# Esco Ventures X - A\*STAR PLATINUM Grant

24th April 2019



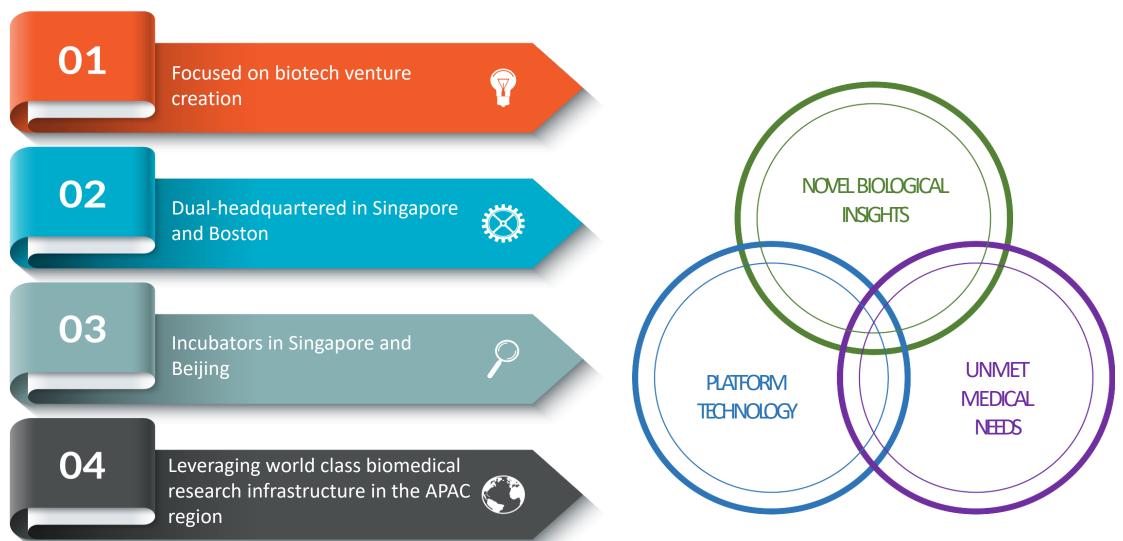






## Esco Ventures X: At a glance

Venture creation platform of Esco Ventures, focused on biotech company creation



### Esco Ventures X - A\*STAR PLATINUM Grant





Academic research grant to support A\*STAR affiliated PIs developing biotech-focused platform therapeutic technologies

#### **Fast streamlined application process**

3 months from start of application to Grant disbursement

#### Aim

To seed innovative scientific substrates into the local biotech ecosystem

#### **Details of Grant**

Up to **SGD 450,000** per project codisbursed by Esco Ventures X and A\*STAR

#### **Eligibility**

A\*STAR affiliated PIs with a research focus on biotech platform technologies



Grant that will provide funding for up to 18 months to achieve POC for platform technology

Research outcomes and all IP belong to A\*STAR Esco Ventures X to be positioned as preferred partner for commercialization of novel platform technology\*

Access to Esco Venture X's biotech venture building resources

Unique opportunity for PIs to become scientific co-founders of their own biotech companies

# Platform Therapeutic Technologies - Introduction





#### What?

A core technology or group of technologies used as a base upon which new applications are developed.

#### Examples:

- Engineered <u>nucleic</u> acids, cells, microorganisms, or proteins as drugs
- Algorithm or predictive tool to identify new drugs or drug targets

#### Why?

Up to 80% of the human proteome is currently undruggable

- New 'keys' required to unlock these challenging 'locks' to treat diseases that currently do not have treatment options, or have less-than-ideal therapies
- New information on these 'locks' are also useful in the design and identification of 'keys' to unlock them

#### Success

Platform technologies form the basis of many high-profile biotech companies today

- Companies with pipeline of multiple assets against various disease indications (Increased chances of bringing a drug candidate into the clinic)
- Heavy VC investment, early exits and early big pharma interest in platforms

