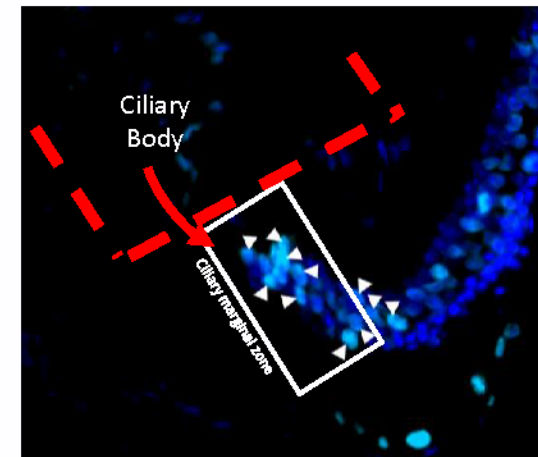
ACTIVATION OF RETINAL STEM CELLS



Stem cells | Proliferation | Nuclei



MIGRATION AND DIFFERENTIATION



Early differentiation marker



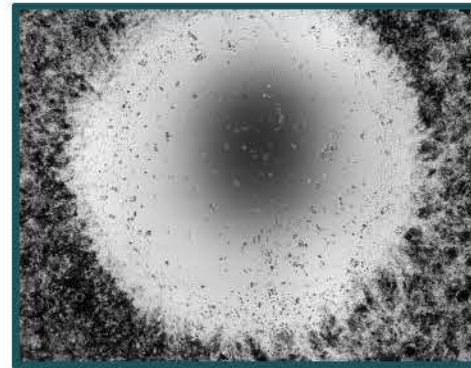
DRY AGE RELATED MACULAR DEGENERATION

IND2022

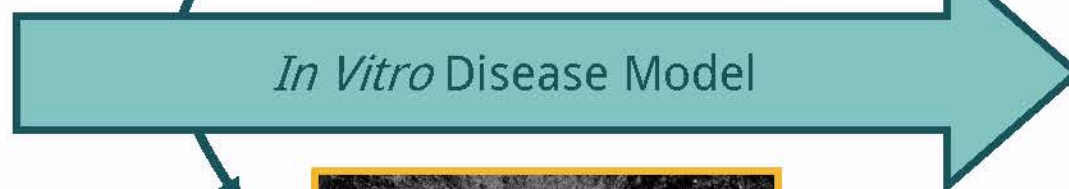
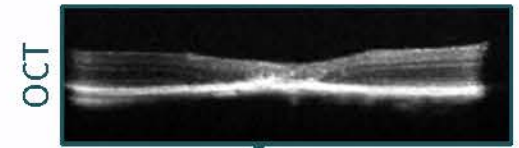
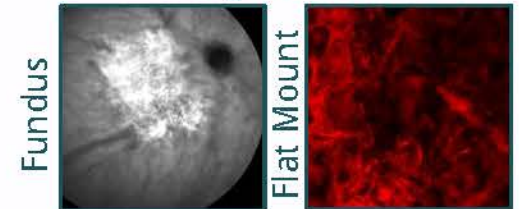
iPS Retinal Pigment
Epithelial Cells
(and from **Human donor**)



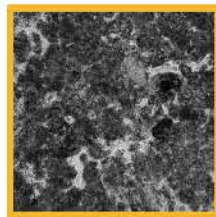
In vitro model of GA
Apoptosis cell death



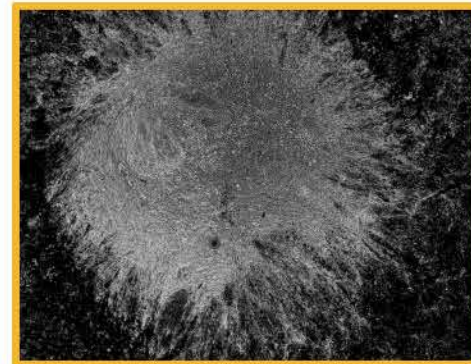
Laser induced
degradation



1. Proliferation
2. Pigmentation



MED < 10nM



In vitro POC



POC
Enabling studies
Ongoing



SUMMARY

A NOVEL THERAPEUTIC PARADIGM FOR TREATING RETINITIS PIGMENTOSA

- Endogene has successfully discovered a small molecule that activates endogenous retinal stem cells and differentiates them into photoreceptors both *in vitro* and *in vivo*
- Initial hit compounds were further developed into a clinical candidate with desired properties
- Two patents filed protecting two chemical series and their use in treating IRDs
- Preclinical development ongoing, IND planned in Q2-2021
- \$15mio required for a phase I/IIa clinical trial to achieve clinical PoC in RP and for preclinical development for AMD



**JONATHAN
BAUT**
Co-founder & CEO
Gabi SmartCare



Save children's lives

Prevent, Diagnose, Surveil



A resident company of Johnson & Johnson Innovation - JLABS, a premier life science incubator program







56% & 32%

ER visits & Hospital admissions
are avoidable*

*Consumer Informatics and Digital Health: Solutions for Health and Health Care (Margo Edmunds, Christopher Hass, Erin Holve); Weinick, Billings, & Thorpes, 2003; University of Rochester News, 2008) - *Keeping children out of hospitals: parents' and physicians' perspectives on how pediatric hospitalizations for ambulatory care-sensitive conditions can be avoided - <https://www.ncbi.nlm.nih.gov/pubmed/145950> - 2003 - * Potentially Preventable 30-Day Hospital Readmissions at a Children's Hospital - doi: 10.1542/peds.2015-4182



Respiratory *

1st cause of hospitalization & ER visit

270m children < 5 – **\$120bn** cost – **6%** increase

*Pediatrics. 2003 Nov;112(5):1021-30. Flores G , Abreu M, Chaisson CE, Sun D. Overview of Pediatric Emergency Department Visits, 2015 Kimberly W. McDermott, Ph.D., Carol Stocks, Ph.D., R.N., and William J. Freeman, M.P.H. - Asthma costs and social impact, doi: 10.1186/s4073301600293 - The Global Burden of Respiratory Disease, DOI: 10.1513/AnnalsATS.201311-405PS - Respiratory diseases in the world, Realities of Today – Opportunities for Tomorrow, Print ISBN: 978-1-84984-056-9; e-ISBN: 978-1-84984 057-6



Market size

ER visits

30 million pediatric ER visits / year in the US¹

56% ER visits avoidable

\$1500 average cost / admission²

\$25.2bn

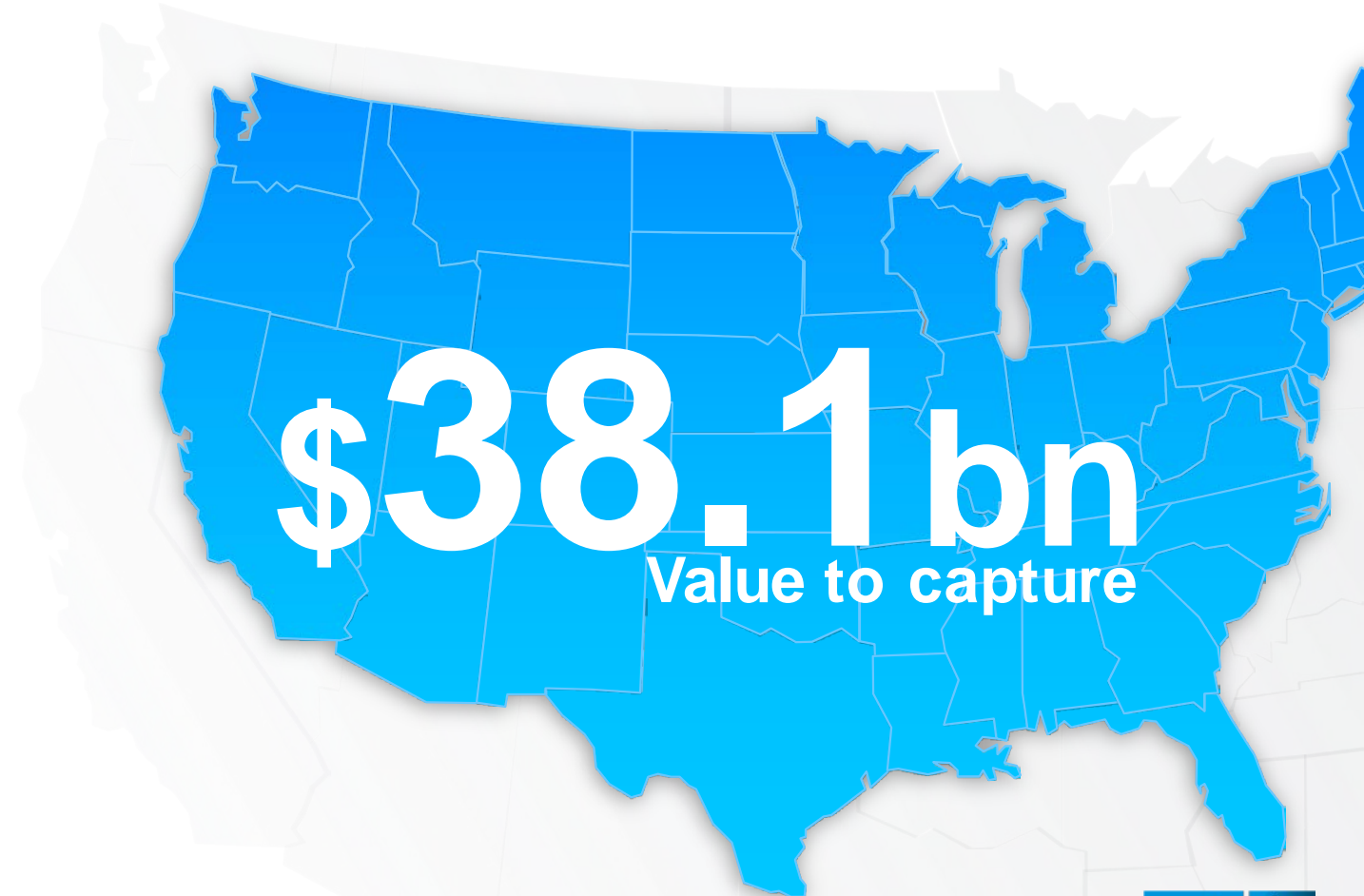
Hospital admissions

3 million pediatric hospital admissions / year in the US³

32% hospital admission avoidable

\$13,400 average cost / stay⁴

\$12.9bn



¹ <https://www.hcup-us.ahrq.gov/reports/statbriefs/sb242-Pediatric-ED-Visits-2015.pdf> ² https://consumerhealthratings.com/healthcare_category/emergency-room-typical-average-cost-of-hospital-ed-visit/#:-:text=Summary%20report%20shows%20average%20cost,pediatric%20ER%20visit%20was%20%243%2C420.-3 ³ <https://cthosp.org/advocacy/quality-and-patient-safety/patients-guide-to-quality-hospital-care/pediatric-hospitalization/#:-:text=Each%20year%20more%20than%203,treatment%20for%20a%20chronic%20illness.;> ⁴ HCUP – UC; Cost of pediatric hospital stay, 2016;



Why?

- 80% Parents struggling to assess their child's condition correctly¹
- Common tests are not applicable on young children
- Up to 40% of assessment errors² and up to 3 years of diagnosis period³

Lack of actionable data!

¹ 250 parents Gabi SmartCare survey; ² A survey from Boulay & Boulet; ³ Asthma.uk

Gabi SmartCare

empowers physicians & parents

thanks to **data driven technologies**

to **disrupt** pediatric healthcare

& **improve children's lives**

How?

By developing
Smart digital platform enabled by hardware
providing unique actionable data to physicians to better



Prevent



Diagnose



Surveil



1st Pediatric fully integrated solution

With a first focus on respiratory

Web Analytics

Interface for Doctors



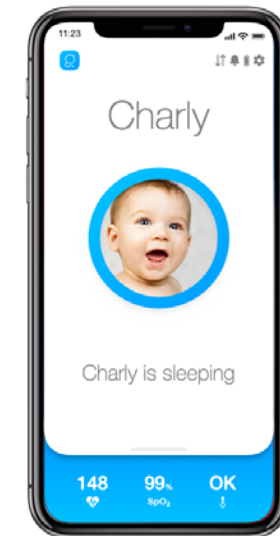
Band

Monitors patient vitals
(SpO2, HR, HRV, RR, Temp.)



Mobile App

Interface for Users





✓ 2nd product version

(preclinically validated, 75 patients)

✓ ISO13485

✓ 1 international Patent Pending

✓ Proven traction

(7 hospitals, 50 doctors, 1000 users, 400 pre-orders)

✓ Awarded



What's unique?

Gabi SmartCare combines the most advanced technologies and tailors them to pediatrics



Full set of vitals



Suitable from premature babies



Non-invasive & connected



Hazardous event detection













Life-threatening event prediction









Health assessment report



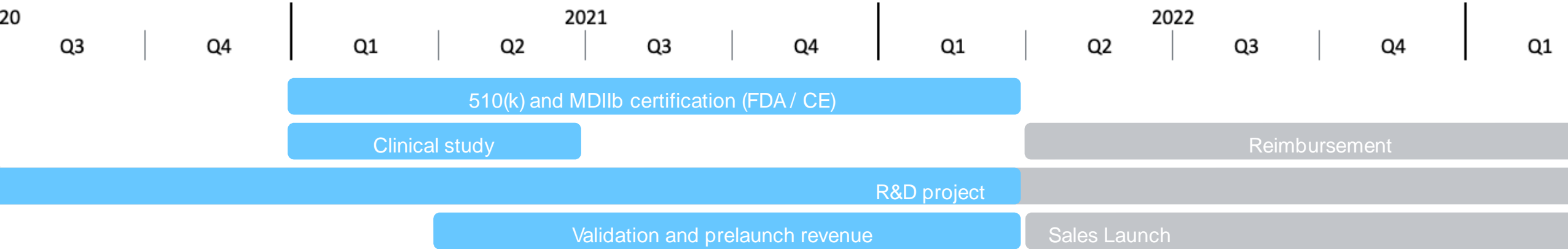
Core Team

<p>Jonathan Baut Co-founder / CEO</p>		<p>Edouard Carton Co-founder / COO</p>	
	<p>Olivier Staquet CTO</p>		<p>Dr. Nicolas Delvaux Pediatrician and lung specialist</p>
<p>Engineers Patrick Celka Sebastian Jacota Olivier Bourdoux Thomas Hayen Minh Huy Huyn</p>			
			<p>Quality Manager Giuseppe Ionta</p>

Medical Advisory

	<p>Dr. L. Hanssen Head of pulmonology</p>	
<p>Dr. F. Dockx Allergist</p>		<p>Dr. J. Van Gaver Pneumologist</p>
<p>John Verrant Senior Scientist</p>		<p>Pamela Spinkins Sr. Director</p>
	<p>Katherine Cheng Sr. Director</p>	

Johnson & Johnson's JPALS



18 months - 510(k)

\$2.000.000 Needs

- ✓ \$900.000 Grant committed
- ✓ \$300.000 Invested already

\$800.000

Investment Opportunity

Key Milestones

- R&D
- Clinical study
- 510(k)

Hires

- 4 software profiles (Ops, Signal, Firmware)
- 2 Data scientists
- 1 Marketeer

Funding Allocation

- R&D: 50%
- Employees: 45%
- OPEX: 5%



Improving children's lives

Prevent, Diagnose, Surveil



jonathan.baut@gabismartcare.com

- ✓ Disrupt pediatric healthcare
- ✓ Preclinical Research-Prototype
- ✓ Fully integrated solution
- ✓ Proven stakeholders' adoption
- ✓ Strong advisory
- ✓ Supported by KOL & industry leaders



A resident company of Johnson & Johnson Innovation - JLABS,
a premier life science incubator program





Reshaping ♦ Restoring ♦ Renewing

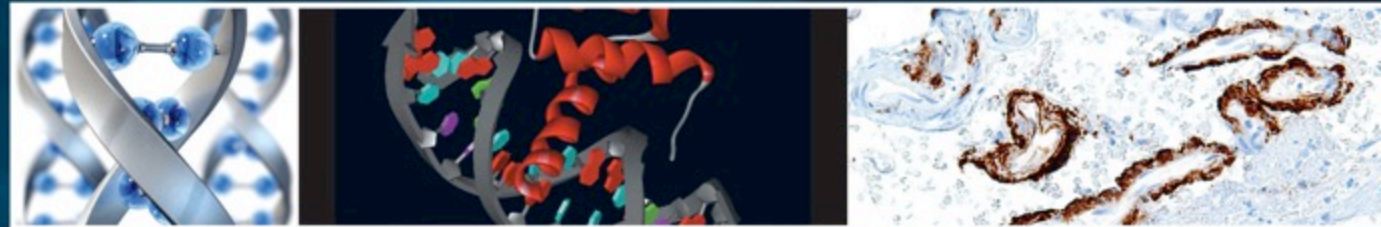


BETH
HOFFMAN, PhD
Founder, President & CEO
Origami Therapeutics

Origami Therapeutics, Inc.

