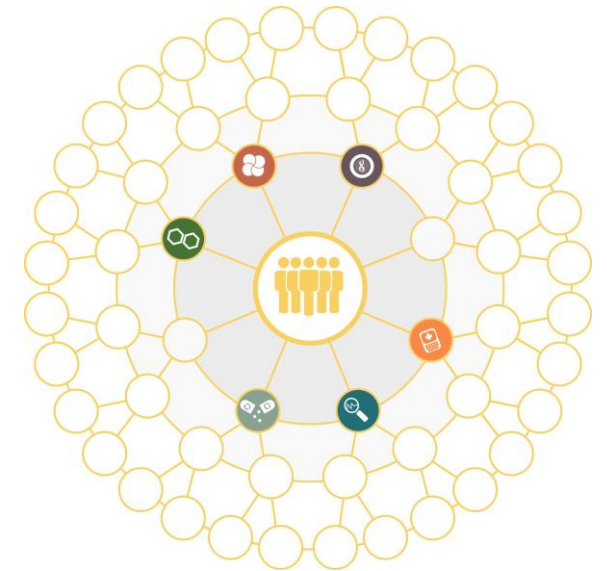
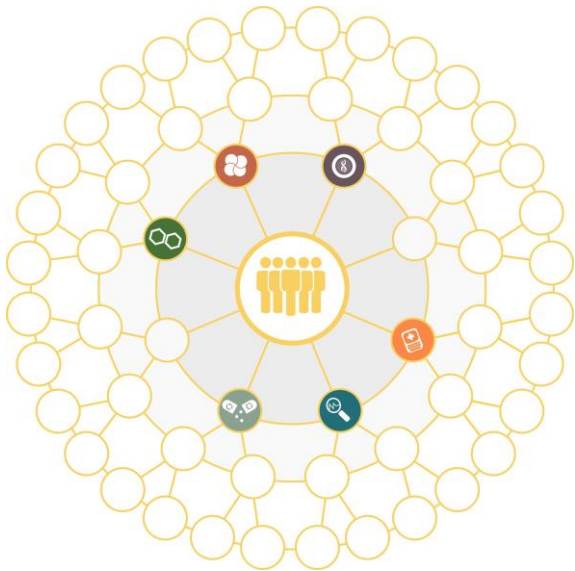


Welcome to the Therapeutic Innovation Networks Launch

12th July 2018

**PRESENTATIONS
COMMENCE AT 5pm**

<http://www.ucl.ac.uk/slms/ovph/TINs>



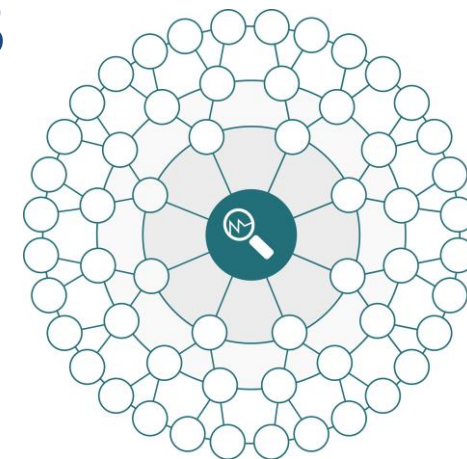
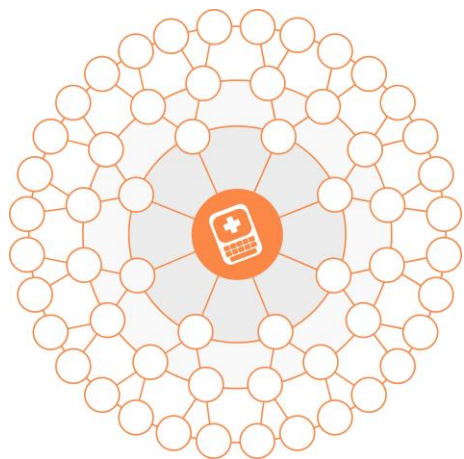
AGENDA



17.00	Introduction	Prof David Lomas, Vice Provost (Health)
17.05	TINs vision	Prof Bryan Williams, Director UCLH BRC
17.10	Devices TIN, Diagnostics TIN	Dr Rebecca Shipley, Chair
17.15	Small Molecule TIN	Prof Bart Vanhaesebroeck, Chair
17.20	Biologics TIN	Prof Paul Dalby, Chair
17.25	Repurposing TIN	Prof Oscar Della Pasqua, Chair
17.30	Cell, Gene and Regenerative Medicines TIN	Prof Emma Morris, Co-chair
17.35	Closing remarks	Prof Thomas Voit, Director GOSH BRC
17.40-18.30	TIN membership sign-up; Networking	

This event is supported by SLMS, NIHR BRCs and Innovation and Enterprise.