# **Biotech Platform Technologies**

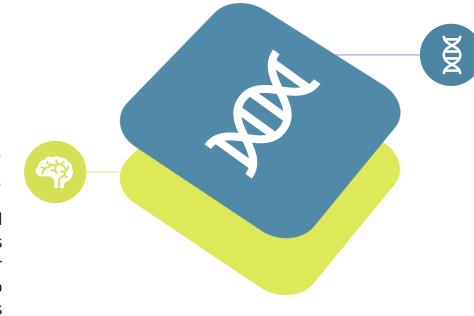
Two main classes





# Novel and high-value insight platforms

Backed by novel, high-value biological insights into diseases, engine that generates previously unappreciated pathways or targets, and presents new opportunities to discover drugs against these targets



# Product (therapeutic modality) platforms

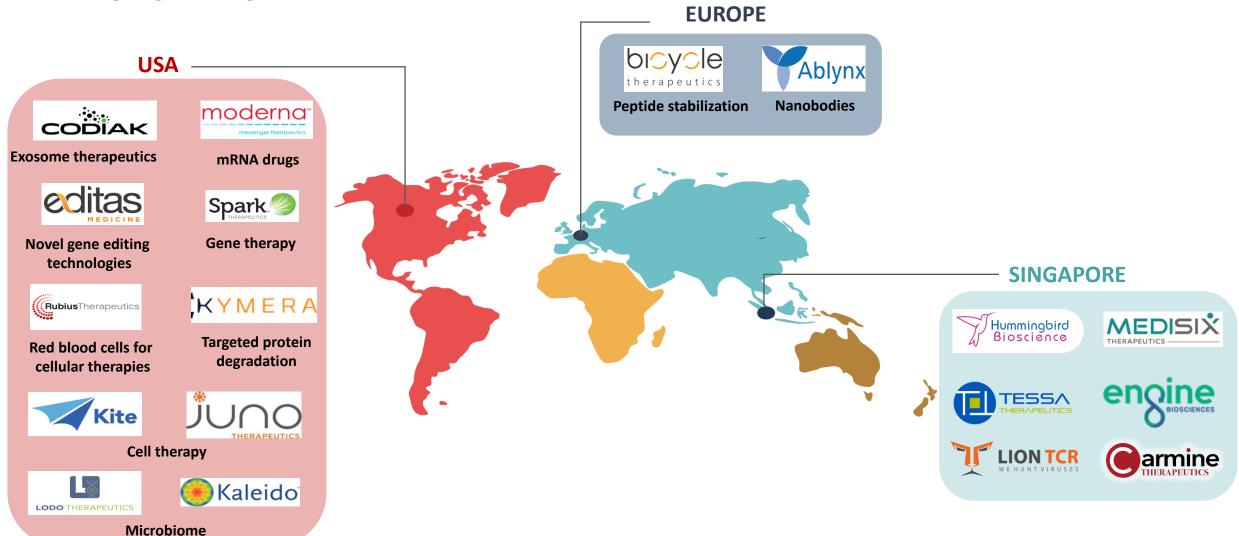
Engine that generates novel drug entities e.g. against intractable but high value biological targets