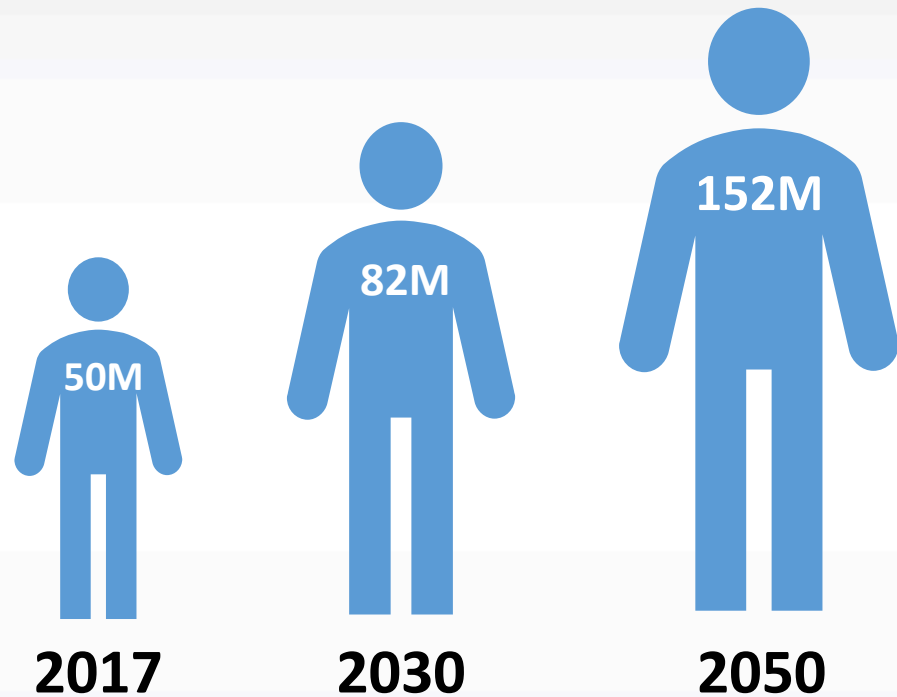


JLABS SVB Pitch Competition
September 10, 2020 | San Diego



The Threat:

Increasing Burden of Chronic Neurological Patients Worldwide



Devastating Consequences

Economic

Societal

Cultural

WHO fact sheet 2017

The Problem:

No Drugs Alter Progression of Neurodegenerative Diseases

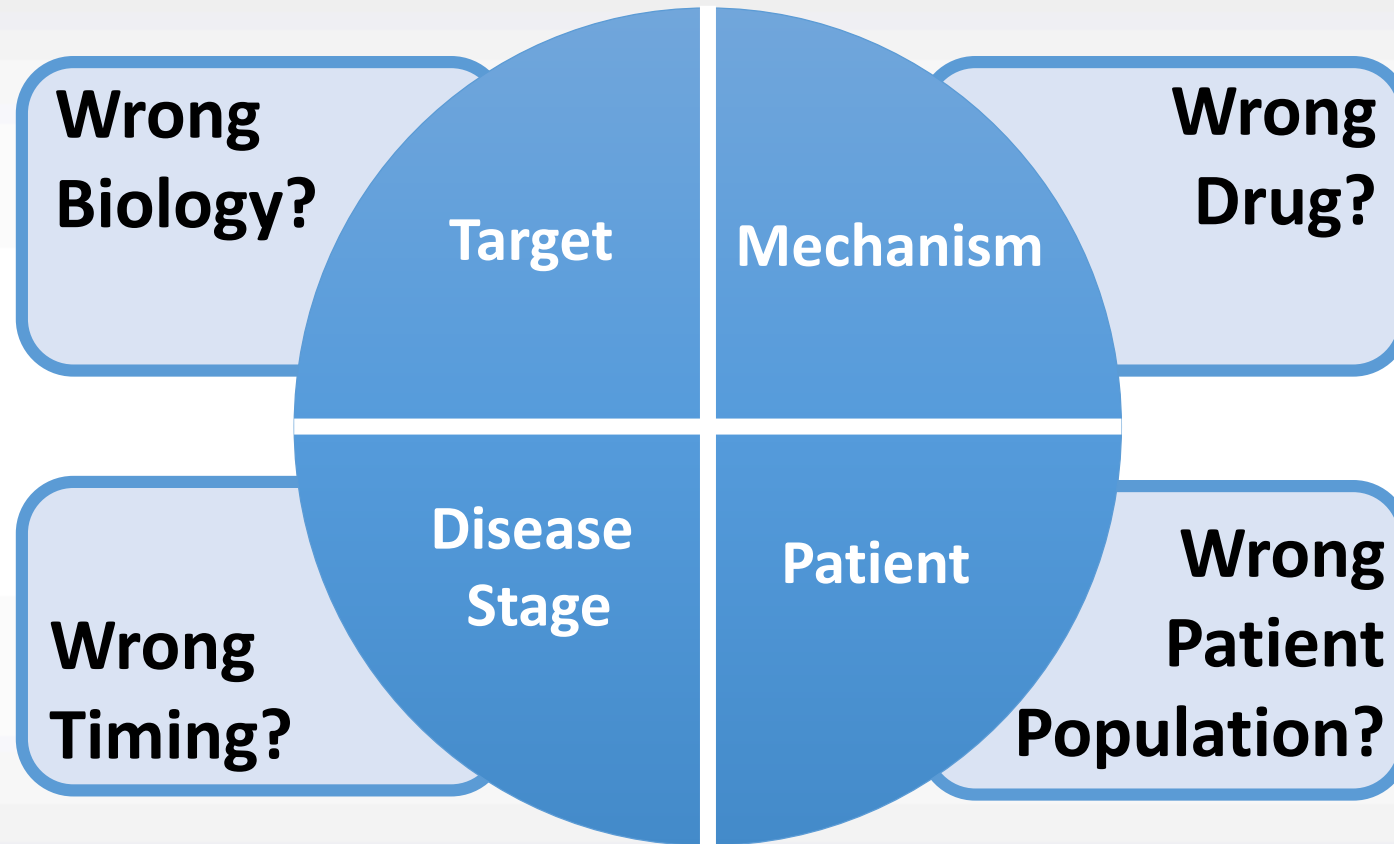


20 years

100's clinical trials

0 drugs

Why Have Neurodegenerative Disease Trials Failed?

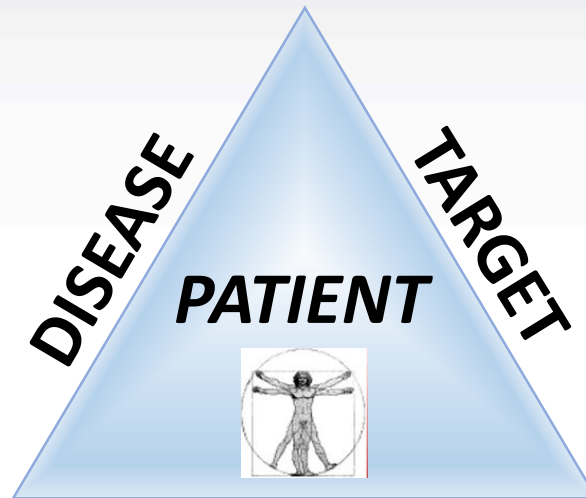


Adapted from S.M. Paul

The Solution: Origami's Precision Medicine Approach

Patient-centric

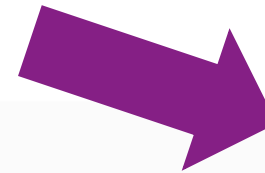
Disease Selection
Natural History
Who to Treat
When to Intervene
Which Outcome Measures



Target Selection
Underlying Cause of Disease/ Genetics
Mechanism/ Activity

DRUG

Drug
Modality
Accessibility
Confirm Mechanism/Activity in Clinic



Disease-Modifying Treatment

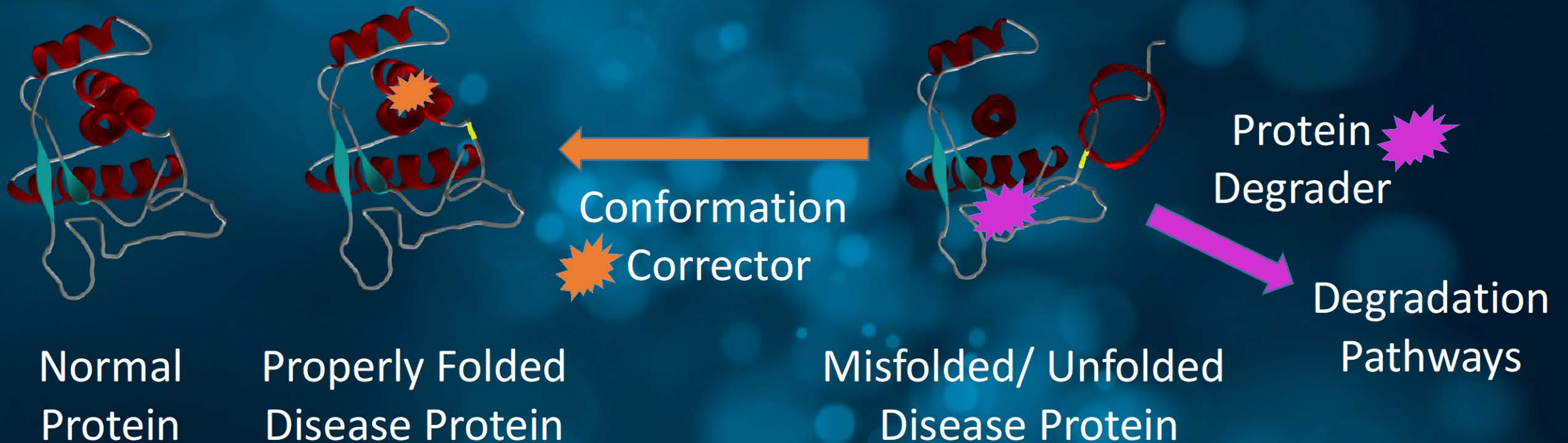
Right drug
Right patients
Right time
Right measures

Discovering Drugs That Reshape Proteins To Restore Health

- Vision: Intervene in disease progression to maintain normal productivity & quality of life
- Precision medicine approach to treating neurodegeneration by targeting the underlying genetic cause of disease
 - ❖ Efficacy
 - ❖ Safety
- Focus: Directly modulating pathogenic proteins with small molecules
- Discovery platform:
 - ❖ Enables the discovery of both protein degraders and conformation correctors
 - ❖ Allows us to match the best mechanism to treat each disease
 - ❖ Uses patient-derived disease models to ensure translation to the clinic
- Current status: Selecting the optimal protein degrader (lead asset) to advance into pre-clinical studies for Huntington's disease (HD) and initiating programs for additional indications.
- Seeking Seed Funding: To advance HD protein degrader to clinical trial

Origami's Technology: Protein Conformation Modulators

Two Different Approaches to Protein Misfolding



N.B. This is a single snap shot of a dynamic kinetic process

— = Mutation * = Origami Drugs

Unmet Medical Need In Huntington's Disease (HD)

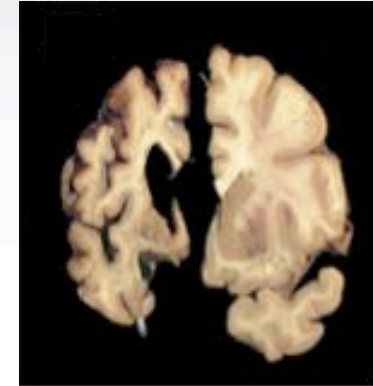
No drugs effectively treat symptoms or modify disease progression

Monogenic disease: Huntingtin (*HTT*) gene
Autosomal Dominant: 50% progeny affected
Average age of onset: 35 yrs (range: 30-50 yrs)
Duration: 10 - 25 yrs
Affected: 185,000 WW (*Orphan Status*)

Standard of care: Supportive care
Drugs partially treat motor symptoms with significant side effects

Unmet need: Cognitive deficits / dementia
Behavioral / psychological symptoms
Motor / physical symptoms
Disease progression

HD
Brain



Normal
Brain

<u>Current Market- Symptomatic</u>	
2020	\$1.3B
	Austedo
	Xenazine
	Tetrabenazine

Huntingtin-Lowering Is A Proven Target

Decrease in pathogenic protein by multiple modalities leads to reversal of disease in multiple models of HD

Cell, Vol. 101, 57–66, March 31, 2000, Copyright ©2000 by Cell Press

Reversal of Neuropathology and Motor Dysfunction in a Conditional Model of Huntington's Disease

Ai Yamamoto,[†] José J. Lucas,^{†‡} and René Hen^{*}

Sustained Therapeutic Reversal of Huntington's Disease by Transient Repression of Huntingtin Synthesis

Holly B. Kordasiewicz,¹ Lisa M. Stanek,² Edward V. Wancewicz,³ Curt Mazur,³ Melissa M. McAlonis,¹ Kimberly A. Pytel,¹ Jonathan W. Artates,¹ Andreas Weiss,⁴ Seng H. Cheng,² Lamy S. Shihabuddin,² Gene Hung,³ C. Frank Bennett,³ and Don W. Cleveland^{1,*}

Neuron 2012

An Intrabody Drug (rAAV6-INT41) Reduces the Binding of N-Terminal Huntingtin Fragment(s) to DNA to Basal Levels in PC12 Cells and Delays Cognitive Loss in the R6/2 Animal Model

Amaro & Henderson 2016

2019

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Targeting Huntingtin Expression in Patients with Huntington's Disease

Sarah J. Tabrizi, M.B., Ch.B., Ph.D., Blair R. Leavitt, M.D., C.M., G. Bernhard Landwehrmeyer, M.D., Edward J. Wild, M.B., B.Chir., Ph.D., Carsten Saft, M.D., Roger A. Barker, M.R.C.P., Ph.D., Nick F. Blair, M.B., B.S.,* David Craufurd, M.B., B.S., Josef Priller, M.D., Hugh Rickards, M.D., Anne Rosser, M.B., B.Chir., Ph.D., Holly B. Kordasiewicz, Ph.D., Christian Czech, Ph.D., Eric E. Swayze, Ph.D., Daniel A. Norris, Ph.D., Tiffany Baumann, B.S., Irene Gerlach, Ph.D., Scott A. Schobel, M.D., Erika Paz, B.S., Anne V. Smith, Ph.D., C. Frank Bennett, Ph.D., and Roger M. Lane, M.D.

- ✓ Disease – Who, When, What to Measure
- ✓ Target – Genetics, Mechanism, Activity
- ✓ Drug – Modality, Accessibility, Confirm Mechanism/Activity in the Clinic

Comparison of HTT-Lowering Approaches






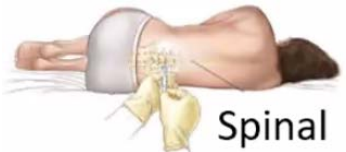



Delivery

Approach

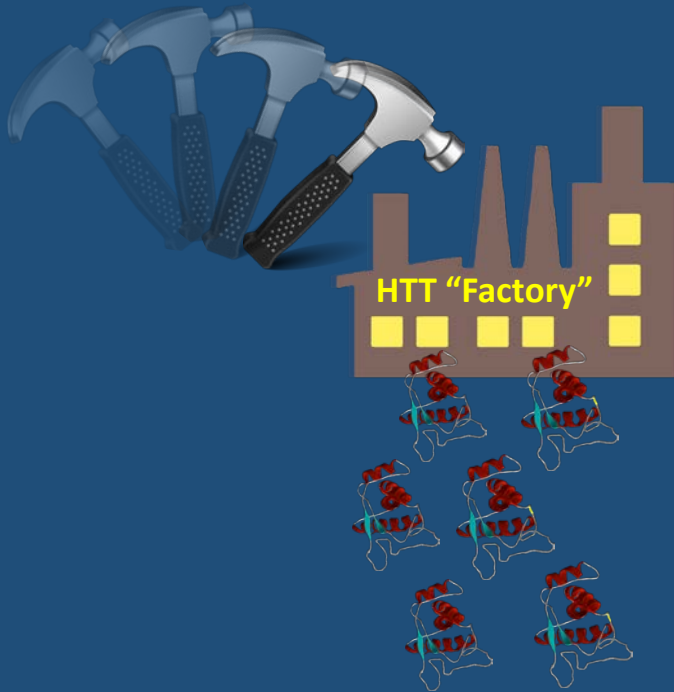
Target

Target Organ(s)

Phase


				
 <p>Spinal</p>	 <p>Brain surgery</p>			
ASO Total HTT	ASO Mutant HTT	AAV Virus Total HTT	Small molecule ? Total HTT	Small molecule Mutant HTT
mRNA	mRNA	mRNA	mRNA	Protein
Brain	Brain	Brain	Brain + Body	Brain + Body
Phase III	Phase I/II	Phase I/II	Preclinical	Discovery

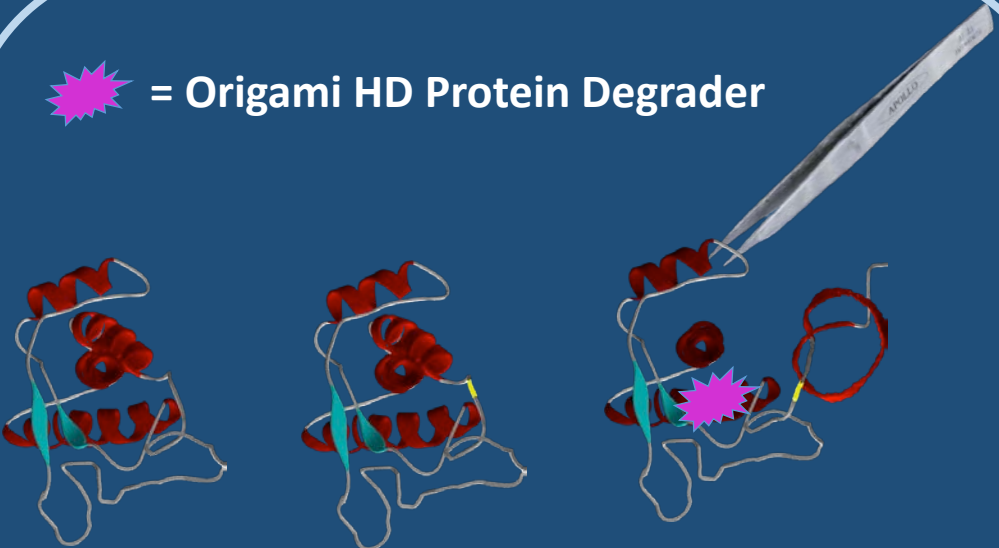
Origami's Technology: Not All "Knock-downs" Are The Same



Suppress production of all HTT or mHTT selectively

Minimizes toxic protein
Reduces functional protein

 = Origami HD Protein Degradator



Normal protein Properly folded Disease protein Misfolded/ Unfolded Disease protein

Origami's Approach: Protein Degradators
Selectively binds misfolded mHTT for degradation

Minimizes toxic protein
Maximizes functional protein
Maintains normal physiology

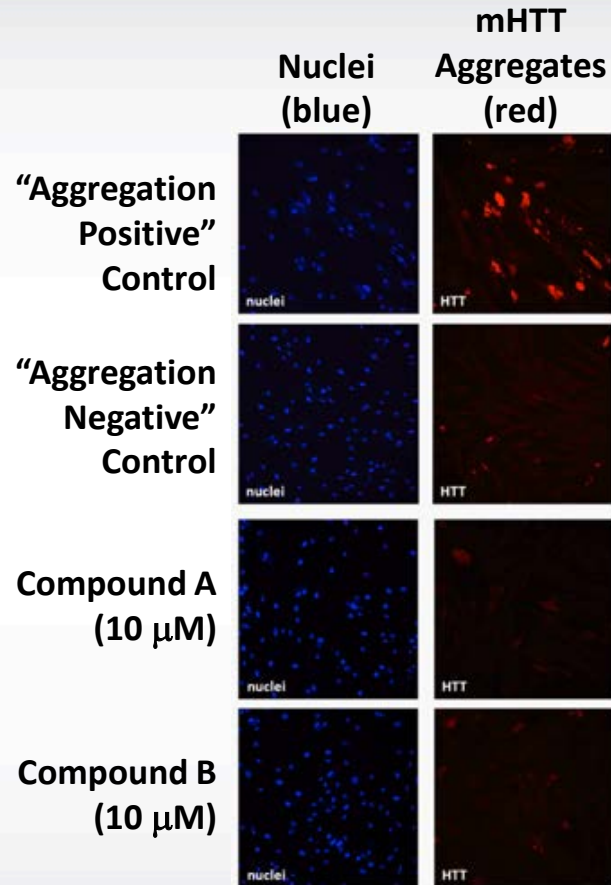


Activate degradation pathways removing all HTT forms

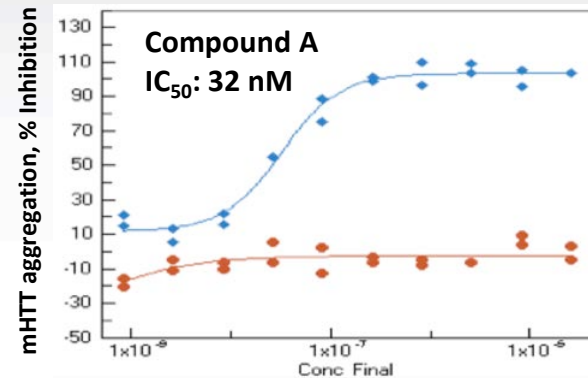
Minimizes toxic protein
Reduces functional protein

