

Introduction to the Cell and Gene Therapy Catapult TMRN Seminar Series, 23rd June 2021

Dr Asimina Pantazi & Dr Sam Goldsmith

The Catapult Network



- A long-term investment to transform the UK's ability to create new products and services
- Open up global opportunities for the UK and generate sustained economic growth for the future
- Strategically located at sites across the UK



About us





Established by Innovate UK as a **not-for-profit**, independent centre



Bridge the gap between businesses and academic research



Provide access to unique technical **facilities** and **expertise** to help adopt, develop and exploit innovations



Part of a **world-leading network** of technology and innovation centres

It is our vision for the UK to be a global leader in the development, delivery and commercialisation of cell and gene therapies.

Where **businesses can start**, **grow and confidently develop** these transformative therapies, delivering them to patients rapidly and effectively.

Our mission



Accelerate	Complement		Innovate		Facilitate		
the commercialisation of innovations from research	industry and academia with unique technical facilities and expertise		in collaboration with academia and industry		operating in UK as a global centre; working with Government, the NHS and international regulators		
Cell and gene therapy specialists (>300)							
London		Stevenage		Braintree			
1,200m ² centre for industrialising cell and gene therapy manufacture		7,700m ² facility for cell and gene therapy manufacturing at scale		4,627m ² facility to develop technology transfer innovation for industrial scale cell and gene therapy manufacturing			
Industrialisation		Regulatory and clinical		Engagement			
 Process development Analytical development Manufacturing systems Supply chain 		 Regulatory Non-clinical safety Clinical delivery Programme management 		 Collaboration formation (e.g. consortia and 3-way collabs) Intellectual property and patent Health economics Reimbursement 			









Our facilities





London

- 1,200m² purpose built centre located on the 12th floor of Guy's Hospital
- Analytical characterisation
- Process development
- Viral vector
- Stem cell differentiation
- 10th floor collaboration laboratory



Stevenage

- 7,700m² facility designed specifically for cell and gene therapy manufacturing at scale
- 12 segregated cleanroom modules
- Secure collaborative model
- At the centre of the third largest cell and gene therapy cluster globally
- Expanded QC capacity and capability



Braintree

- 4,627m² facility to support national COVID-19 vaccine manufacturing
- Fully operational by Dec 2021 to meet immediate vaccines demand
- To become innovation centre for cell and gene therapies and develop technology transfer innovation









Core model: in-kind support, e.g. CoR

Collaborative model: identify and collaboratively apply to grant to carry out work

Commercial model: fee for service





CoR - What is our definition of an investible opportunity?



A great differentiated idea

Convincing in vitro data to support MoA

Relevant in vivo model and endpoints

A reliable high yielding scalable manufacturing process

Pre-clinical Safety & Pharmacology data

An experienced entrepreneurial team

A clear vision of their medical product

A clear realistic Clinical PoC study design

Thorough HEMA model to support value

Freedom To Operate

CoR - Investible Opportunity Development





A great differentiated idea Convincing in vitro data to support MoA Relevant in vivo model and endpoints External A reliable high yielding scalable manufacturing process Consultants Pre-clinical Safety & Pharmacology data An experienced entrepreneurial team A clear vision of their medical product HEMA A clear realistic Clinical PoC study design Thorough HEMA model to support value Regs IP Freedom To Operate

CoR – Investible Opportunity Process



1. Investable Opportunity Clinic	2. CoR Collaboration
 Use diverse expertise of CoR team to review projects from academics and Spin Outs Each person reviews the Investable Opportunity from their respective speciality 	Formal collaboration with academic group or spin-outDesk based WPsLab based WPs
 Provides a high level report on what needs to be done to get from amber to green Can be used in pitch decks and business plans 	 Focused on getting amber lights green Collaborate with 3rd party (VC/Funder)
 Forms basis of diligence document for 2 	

3. Pitch Training and VC Engagement

Providing template VC pitch decks, dry run pitch training, VC introductions

Supporting UK University Innovation & Spin-outs



Collaborating Universities

Bristol – <u>PureSprinq</u> Kings College London Imperial College Manchester Cambridge Oxford QMUL Birmingham Babraham Sheffield – <u>Rinri Therapeutics</u> Leeds Edinburgh







Funding body	Call	Applicant	Funding	Opening	DD
IBioIC	Innovation Fund	Academia – industry collab	£100K	Open	01/07/21
MRC	MRC Development Pathway	Academia, RTO, NHS	£1m	Open	21/07/21
IUK	SMART	SME, acad-RTO collab	£25K-£2m	Open	25/08/21
IUK	BMC	SMEs, acad-RTO collab	£25K-£4m	Open	26/08/21
MRC	MRC experimental medicine grants	Acad, RTO, NHS	No limit	15/07/21	09/09/21
MRC	MRC neurosciences & mental health research programme	Industry- academia collab	£1m+	Open	29/09/21
UKRI	DPFS	Academia, acad- ind collab	No limit	15/10/21	24/11/21



Name	Role	email
Asimina Pantazi, PhD	Business Development Executive UK North	asimina.pantazi@ct.catapult.org.uk
Sam Goldsmith, PhD	Sr Manager of Commercialisation of Research	sam.goldsmith@ct.catapult.org.uk

CATAPULT Cell and Gene Therapy

Cell and Gene Therapy Catapult is committed to ensuring high standards of research integrity and research best practice in the activities we carry out. We subscribe to the principles described in the UK concordat to support research integrity.

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12th Floor Tower Wing Guy's Hospital Great Maze Pond London SE1 9RT

info@ct.catapult.org.uk ct.catapult.org.uk Twitter: @CGTCatapult



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