# Platform Therapeutic Technologies - Examples





Attracting large funding rounds with fast and attractive exits



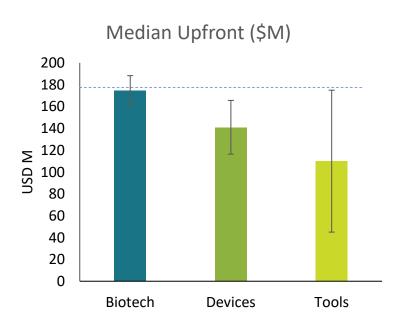


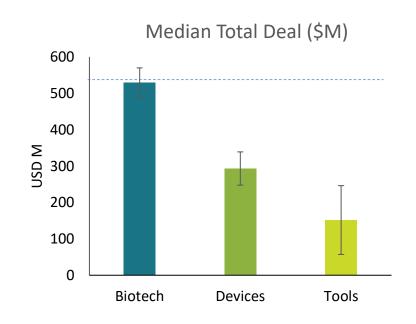


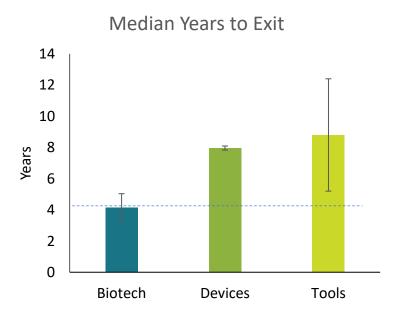


Biotech/Biopharma exits are faster and higher multiple than devices and diagnostics

# VC-Backed Big Exit M&A 2016 - 2018







## Case Study: Rubius Therapeutics

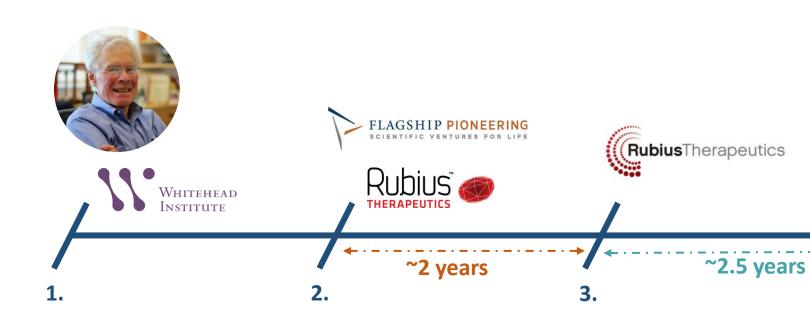


~9 months



U.S. FOOD & DRUG

ADMINISTRATION



#### **Academic technology**

Research discoveries from academic labs of Professors Harvey Lodish and Hidde Ploegh of Whitehead Institute, MIT, as foundational technology behind Rubius' Red Cell Therapeutics (RCT) platform.

#### **Incubation**

Technology development in Flagship VentureLabs. Members of Flagship Pioneering (biotech VC firm in Boston) working closely with scientific co-founders to further adapt and develop technology into a novel therapeutic platform to generate functionalized red blood cells as a novel cell therapy modality against cancer, autoimmune and rare diseases.

#### First disclosed financing

Rubius Therapeutics emerges from stealth with a USD 25M investment from Flagship Pioneering.

**IPO** 

As a company with only preclinical assets, Rubius raised another USD 220M in subsequent private fund-raising rounds, before listing on NASDAQ and raising a total of USD 241M at a valuation of USD 1.8B

Nasdag

#### IND filing

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First RCT clinical trial IND approved by FDA, for rare disease phenylketonuria

## Why work with Esco Ventures X?

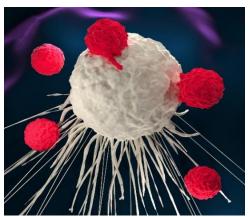




Active and established player in the local ecosystem with a pipeline of Biotech ventures

#### CURRENT PIPELINE











#### **Carmine Therapeutics**

Red blood cell extracellular vesicle-based platform for gene therapy

Winner of the 2019 Bristol-Myers Squibb LabCentral Golden Ticket

#### **PairX Therapeutics**

TCR-based T cell therapies directed against cancer shared neoantigens.

#### **NuevoCor**

Gene therapy for heart indications

#### **Morphosis Program**

Talent pool of Venture Fellows that continuously scout for promising project leads for pipeline expansion. Selected Fellows become Associates to take on key roles in NewCo formation.