Lead Molecules Prevent HD Pathology Via Protein Degradation

Proprietary Cell-based High Content Assay



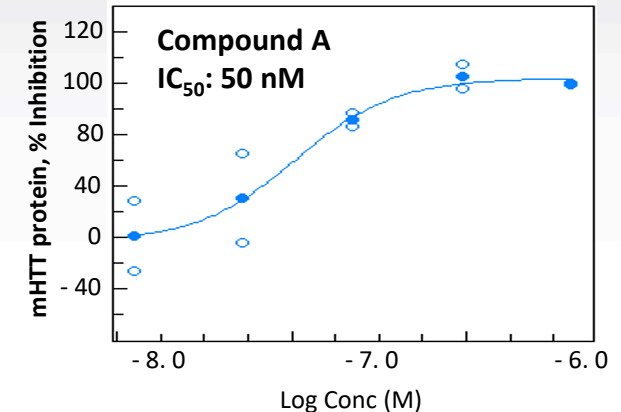
Images from high throughput (HTS) screen



X-axis: compound concentration
Y-axis: % prevention of aggregates (blue)
& % cell toxicity (orange)

Compounds prevent mHTT aggregation (HD Pathology)

mHTT Protein Assay



Compounds reduce mHTT protein levels (Protein degraders)

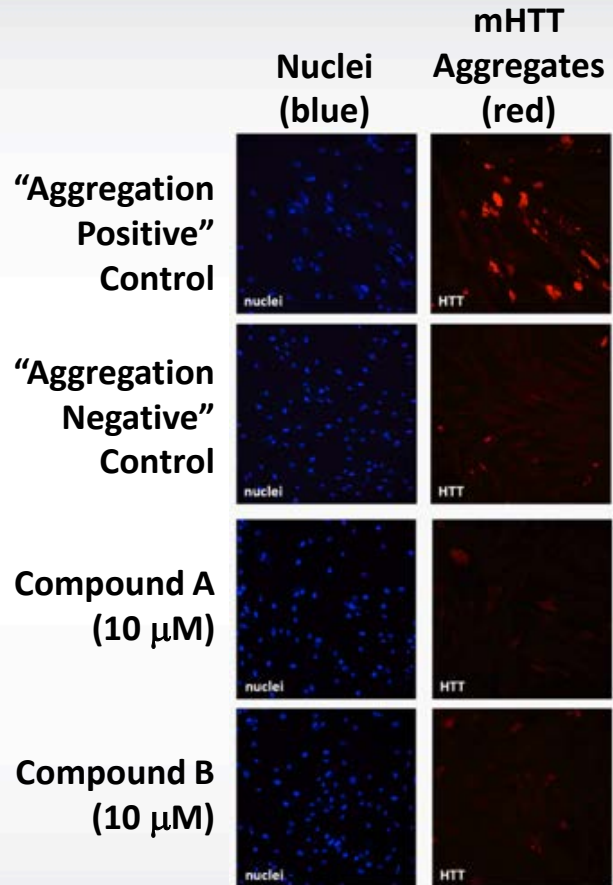
HD: Huntington's disease

HTT: huntingtin protein

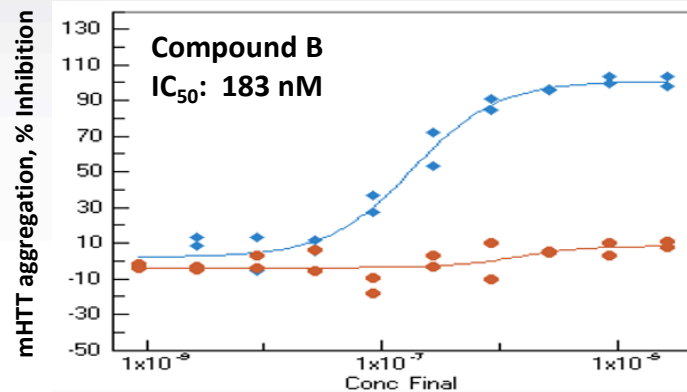
mHTT: mutant huntingtin protein (pathogenic)

Conformation Corrector Prevents Aggregates, No Change In mHTT Levels

Proprietary Cell-based High Content Assay



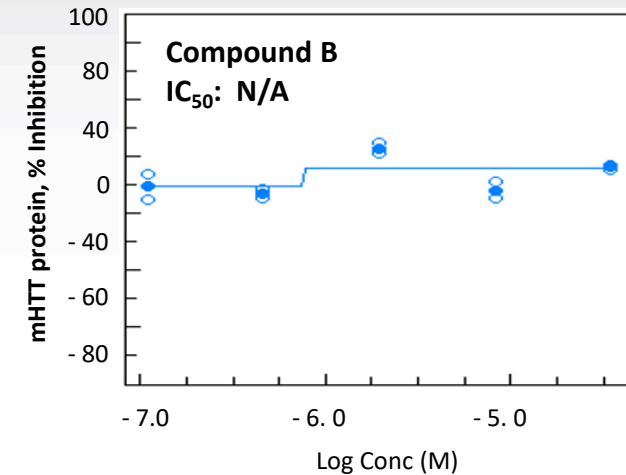
Images from high throughput (HTS) screen



X-axis: compound concentration
Y-axis: % prevention of aggregates (blue)
& % cell toxicity (orange)

**Compound B prevents
mHTT aggregation
with no cell toxicity
(HD Pathology)**

mHTT Protein Assay



**Compound B does not alter
mHTT protein levels
(Potential conformation corrector)**

HD: Huntington's disease
HTT: huntingtin protein
mHTT: mutant huntingtin protein (pathogenic)

Comparison Of Top Five Chemical Scaffolds: Emerging SAR

Scaffold	IC50 (nM)	LE	CNS MPO
A	32	0.43	4.98
B	28	0.46	4.26
C	305	0.41	5.42
D	211	0.40	4.65
E	461	0.39	4.7

- Green: Excellent
- Shaded green: Good
- Orange: Acceptable

- Preliminary Freedom to Operate (FTO)
- Most potent compound shown for each scaffold
- IC50: Prevention of aggregates in HTS cell assay
- LE: Ligand Efficiency, indicates the strength of compound binding, >0.4 desirable
- CNS MPO: > 4.5 suggests CNS permeability

Intellectual Property (IP):

Patent filings include composition of matter (5 scaffolds), method of use and methods for identification (2040 expiry)

Origami's Accomplishments Through Mid-2020

Science

- ✓ Proprietary high throughput screen (HTS)
- ✓ Hit expansion/ mechanism of action (MoA)
- ✓ Molecules with therapeutic potential
- ✓ Pipeline - multiple assets
- ✓ Collaborators
- ✓ IP: Provisional patent applications



Selected as CONNECT w/
SDVG Cool Company 2020



Operations

- ✓ Accepted into incubator: JLABS San Diego
- ✓ Wet bench laboratory operational
- ✓ 2 Bench Scientists

Team

- ✓ Team (6)
- ✓ Advisory Board (4)
- ✓ Consultants (3)

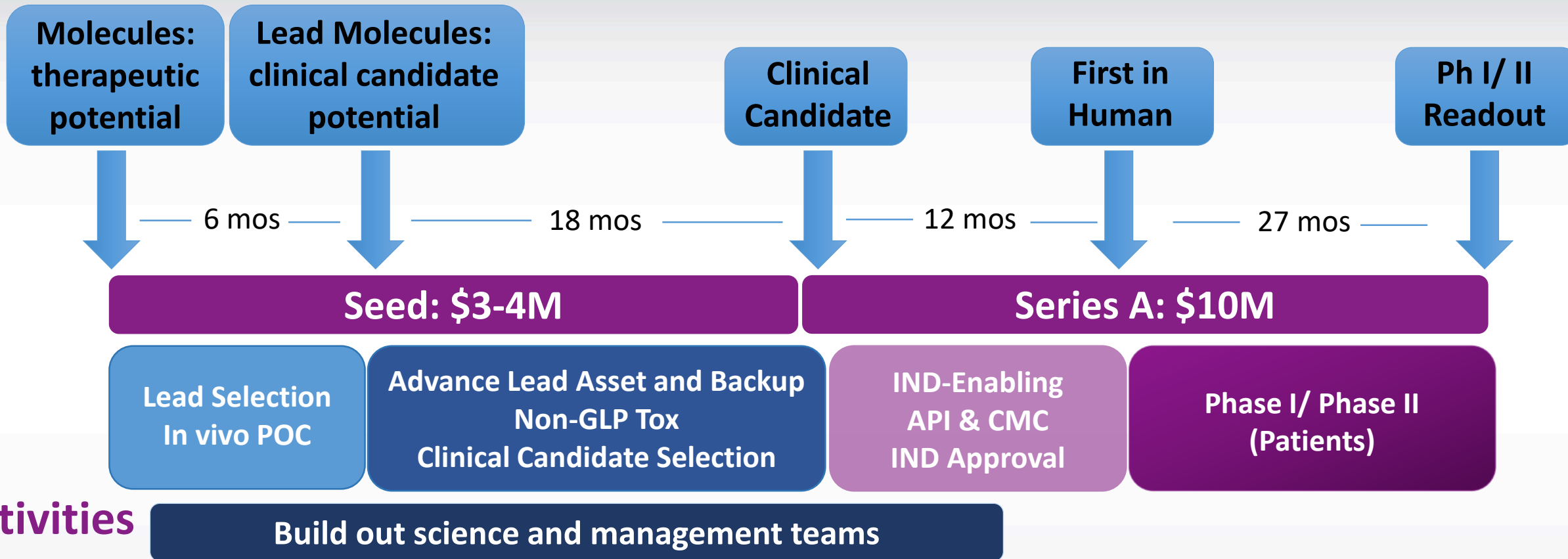


Pipeline

	Discovery	Preclinical	IND Enabling	Ph I / Ph II
HD - Degradar	→			
HD - Corrector	→			

Use of Funding & Milestones

Milestones

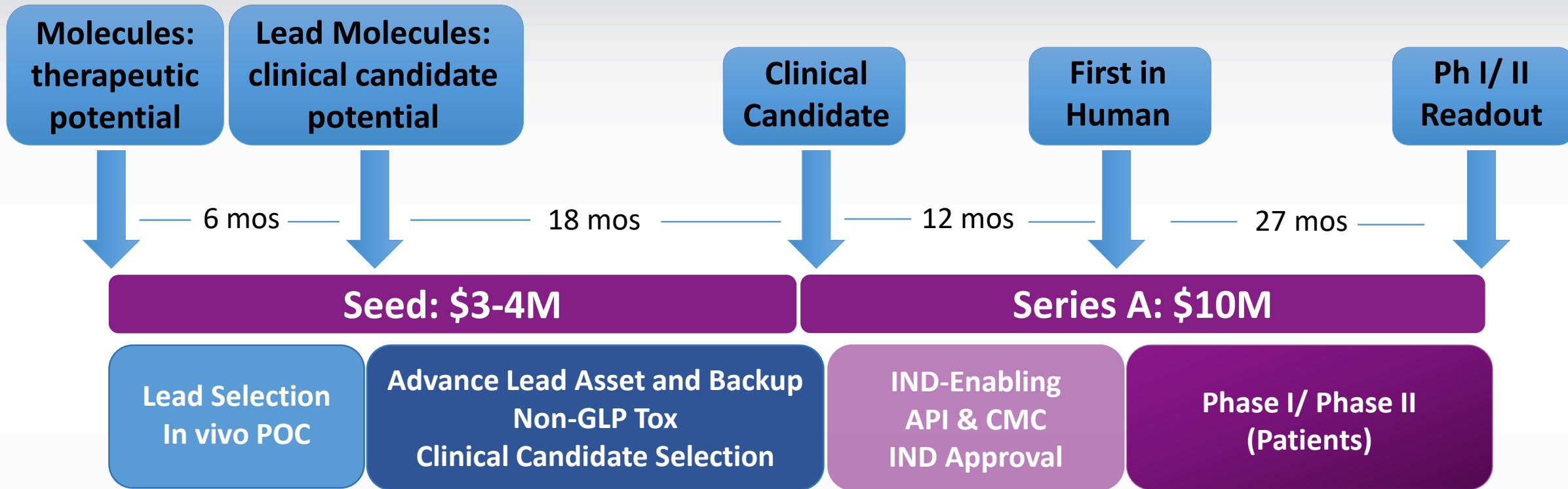


Activities

Rev 08212020

Potential Exit Strategies

Milestones



Activities

Multiple Ways to Leverage Value

- License/Partnering
- Acquisition/Merger
- Public Capital

Rev 08212020

Management Team & Advisors

> *100 years of drug discovery experience including multiple launched drugs*

Beth J. Hoffman, Ph.D.

Founder, CEO



Leslie J. Schulze, CPA, CGMA

Co-Founder, CFO



Christopher Smith, Ph.D.

VP, Chemistry



Lucia Mokres, DVM

VP, Regulatory, Clinical and Medical Affairs



Advisors:

Jody Corey-Bloom, M.D.: Director, HD & AD Clinical Centers, UCSD, *KOL*

David H. Crean, Ph.D., MBA: Business Advisor, healthcare investment partner

Steven Finkbeiner, M.D., Ph.D.: Professor, UCSF & Gladstone Institutes, *KOL*

Kalpana Merchant, Ph.D.: CEO & CSO roles at start-ups; formerly Eli Lilly, Pharmacia; *KOL*

Risks and Mitigations

Risk

- Lead molecule cannot be adequately optimized
- Clinical candidate may not translate from preclinical to clinical
- Protein degradation mechanism is invalidated due to:
 - Associated toxicities
 - Lack of efficacy
- Competitor HTT-lowering treatments achieve regulatory approval
- Sufficient capital to accomplish goals

Mitigation

- Multiple backup scaffolds available as replacements
- Use of patient-derived disease models, including 3D organoids
- Conformation correctors available as backup mechanism
- Origami small molecule modality
 - Superior delivery and cost-effectiveness
 - Enables systemic treatment
 - Opportunity to augment CNS-directed competitors
- Continue to actively raise funds

Origami Therapeutics, Inc.

- Founded October 2015 in San Diego
- Resident company at JLABS @ San Diego (March 2018)
- Platform: Technology platform to generate small molecule conformation modulators
- Seeking: \$3-4M Seed Funding:
 - ❖ Advance lead asset and back-up to Clinical Candidate/ IND-enabling
 - ❖ Prepare for Series A to achieve Ph I/ Ph II readout

Contact Information: Beth J. Hoffman, Ph.D., President & CEO

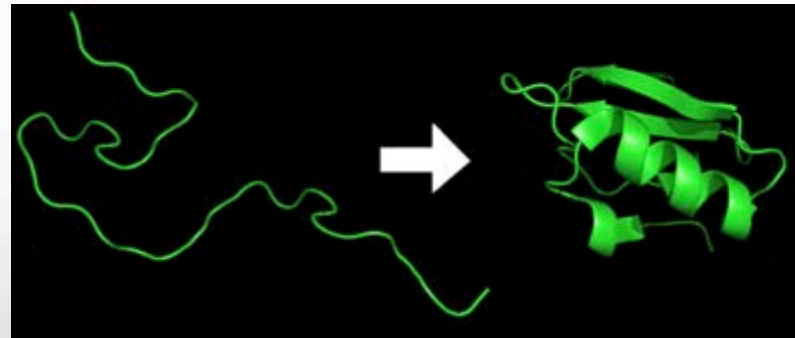
Mobile: 805.558.2664

beth@origamitherapeutics.com



Origami:

The art of folding paper



Origami Therapeutics:

The science of folding proteins

Stream BIOMEDICAL

2016 Q1



GARY
GAGE, PE, MBA
Founder & CEO
Stream Biomedical



Silicon Valley Bank – JLABS Event
September 2020
Gary Gage

Key Topics

1) *POTENTIAL IMPACT ON HUMAN HEALTH*

2) *UNIQUENESS OF IDEA / PRODUCT*

3) *IDENTIFICATION OF KEY RESOURCES AND PLAN TO FURTHER IDEA*

4) *UNDERSTAND DIFFICULTIES. HAVE PLAN TO AVERT ROADBLOCKS*

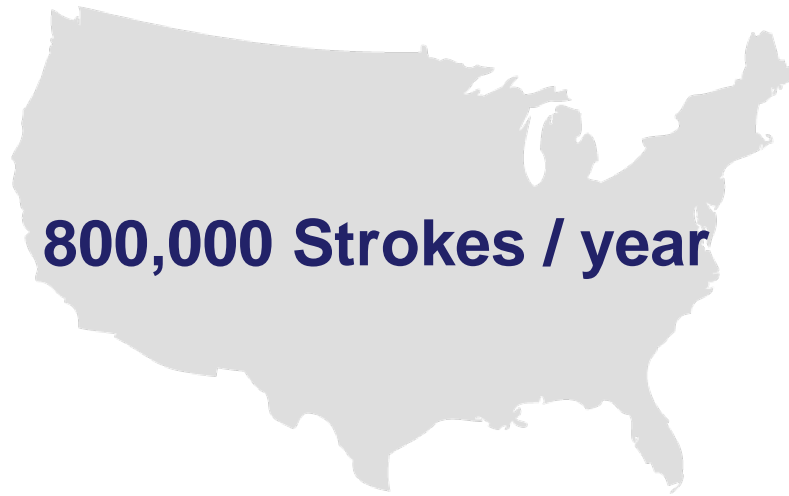
1) *POTENTIAL IMPACT ON HUMAN HEALTH*

The Unmet Need(s)

Nothing on the market has proven or been approved to:

- Preserve injured brain cells
- Regenerate damaged brain

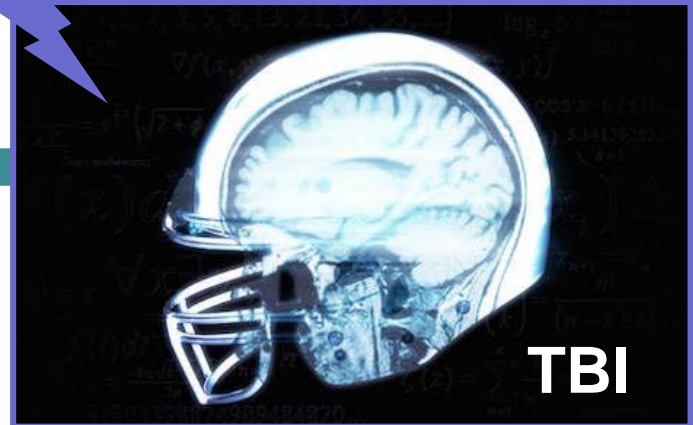
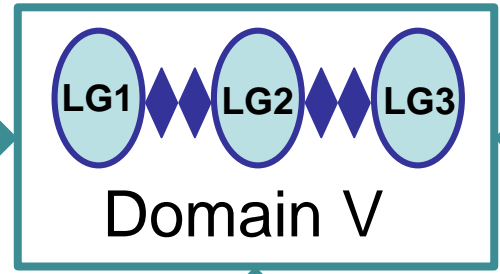
Stroke Incidence: US and Worldwide



10% of Survivors return to normal activity

2) UNIQUENESS OF IDEA / PRODUCT

The Body's Attempt at Self-Repair... Perlecan Domain V (DV)

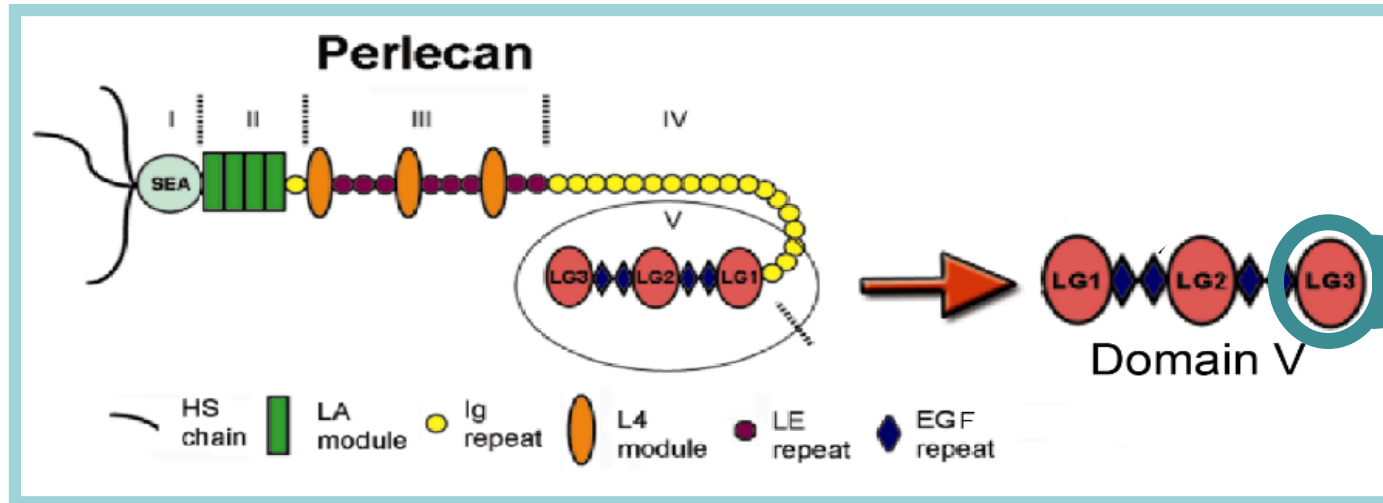


DV is actively generated by vigorous activity, traumatic brain injury (TBI) & stroke

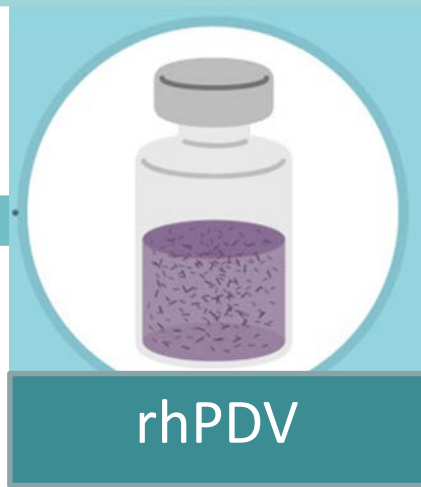
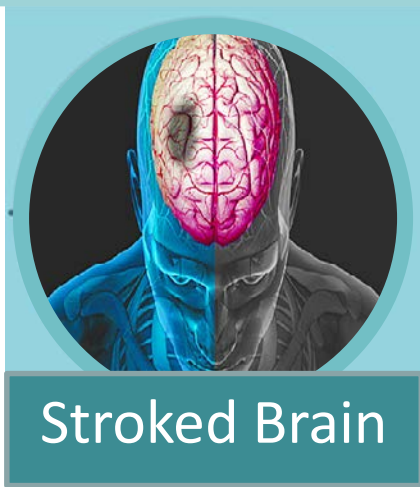
*DV is a critical component of the body's post-stroke attempt at self-repair **

* Per Lee et al, 2011

Our Product... Recombinant Human Perlecan Domain V (rhPDV, or DV)



Recombinantly Produced

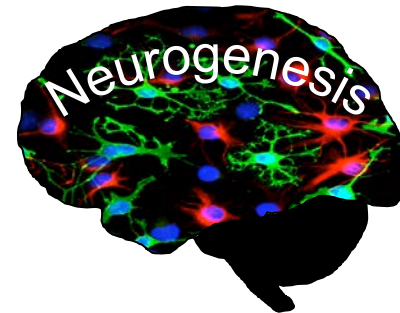


DV is a naturally occurring protein, which we synthesize in a high-yield biological process

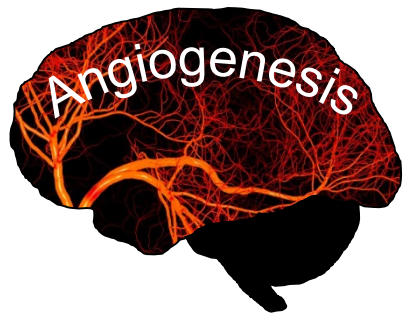
DV: for Neuroprotection & Neurorepair



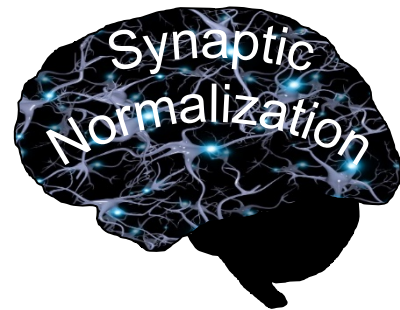
Neuroprotection: the preservation of neurons (nerve cells) compromised by injury or degeneration



Neurogenesis: the biologic process by which new neurons are generated



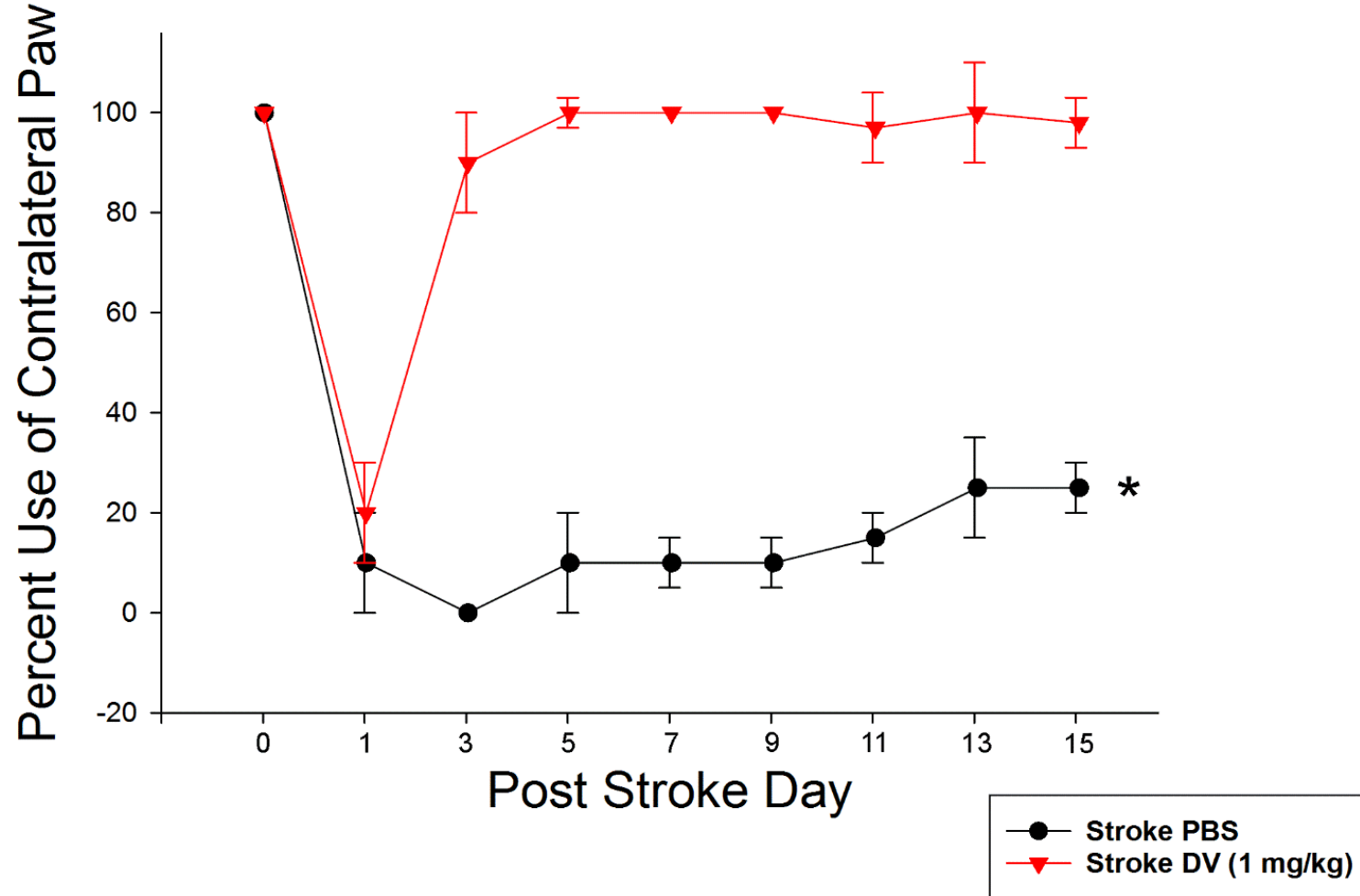
Angiogenesis: the development of new blood vessels



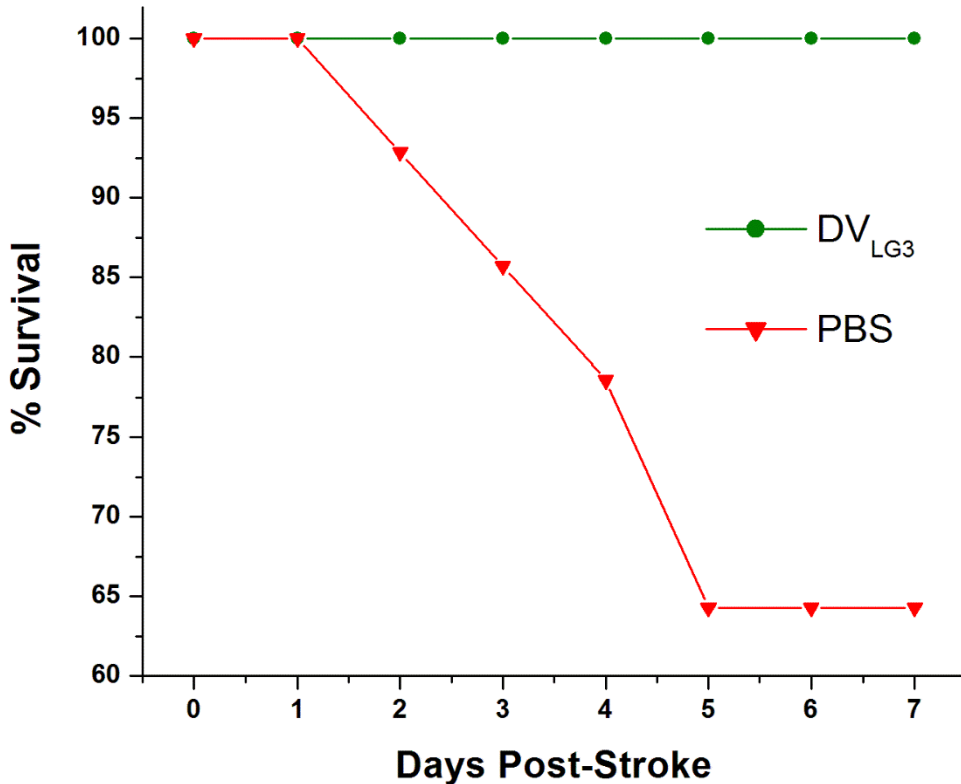
Synaptic normalization: the elimination of seizure-like activity

DV is significantly neuroprotective, angiogenic, neurogenic & significantly normalizes synaptic dysfunction

DV: for Dramatic Functional Improvement



DV: as Potential Life-saving Therapy



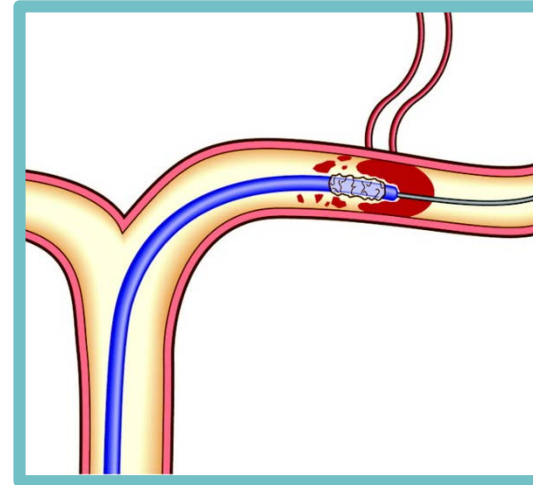
Kaplan Meier survival curve and statistical significance illustrating the unique life-saving potential of DV_{LG3}

P=0.005

Stroke Standard of Care

Genentech

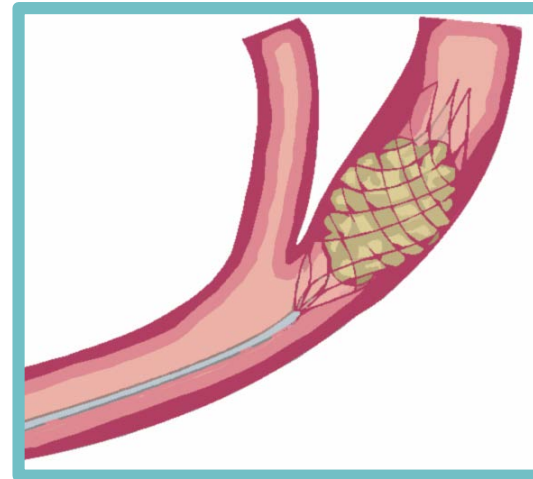
- tPA...Tissue Plasminogen Activator
– Clot Dissolution



Not Neuroprotective
Not Neuroreparative

Medtronic **stryker**[®] Penumbra

- Thrombectomy Devices
– Mechanical Clot Removal



Not Neuroprotective
Not Neuroreparative

3) IDENTIFICATION OF KEY RESOURCES AND PLAN TO FURTHER IDEA

Overview: Plan & Key Resources

PLAN: KEY ACTIVITIES

- File IND in Q1
- Produce GMP DV
 - For Phase 1 human trial
- Execute Phase 1 Trial
 - In stroke patients

KEY RESOURCES

- Capital
 - Equity Raise: current raise \$4M
 - Fund GMP, Ph1 clinical, Ops
 - Non-dilutive Funding: leverage/expand
 - PH 1-2 FastTrack
- Personnel
 - Stream Team: leverage
 - Clinical Research Associate: hire
 - SAB: establish/expand
- Outside Services
 - CDMO: Hired
 - CRO: Selection process near completion

Stream Background

PUBLICATIONS



20+ scientific
peer reviewed
publications

Stroke
Dementia
Mechanism of Action

INTELLECTUAL PROPERTY



20+ issued
patents

Stroke, Traumatic Brain Injury,
Alzheimer's, Parkinson's,
Spinal Cord Injury, Other

COMPELLING PRODUCT DATA



Recombinant Human
Perlecan Domain V
(rhPDV or "DV")

Neuroprotective
Angiogenic
Neurogenic

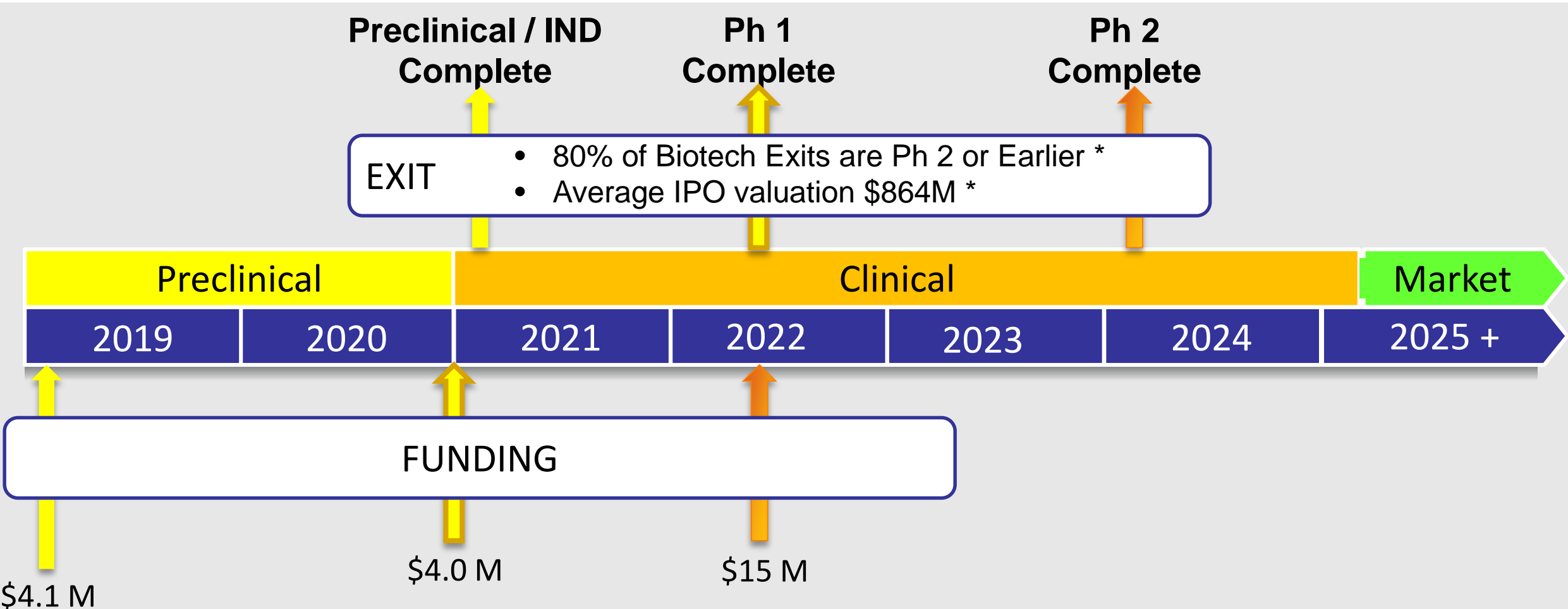
Evidence & IP are extensive, data are compelling

Where We Are

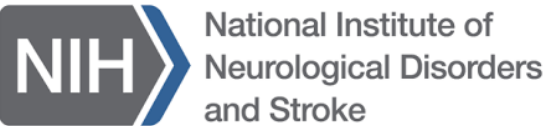
- Identified Preferred DV Construct for Stroke
 - Developed 20+ recombinant DV constructs. Chose top 7 producers. Evaluated top 3 in severe stroke model
 - Selected construct elicits functional improvements *and* life-saving potential
- Developed Process for Preferred DV Construct
 - Scaled DV synthesis from milligram to gram quantities
 - Established purification process up to 99% purity
- Initiated IND-Enabling Toxicology Studies
 - Rat & primate injections initiated
 - Initial injections at 25x therapeutic dose show no deleterious effects
- Completed FDA PreIND Meeting
 - Phase 1 Clinical trial design confirmed: escalating dose in stroke patients
- New IP Filed
 - Patent application filed July 2020, with potential to significantly extend patent protection
- IND Filing projected Q1 2021
 - IND clearance will enable subsequent initiation of first-in-human trials