#### **PLATINUM Grant**

Grant to support A\*STAR affiliated PIs in developing biotech platform technologies, and the opportunity to co-found a biotech company

## Why work with Esco Ventures X?

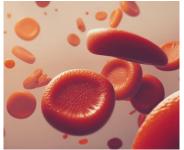
Phase I





The Esco Ventures X Morphosis Fellowship Program has successfully seeded new ventures for pipeline expansion





Morphosis Fellows that are involved in the founding of Esco Ventures X latest new ventures



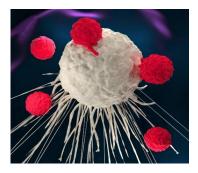
Tenzin Gocha, PhD

Director of Scientific & Business

Operations, Carmine Therapeutics









Mayura Wagle, PhD
Founding Member, PairX
Therapeutics

The PLATINUM Grant will further enhance efforts to uncover promising and breakthrough science and co-found more Biotech start-ups with A\*STAR PIs.

# Overview of the Esco Ventures X – A\*STAR PLATINUM Grant







- Webinar info-session
- **Applications open**

Process

#### Scientific deck

Description of:

- Technology
- Existing or potential IP
- Proposed application

#### **Shortlisted projects**

Consultation with Esco Ventures X to prepare a pitch deck for the final panel showcase (including chart showing Gantt budget and milestones)

#### **Platform showcase**

selection Pitches to that committee will consist of members of:

- Esco Ventures X,
- A\*STAR
- and external parties

**Grant award** 

# Application close: 15th May







Quick and Easy application (summary, basic administrative information and a scientific presentation deck)



Esco Ventures X and A\*STAR BMRC have signed an NDA covering all BMRC RIs.

#### **Applicant particulars** – 1 slide

**Summary of proposed Platform Technology** – A maximum of 3 slides

- Provide an overall summary of the platform technology and its advantages
- Outline the possible therapies that can be developed using the platform
- What specific application is your lead product in and why?

#### Background IP Status- 1 slide

- Have any Technology Disclosures/Patent applications for background IP been filed with A\*ccelerate?
- Have you collaborated with any industry partners in the development of your platform technology, past and present?
- Is the background IP or any potential future foreground IP jointly owned by an industry partner?

**Undertaking** – 2 slides

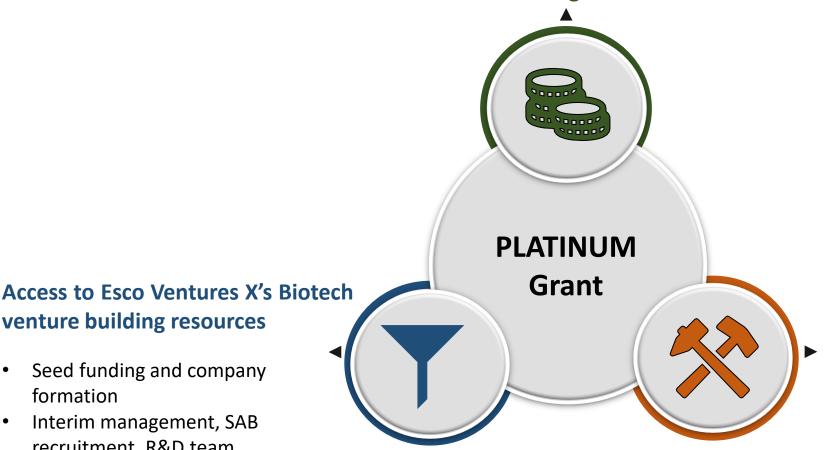
Research Slides – A maximum of 30 slides

## Advantages of the PLATINUM Grant





#### Access to research funding for biotech-focused R&D



Opportunity to found a globallycompetitive biotech company

Working with early stage biotech VC like Esco Ventures X to:

- Brainstorm scientifically
- Obtain later stage VC feedback
- Formulate venture hypothesis based on your research work

IP and licensing

formation

VC funding at Series A

venture building resources

Seed funding and company

Interim management, SAB

recruitment, R&D team

# **THANK YOU**

We are passionate about biotech venture creations, and also seek to help nurture startups. We look forward to partnerships with academic scientists to develop novel platform therapeutic technologies.

More information on our website <a href="https://www.escoventures.com/platinum-astar">https://www.escoventures.com/platinum-astar</a>

Direct your enquiries to platinum@escoventures.com