Stream is building on success to drive to a Phase 1 Trial

Timeline: Funding v. Development v. Exit



Non-Dilutive Funding



Acute Stroke

- SBIR Ph 1-2 Fast-Track Application
- Notice of Award June 6, 2019
- \$3.0M : Ph 1 = \$770k; Ph 2 = \$2.3M



Alzheimer's

- SBIR Phase 1 Application
- Notice of Award Sep 9, 2019
- \$393k

Stream Team... since the beginning



Gary Gage, PE, MBA
Founder & CEO

- 25+ yrs Biotech, Medtech
- Sr Staff \$280MM Acquisition by Medtronic



Justin Fraser, MD
Chief Clinical Advisor

- Neurosurgeon. Clinical Researcher
- Board of Neurointerventional Society



Davis Adkisson, PhD
CSO

- 20 yrs Biotech, Medtech
- Experienced CSO



Bill Schwieterman, MD
Regulatory, Clinical

- CEO Public Biotech Company
- Branch Chief FDA CBER



Greg Bix, MD, PhD
Chief Neuroscientist

- Discoverer/Inventor of DV
- Director Neuro Center, Tulane



Good looks are overrated

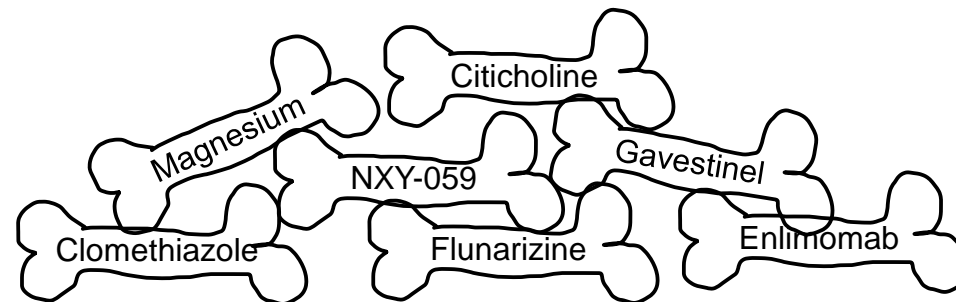
Stream Team... with new faces



4) UNDERSTAND DIFFICULTIES. HAVE PLAN TO AVERT ROADBLOCKS

Boneyard (Historical Roadblock)

- The Historical Roadblock is Clinical Trial Failure
- The Neuroprotective Drug Boneyard is Understood
 - Two of Stream Team Members have Published on this Topic
- Expect Stroke Severity & Drug Treatment Outcomes to Differ if...
 - ... the patient has small occlusions versus large occlusions
 - ... the patient is treated within hours instead of days
 - ... the patient has a hemorrhagic stroke versus an ischemic stroke
 - ... the patient encounters a stroke of the cerebrum versus a stroke of the brainstem
 - ... the occlusion is removed and the vessel is recanalized vs occlusion remaining



DV Differences & Averting Roadblocks

- Vast Majority of Previous Failures were NOT
 - ... biologics
 - ... shown to be an endogenous critical component of self-repair
 - ... treating homogeneous population
- Animal/ Human Bodies Produce DV in Response to Stroke
 - Mouse, rat, sheep, NHPs, humans...
- To Avert Roadblock Stream Trial will...
 - Maximize Homogeneity of Population
 - Couple with Recanalization

Phase 1 Clinical Trial Design

- 3 Escalating Dose Groups
- 24 Patients Total
- All Stroke Patients

Dose 1: Low

- 6 Treated with DV_{LG3}
- 2 treated with Saline

Dose 2: Medium

- 6 Treated with DV_{LG3}
- 2 treated with Saline

Dose 3: High

- 6 Treated with DV_{LG3}
- 2 treated with Saline

Design provides early read of DV-treated stroke patient outcomes

Summary

Large Market(s)

Unmet Need

Compelling Product Evidence

Strong Patent Protection

Experienced Team

Strong Return Potential & Early Exit Options



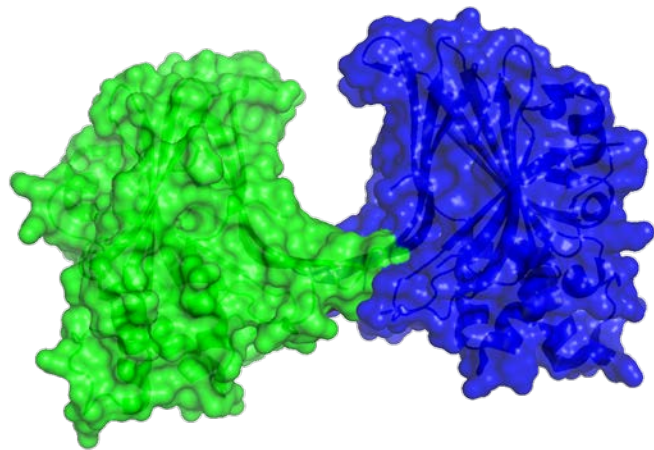
MARIA
SOLOVEYCHIK, PhD
Co-founder & CEO
SyntheX



Maria Soloveychik, PhD
CEO

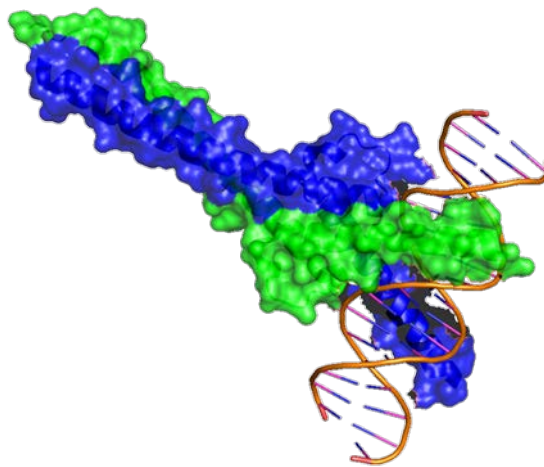
At SyntheX, we are building a collection of synthetic biology technologies to enable us to produce and functionally select potent compounds to target conventionally undruggable proteins.

What do we mean by undruggable targets?



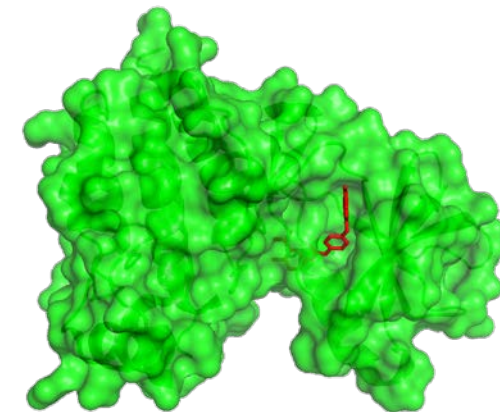
Protein-protein
Interactions (PPIs)
(homodimers, heterodimer,
complexes, aggregates, etc.)

e.g. Ras/Raf, YAP/TEAD



Protein-nucleic acid
interactions
(transcription or splicing
factors)

e.g. Myc, Ets TFs



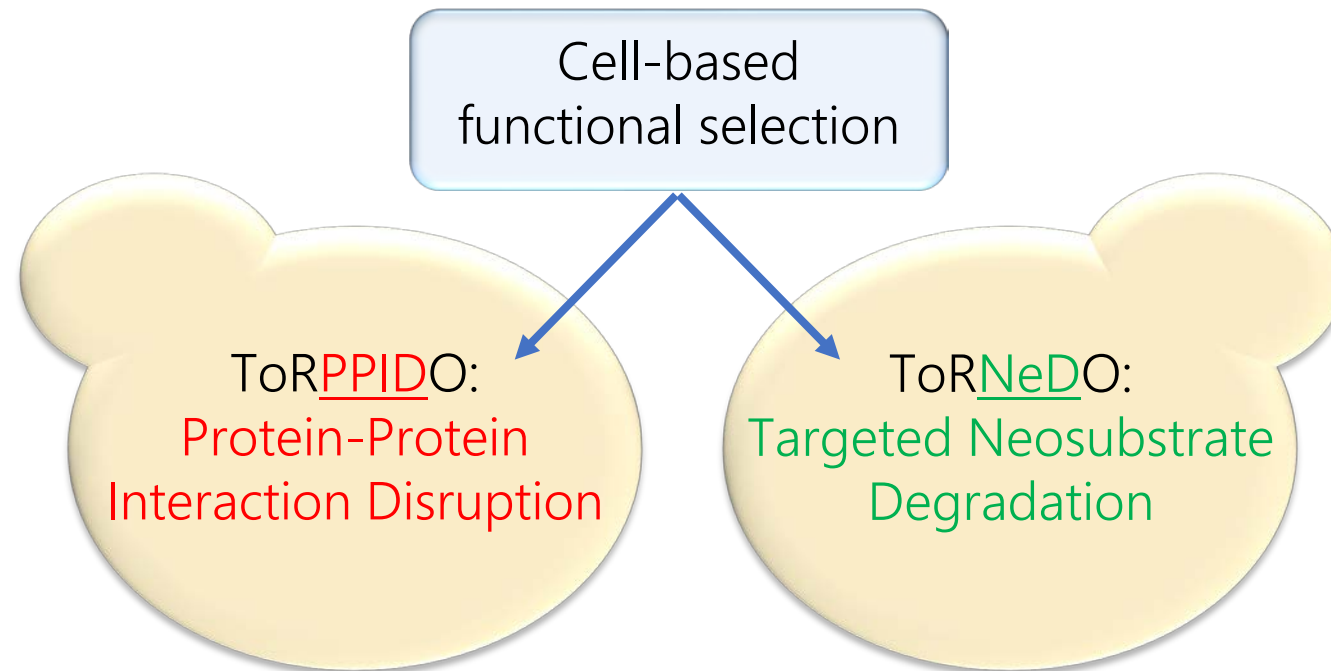
Low specificity enzymes
(phosphatases, nucleases,
proteases etc.)

e.g. Shp1/2, Trex1

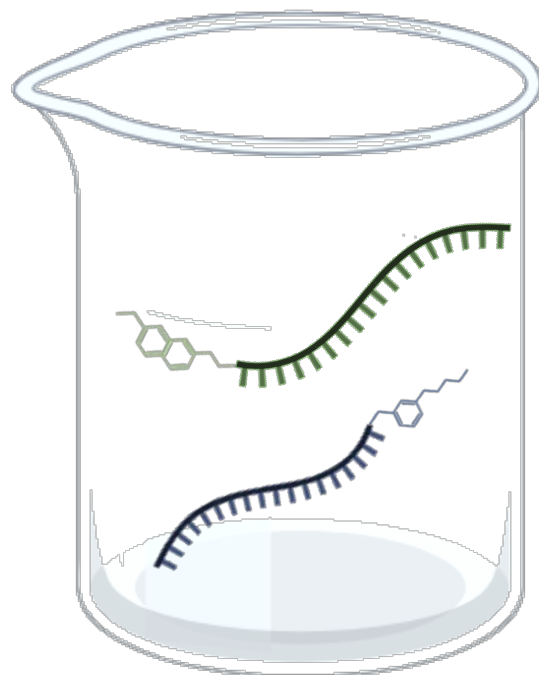


ToRPPIDO and ToRNeDO:
Our drug discovery engines

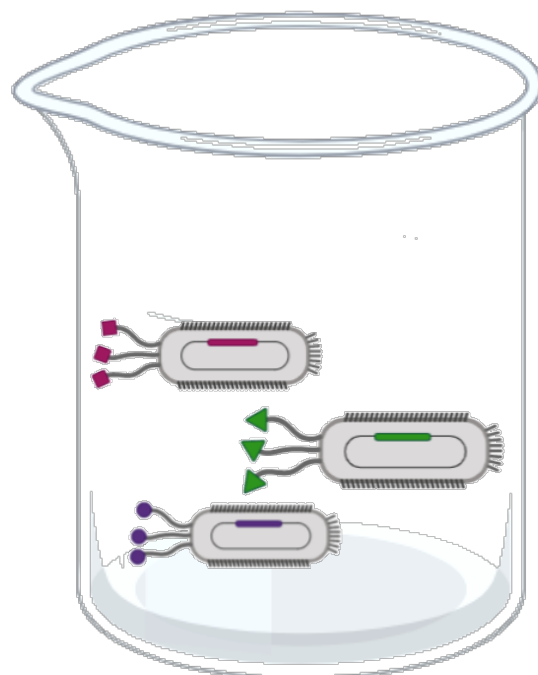
Platform technologies overview



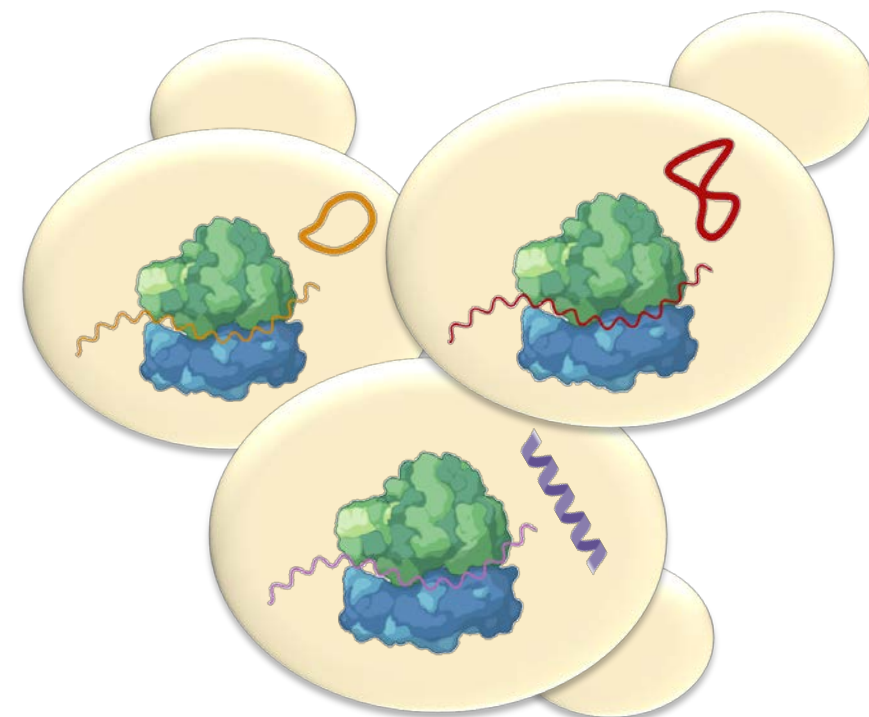
SyntheX libraries are ribosomally encoded and provide expanded chemical diversity and built in functional selection



Traditional DNA-barcoded libraries:
Used in *in-vitro* binding assays

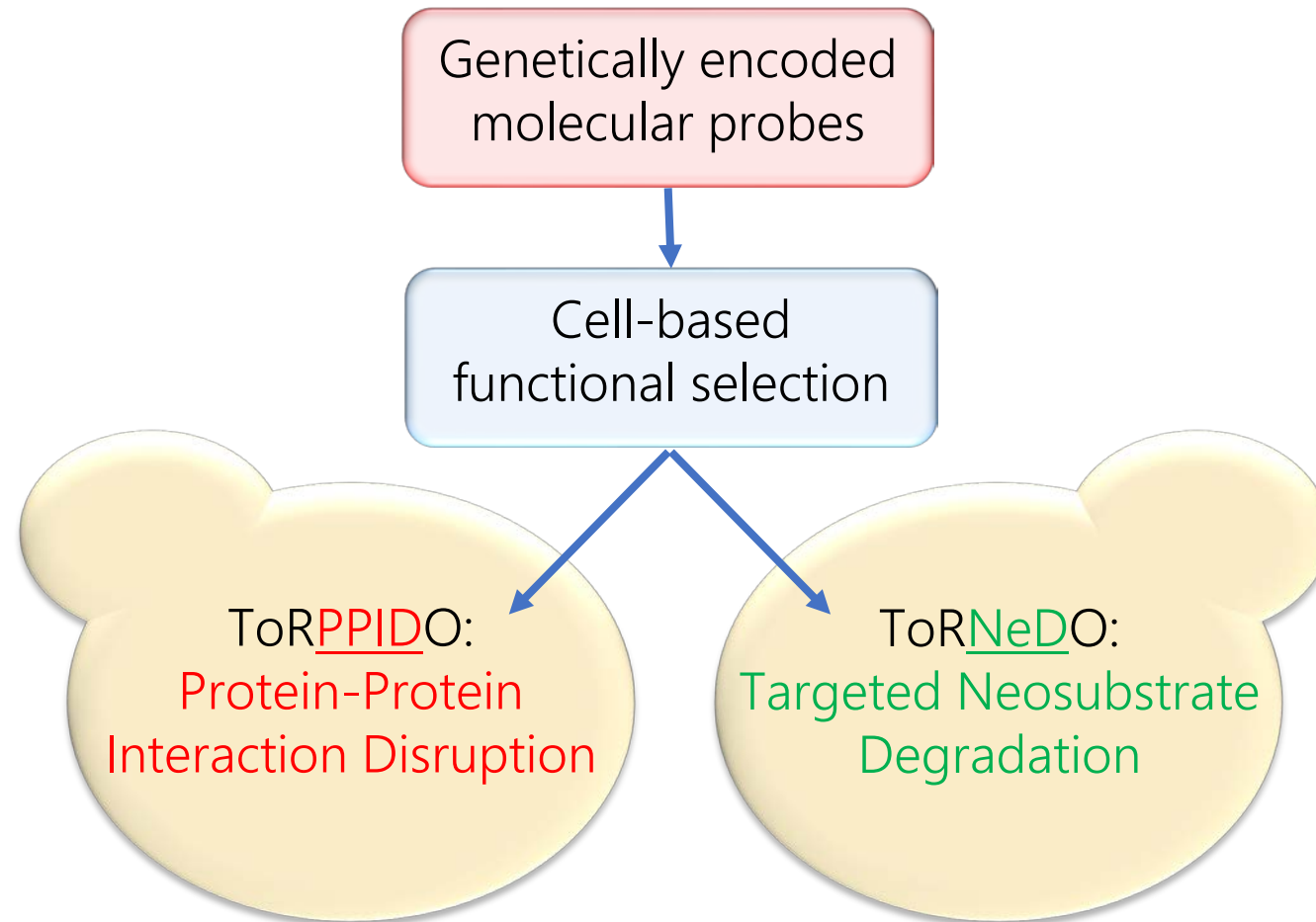


DNA-encoded displayed libraries:
Used in *in-vitro* binding assays
(e.g. phage/ mRNA/ yeast displays)

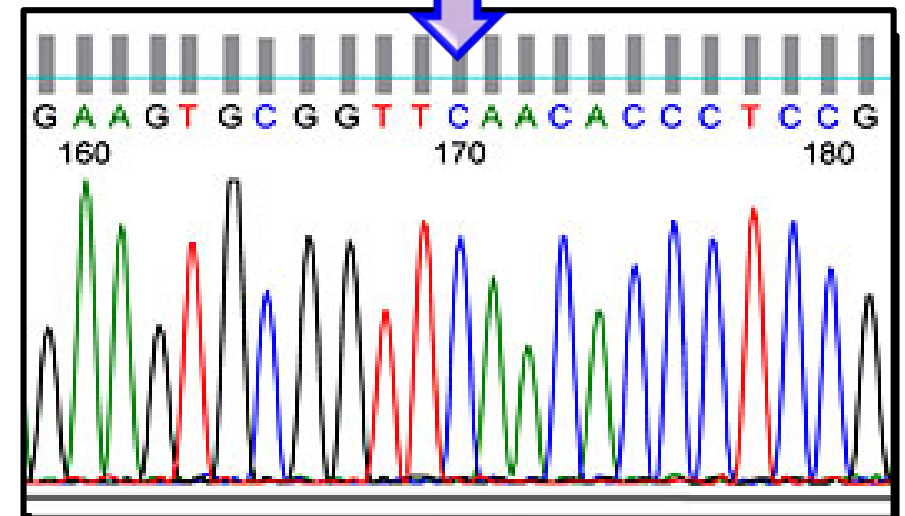
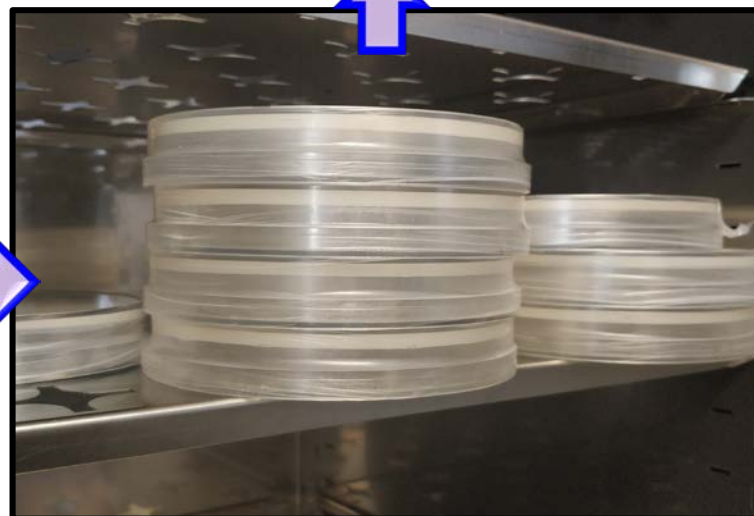
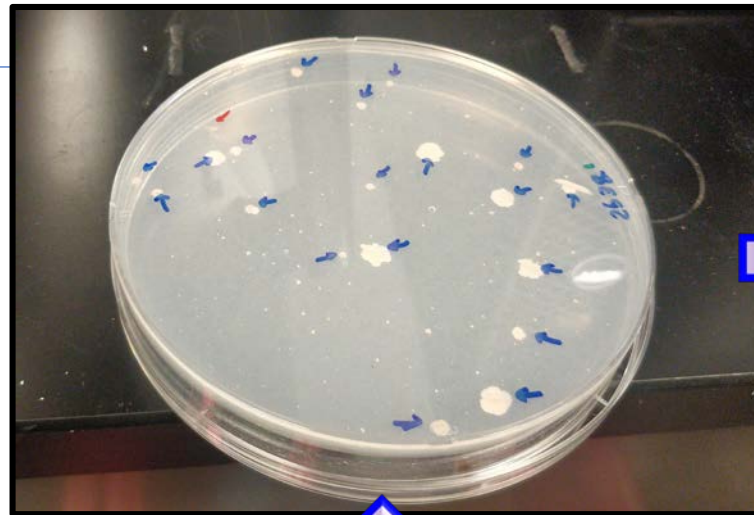
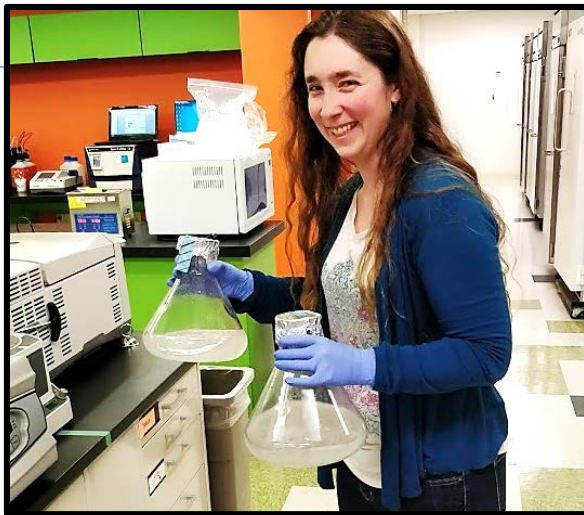


Intracellular Genetically-encoded libraries:
Our libraries of peptides and macrocycles are
used in cell-based functional selection assays

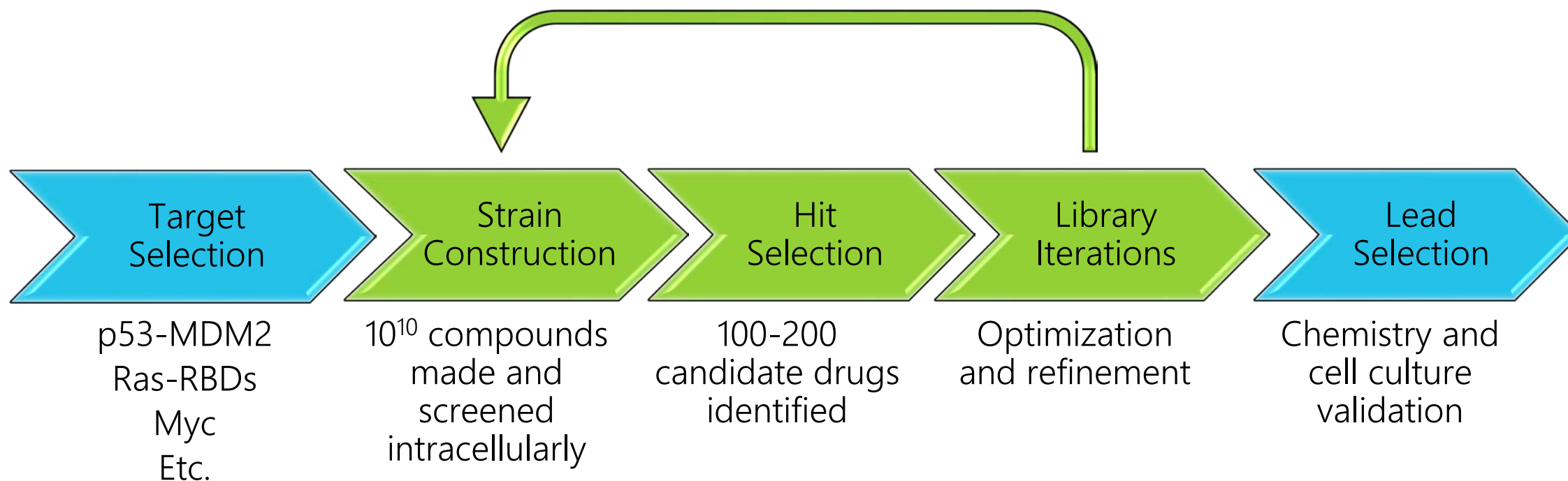
Platform technologies overview



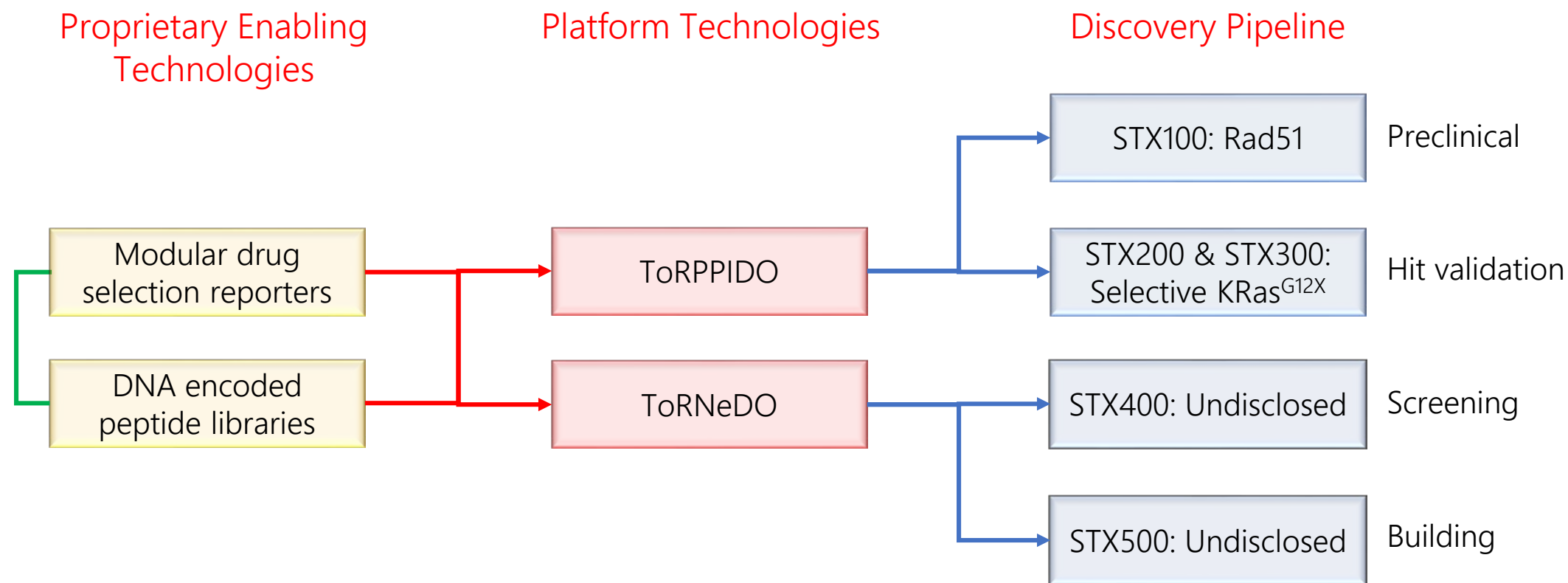
Screening process



Our screening process selects for potent hits



SyntheX strategy overview – building our pipeline



We create synthetic biology-based tools to accelerate and improve drug discovery

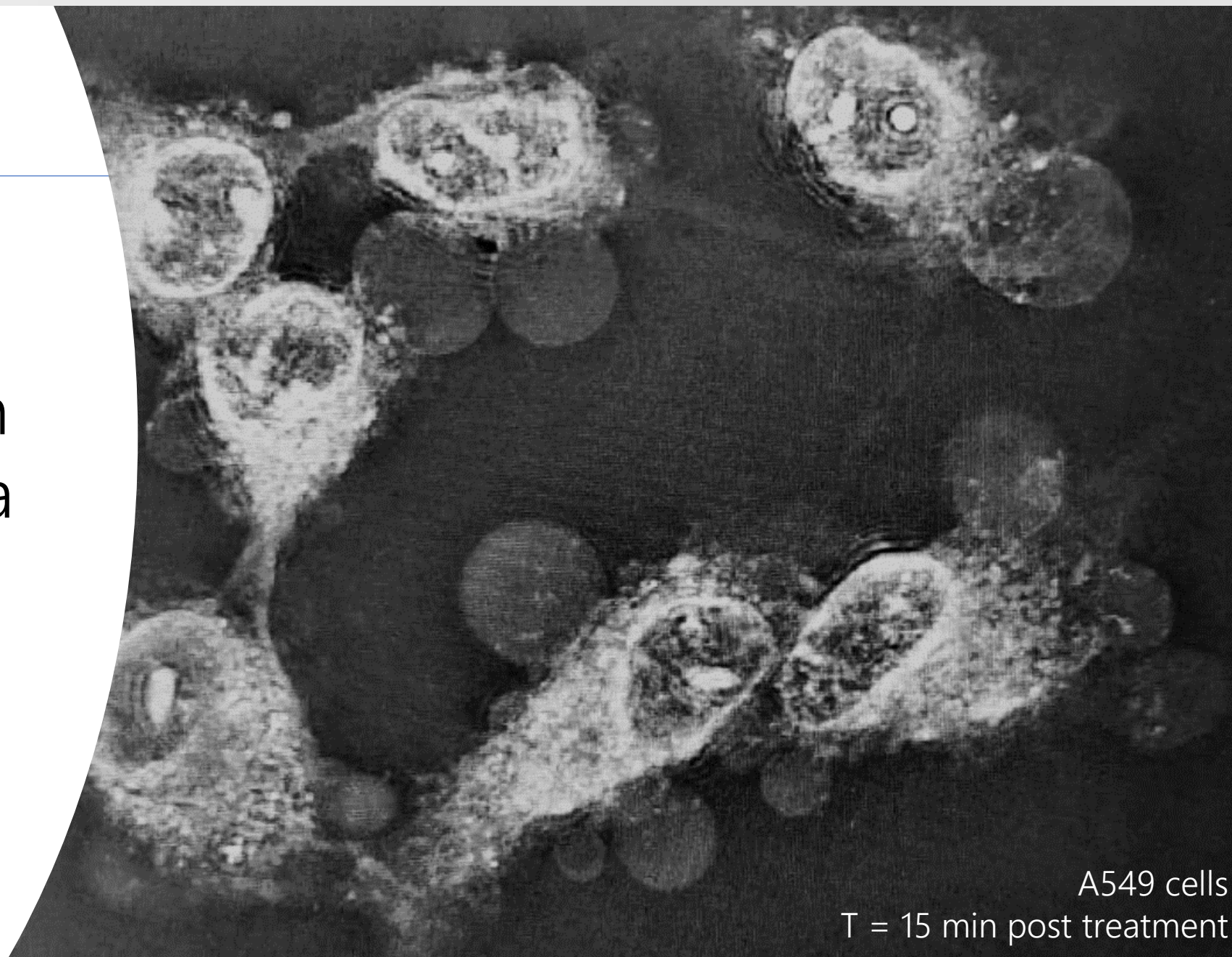
Our technologies are combined to generate our powerful cell-based drug discovery platforms

Using our internal discovery engines, we built a pipeline of oncology assets

A 3D molecular model showing a protein structure in blue and a DNA molecule in green. The protein is a large, complex structure with many lobes and indentations. The DNA is a double helix structure with a central backbone and two strands. The text is overlaid on the protein structure.

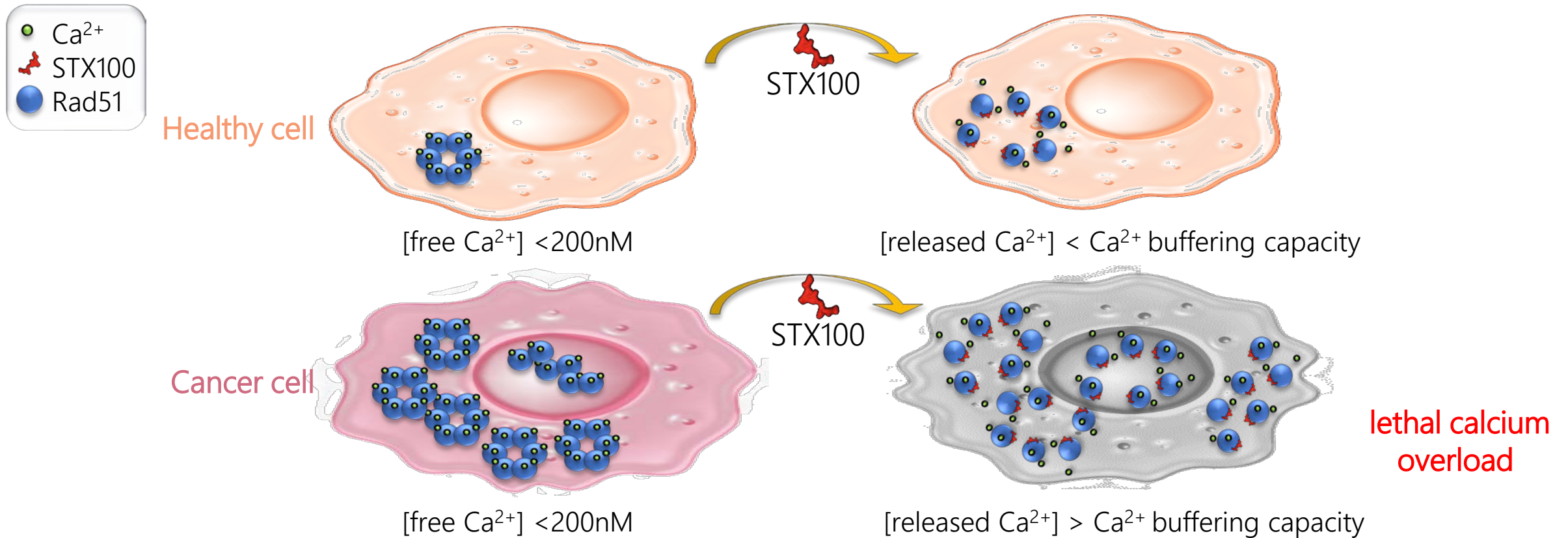
STX100:
Targeting the
BRCA2/RAD51 Homologous
Recombination (HR) DNA
repair pathway

STX100 works with
acute kinetics via a
novel cell death
mechanism

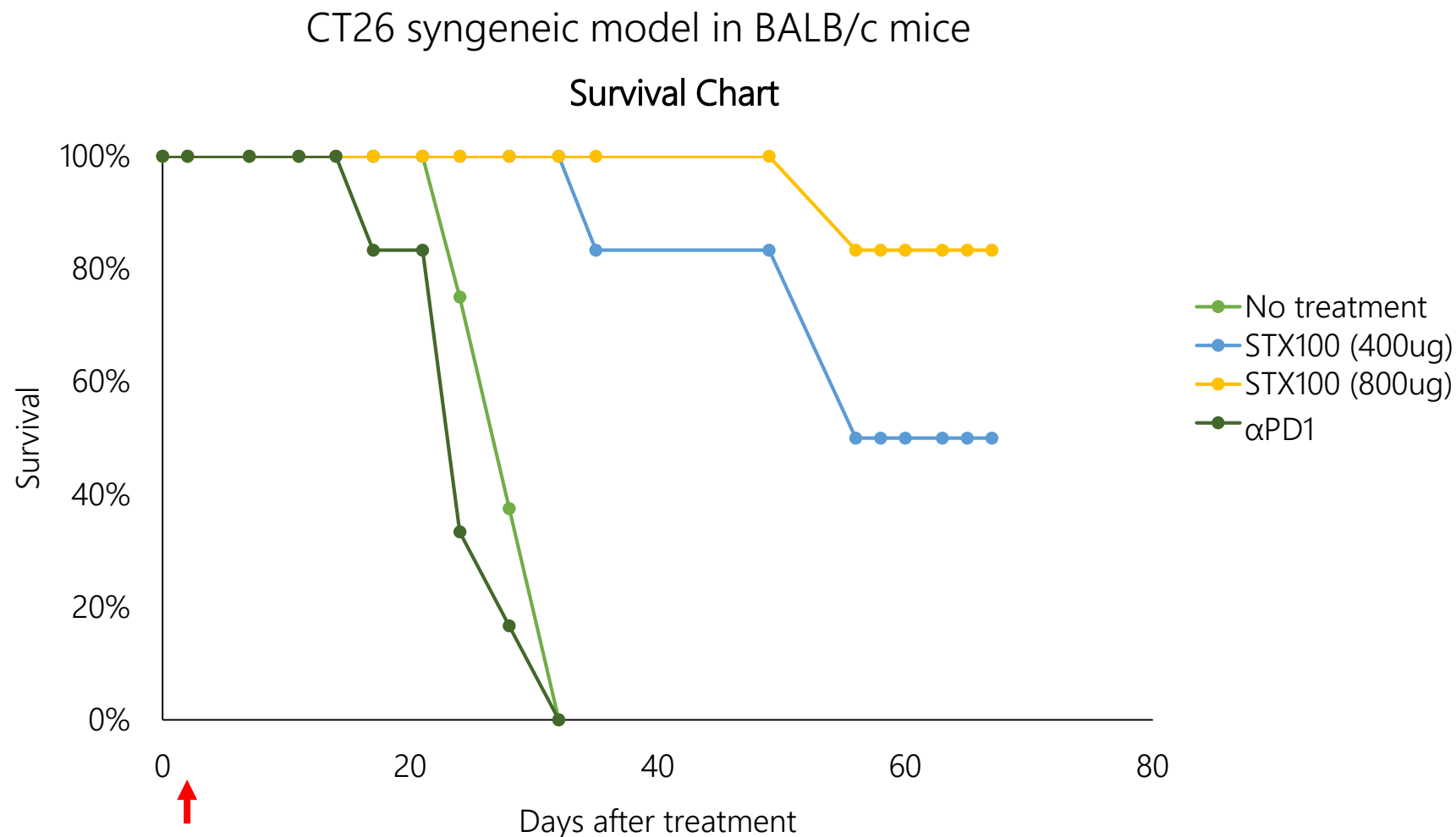


A549 cells
T = 15 min post treatment

STX100 kills cancer cells via a calcium surge released from the cancer's over-expressed Rad51



STX100 exhibits single agent activity in a CT26 model

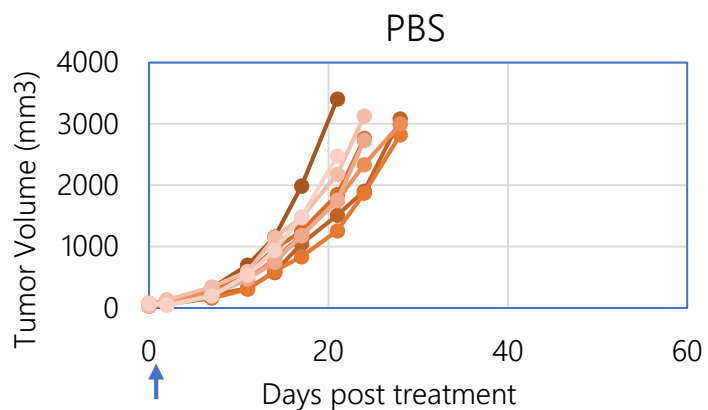


n=6-8 mice
 Day=0 refers to 1st day of treatment with tumor volumes ranging between 50-100m³

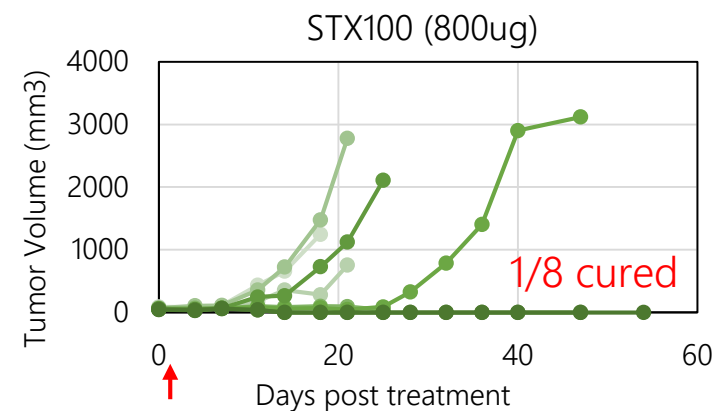
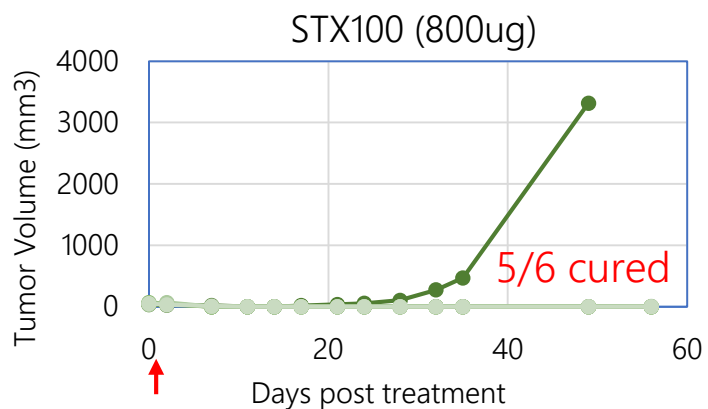
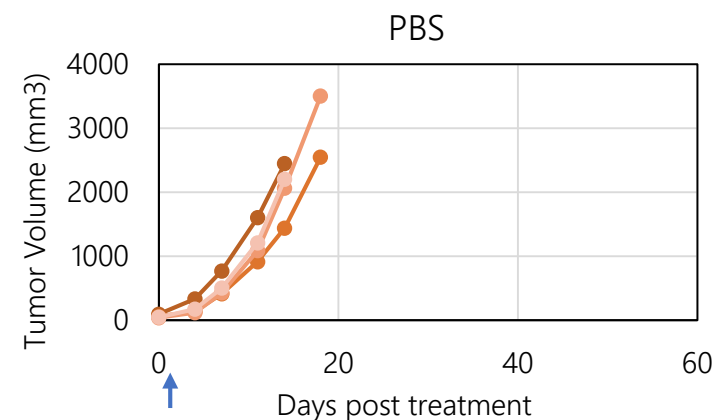
STX100 IT
10mg/kg αPD-1 IP

STX100 activity requires an intact immune system

CT26 model in BALB/c mice



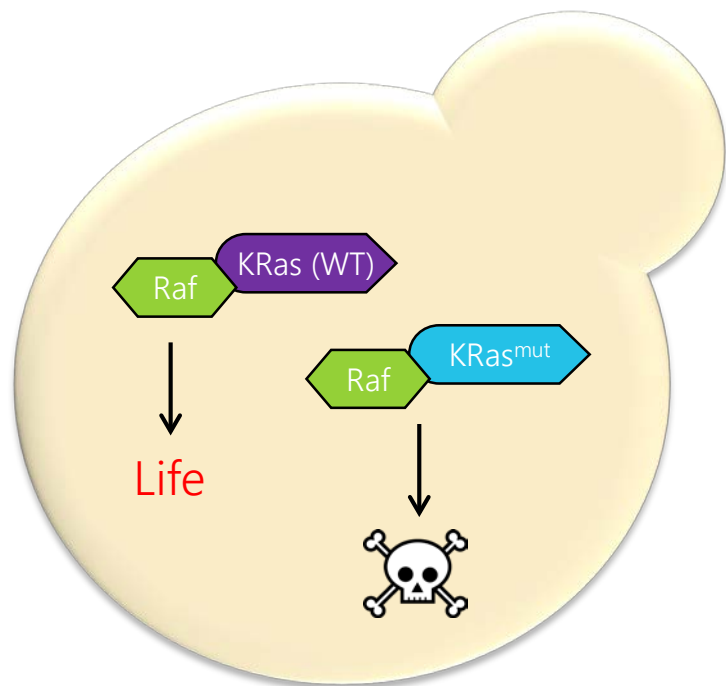
CT26 model in NSG mice



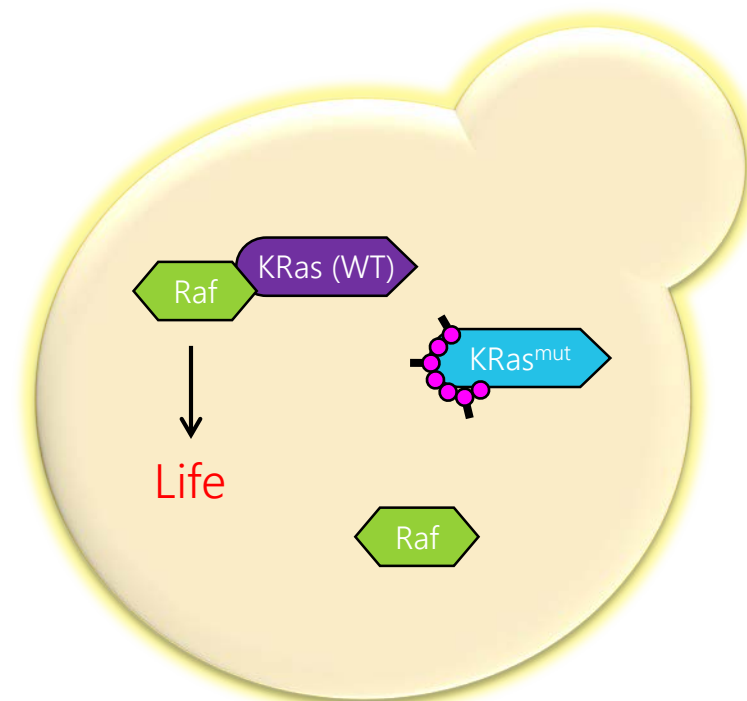
A microscopic image showing a cluster of cells. The majority of the cells are stained blue, while a distinct region in the upper right corner is stained bright green, indicating a specific area of interest or a different cell population.

STX200 & STX300:
Selectively targeting
oncogenic KRas signaling

STX200: Distinguishing KRas^{mut} signaling from WT



Interaction: cell death



PPI disruption: cell survival

Survival only possible If Raf preserves binding to KRas WT but NOT Kras^{mut}

Using ToRPPIDO, we discovered two different mechanisms of disrupting oncogenic KRas signaling

Potential disruptor classes:

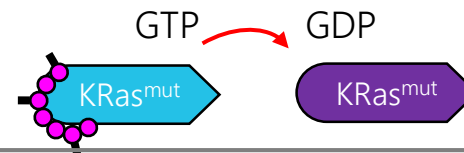
- KRas^{mut} binding peptides
- Non-productive KRas dimers

Both of these classes constitute novel insights and tools for probing KRas biology

- Disrupting peptides



- KRas^{mut} selective GTPase activating peptides



Currently undergoing biochemical characterization and compound optimization.

Our core team



Maria Soloveychik, PhD
Co-Founder, CEO



Charly Chahwan
Co-Founder, CSO



Tri Luong, MBA
Head of Finance and
Operations



Rachel Bond, PhD
ToRPPIDO Scientist



Michal Olszewski, PhD
Biochemistry Scientist



Shirin Jenkins, PhD
ToRNeDO Scientist



Daniel Nielsen, PhD
Peptide Med Chemist



Pin-Joe Ko, PhD
Cell Biology Scientist



Sabrina Lin, BSc
Research Assistant

Our advisory teams



Leonard Post, PhD
Drug Development
SAB



Andrew Perlman, MD, PhD
Clinical Development
SAB



Diane Hollenbaugh, PhD
Immuno-Oncology
Advisor



Lesley Stolz, PhD
Corporate Development
Advisor



Arvind Gupta
Board Member



Esther Chung, JD
Corporate Counsel



Maya Skubatch, JD
IP Counsel



Mary Wheeler, PhD, MBA
Business Development
Advisor





info@synthexlabs.com

🐦 @SyntheX_Inc

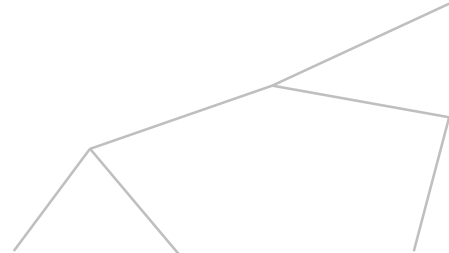
www.synthexlabs.com



VINCERE



SPRING
BEHROUZ, PhD
CEO
Vincere





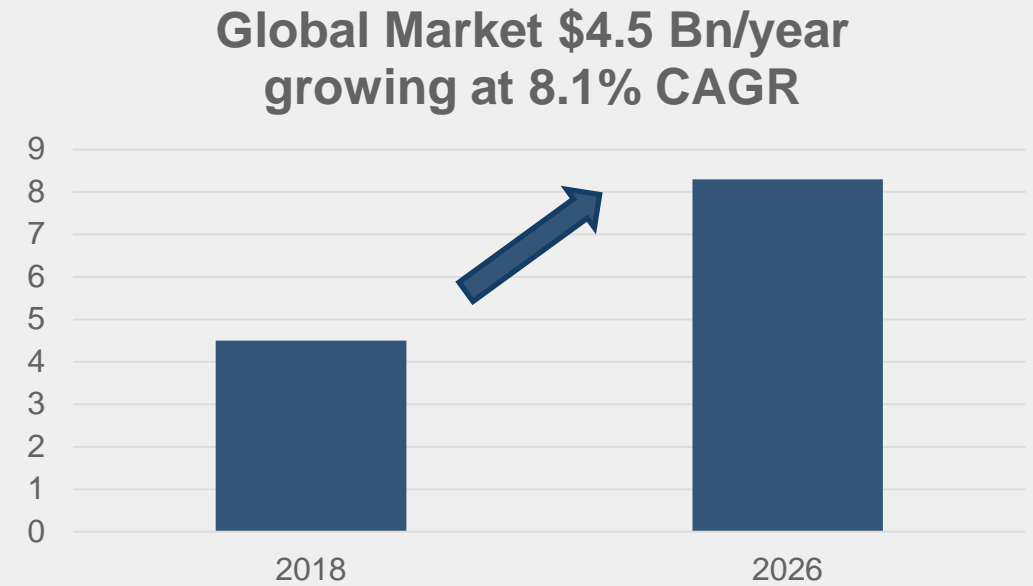
VINCERE

Invent the Future

Sept 2020

Parkinson's Disease is a Large and Growing Unmet Need

- No disease modifying therapy
- 10 million patients worldwide – 1 million in US
- \$2B/year spent on therapeutics in US and growing

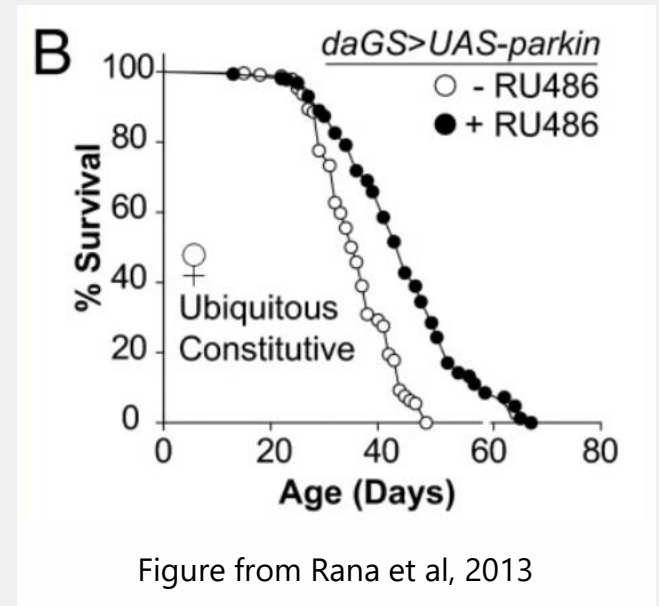


Fortune Business Insights report FBI100655



Additional Health Impact: Compounds Have Potential for Rare Diseases and Diseases of Aging

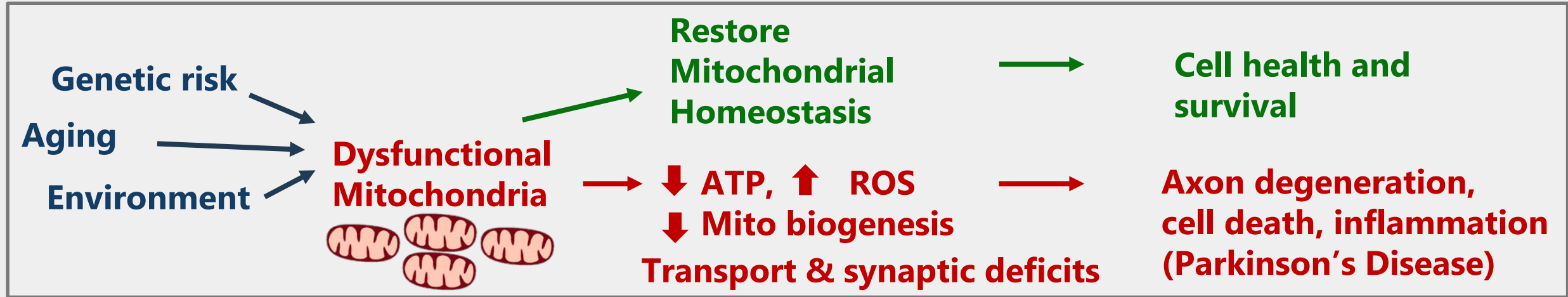
- Mitochondria important for many diseases
- Mitochondria important for healthspan and lifespan



Indication	Market Size (US)	Prognosis	Standard of Care
Idiopathic Pulmonary Fibrosis	200,000	Fatal within 3 years	Do not improve prognosis or symptoms
Acute Kidney Injury	~2M deaths/year	~50% hospital mortality	supportive
Mitochondrial Rare Diseases	80,000	Varies	Symptomatic or palliative



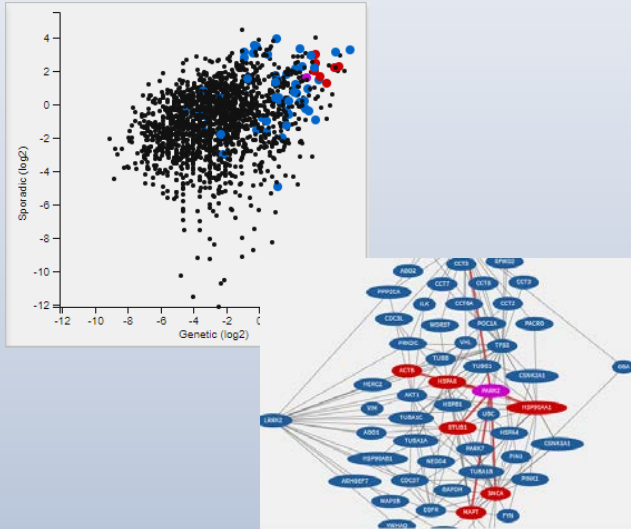
Unique Approach: No Similar Therapies in the Clinic or Clinical Trial



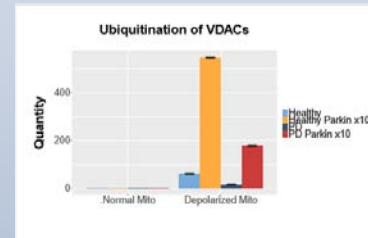
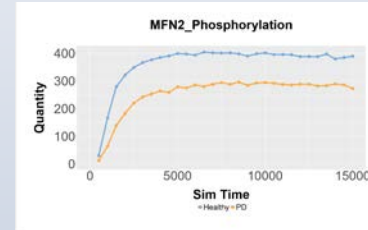
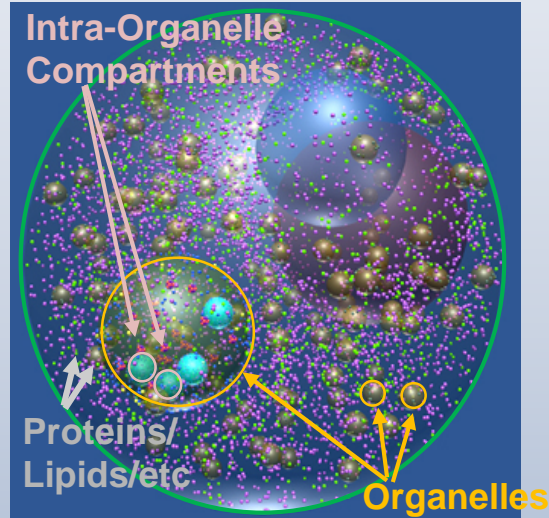
- No therapies in clinical trial that remove damaged mitochondria
- Preclinical competition from a few companies but we have technical advantages

Unique Innovative Technology: Software Aids Target Validation, Patient Enrichment, and Biomarker ID

1. Target ID with network analytics and AI

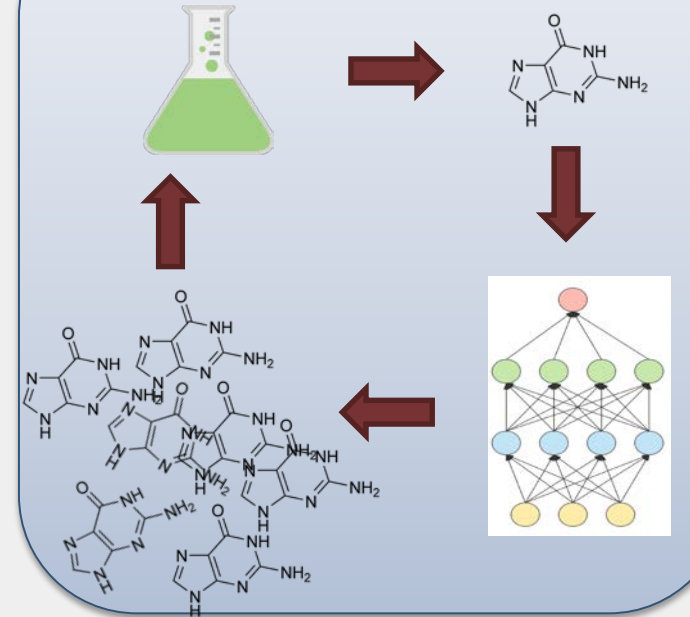


2. Target validation using patented simulation of patient cells



U.S. Patent No. 9,805,159

3. Compound ID using suite of med-chem and AI



Key Resources: Accomplished Team Skilled in Advancing Drugs to Clinic

Management Team:



Spring Behrouz, Ph.D.

Chief Executive Officer

Neuroscientist. Mayo alumna with >15 years Parkinson's R&D experience



Andy Lee

Chief Operations Officer

Computer scientist. Former VP of Engineering at Black Knight



Jim Liang

Board Director

Former IBM chief strategy officer and Morgan Stanley tech banker

Science Team:



Donna Romero, PhD

Lead Medicinal Chemist

Former Pfizer and Pharmacia Sr Director of Med-Chem with 35 patents, an approved drug, and many discovery to clinic projects



Chris Fanger, PhD

Head of Biology

Stanford alumnus with over 15 years at startup biotechs, including Hydra and Cadent



Ed Fritzen, MS

Medicinal Chemist

Over 25 years of experience at biotech and pharma with 11 patents

Scientific Advisory Board:



Dario Alessi, PhD

SAB – Dundee University

Enzymology expert and one of most cited biochemists in the world



Stephen Burley, MD, Dphil

SAB – Protein Data Bank, Rutgers

Expert in structural biology who successfully founded and partnered SGx with Eli Lilly



Peter Lansbury, PhD

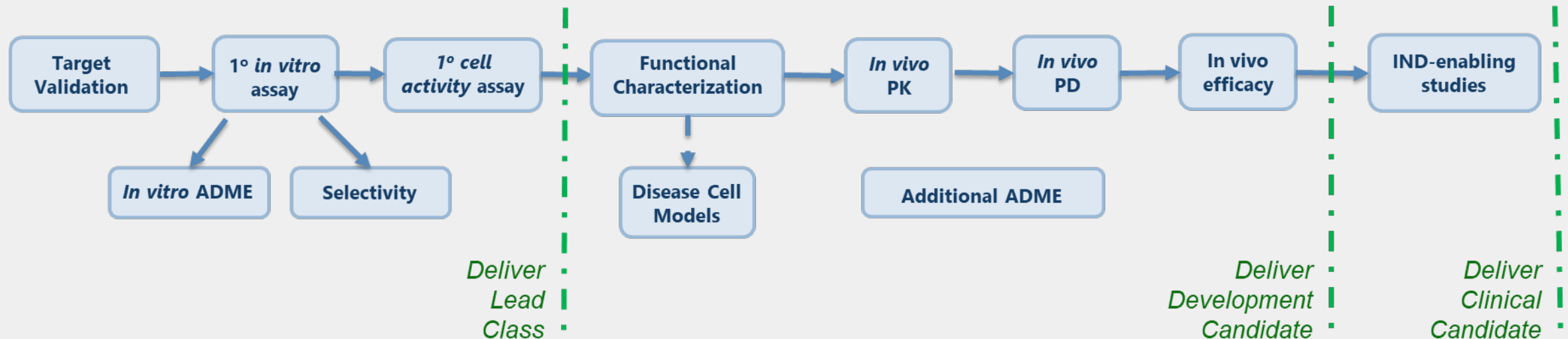
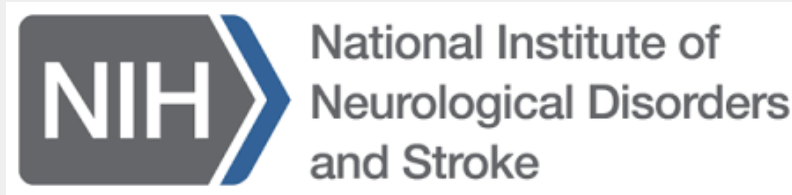
SAB– Harvard, Lysosomal Tx

Serial Biotech founder who has delivered a Parkinson's disease therapeutic molecule to clinic



Key Resources: Funding from Expert Agencies

Plan: Clear Inflection Points Drive Value Increase and Reduce Risk



This slide contains forward-looking statements

Traction: Target Validation to Patent Filing for Lead Class in 9 Months

Target Validation

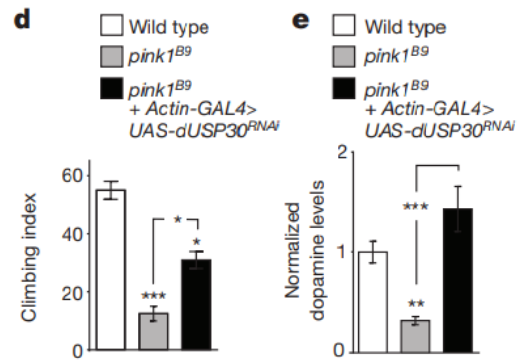
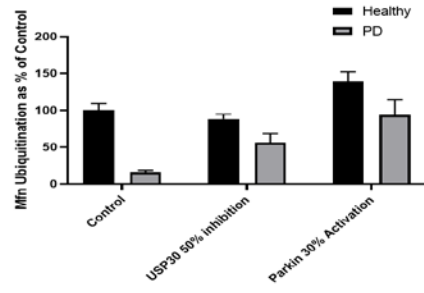
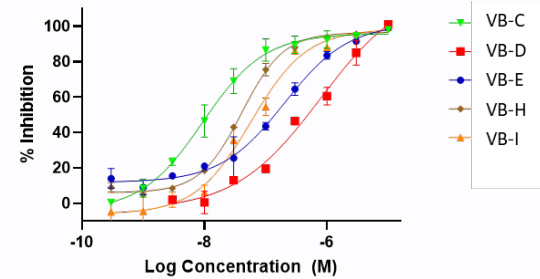


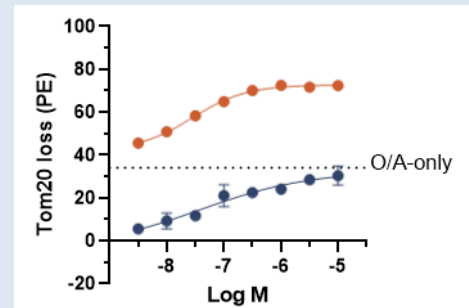
Figure from: Bingol et al, 2014



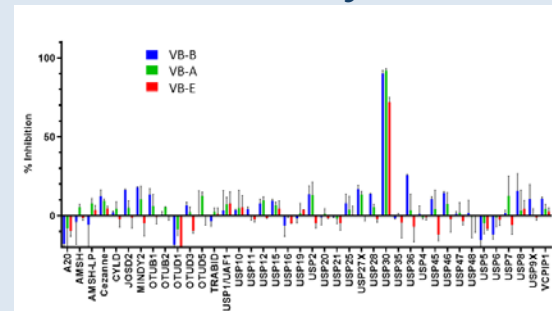
1° in vitro assay



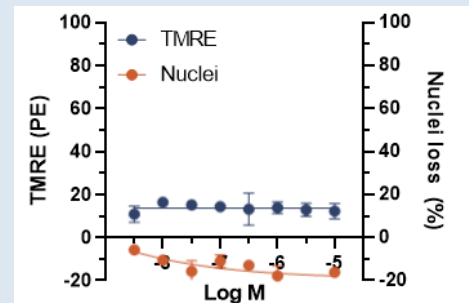
1° Cell Assay



Selectivity



Functional Characterization



Potential Roadblocks and Action Plan

	Roadblock	Solution
Scientific	<ul style="list-style-type: none">• No clinical precedence for targets• Lack of good animal models for PD	<ul style="list-style-type: none">• Experienced med-chem & learn from similar successes• Simulation and Patient cell validation
Execution	<ul style="list-style-type: none">• Milestone “no-go”	<ul style="list-style-type: none">• Multi-asset pipeline• Track record of hitting milestones
Financial	<ul style="list-style-type: none">• Significant capital required• Market risk	<ul style="list-style-type: none">• Large market justifies investment• Building early relationships with institutional investors and pharma





Impact: First-in-class small molecules to halt/slow **Parkinson's Disease**
& **other age-related disorders**



Competitive Advantage:

- **Patent-pending, potent, and selective inhibitors of USP30**
- **Patented** software technology
- **Multiple assets** in pipeline

Resources and Plan:

- **Accomplished** drug discovery team
- Funding from **NIH and MJFF**
- Clear flow-scheme demonstrating **value created** and upcoming **inflection points**



Panelists



**JEFF
CALCAGNO**

Head of JLABS San
Francisco Bay Area
**Johnson & Johnson
Innovation - JLABS**



**WILLIAM
HYUN**

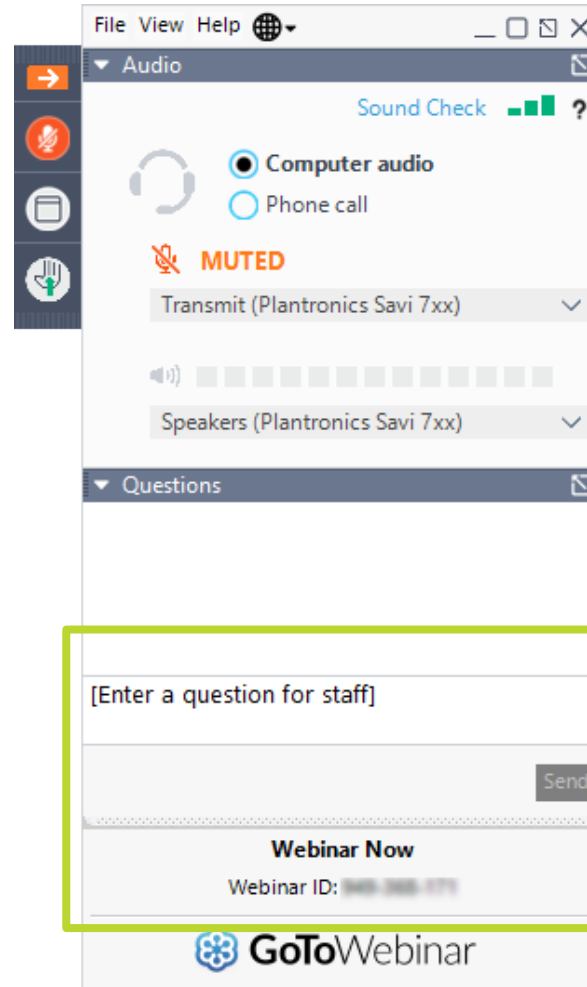
Venture Partner
Genoa Ventures



**LAURA A.
LANE**

Associate
Advent Life Sciences

Audience Q & A



The screenshot shows a GoToWebinar interface with a sidebar on the left containing icons for navigation, audio, chat, and hand-raising. The main window has a menu bar with 'File', 'View', and 'Help'. Below the menu bar are two expandable sections: 'Audio' and 'Questions'. The 'Audio' section includes a 'Sound Check' indicator, radio buttons for 'Computer audio' (selected) and 'Phone call', a 'MUTED' status with a microphone icon, a dropdown menu for 'Transmit (Plantronics Savi 7xx)', a volume slider, and a dropdown menu for 'Speakers (Plantronics Savi 7xx)'. The 'Questions' section is currently empty. A green box highlights the bottom portion of the interface, which includes a text input field with the placeholder '[Enter a question for staff]', a 'Send' button, and a 'Webinar Now' section displaying 'Webinar ID: 949-268-1771'. The GoToWebinar logo is at the bottom of the interface.

Type your questions or just say hello here.

AWARDEE RESULTS



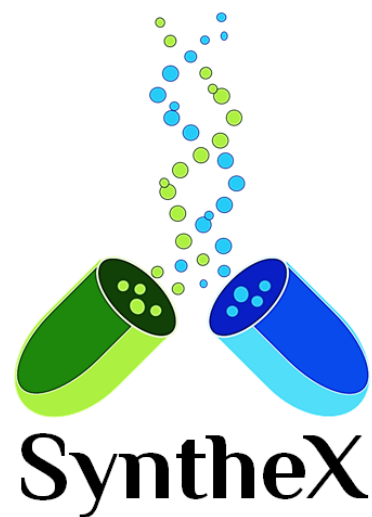
**BEN
JOHNSON**
Head of Early Stage
Life Science
Silicon Valley Bank

CONGRATULATIONS AWARDEES!

1ST



2nd



3rd



Upcoming JLABS Webinars

SEPT 14 | Catalyzing Innovation in TB Care: Solutions During COVID-19 and Beyond

SEPT 15 | Next in Naturals: A Look at the Future of Dietary Supplements and Their Potential Role in Our Health and Wellness

SEPT 16 | A Step Forward: Development of Effective Allogeneic CAR-T Strategies

SEPT 17 | A Master Introduction to Developing Cell and Gene Therapies

SEPT 18 | A Breath of Fresh Innovation: Advancing Remote Respiratory Monitoring

SEPT 22 | Precision Medicine and AI: Collaborating to Transform Biomedical Research and Development

OCT 8 | The Great Debate: Debt vs. Equity - with Silicon Valley Bank

For more information on JLABS events, please visit <https://jlabshub.splashthat.com>



Next in Naturals QuickFire Challenge on Immune-Support

Innovators are invited to submit breakthroughs ideas aiming to support healthy immune systems in babies, children, or adults. Ideas must be supported by scientific data and on track for commercialization in existing retail channels within 6-18 months.

**APPLY AT jlabs.buzz/immune-support
BY SEPTEMBER 18, 2020**



Awardee(s) will receive:



UP TO
\$50,000
IN GRANT FUNDING

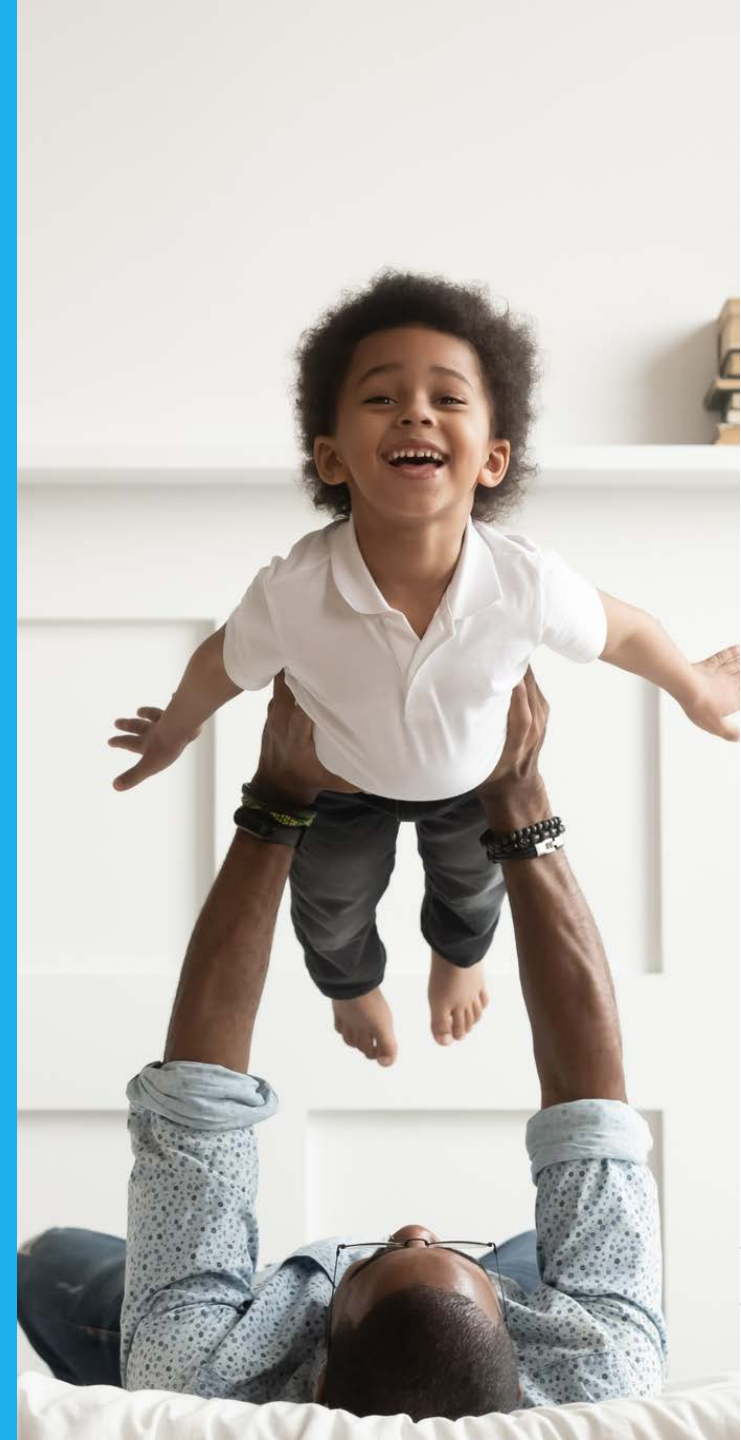


ONE YEAR
OF RESIDENCY AT JLABS



MENTORSHIP

FROM EXPERTS AT
JOHNSON & JOHNSON
FAMILY OF COMPANIES



Thank You for Attending!

You will receive the recording within 24 – 48 hours.

Additional questions, please send them to:

Ro Rabanillo

rrabanil@its.jnj.com

Interested in applying to JLABS? <https://jlabs.tv/apply>

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