Therapeutic Innovation Networks Devices Diagnostics 12th July 2018



Chair: Dr Rebecca Shipley

Therapeutic Innovation Networks Launch



UCL Institute of
Healthcare Engineering

www.healthcare-eng.ucl.ac.uk



UCL TRANSLATIONAL RESEARCH OFFICE



<https://www.ucl.ac.uk/healthcare-engineering/>

UCL Institute of Healthcare Engineering presents

Autumn RESEARCH SYMPOSIUM

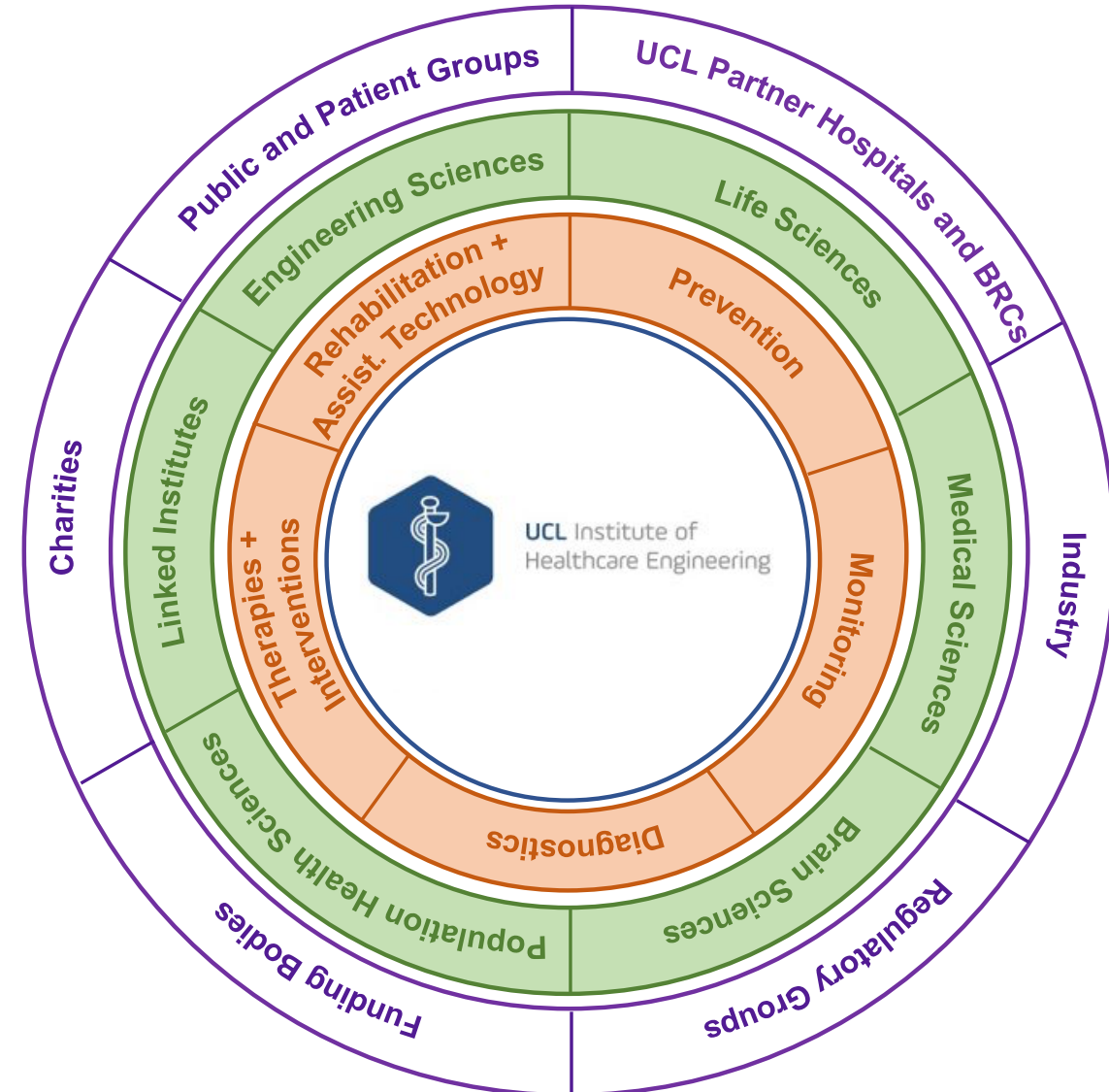
Monday 1 October 2018
Wellcome Collection
183 Euston Road, London

Prevention | Monitoring | Diagnostics | Therapies & Interventions | Rehabilitation & Assistive Technologies

Hear the latest in healthcare engineering research across UCL with talks and posters from leading engineers, scientists and clinicians

9.30 - 17.00 Presentations and posters
17.30 - 20.00 Networking drinks and prize-giving

UCL Institute of Healthcare Engineering
www.ucl.ac.uk/healthcare-engineering
Join the conversation #IHESymposium2018
@health_eng



Key:

- Themes
- Internal
- External

Linked Institutes:

- Francis Crick Institute
- Alan Turing Institute
- Farr Institute of Health Informatics Research
- Institute of Digital Health
- Institute of Robotics
- Global Disability Innovation Hub

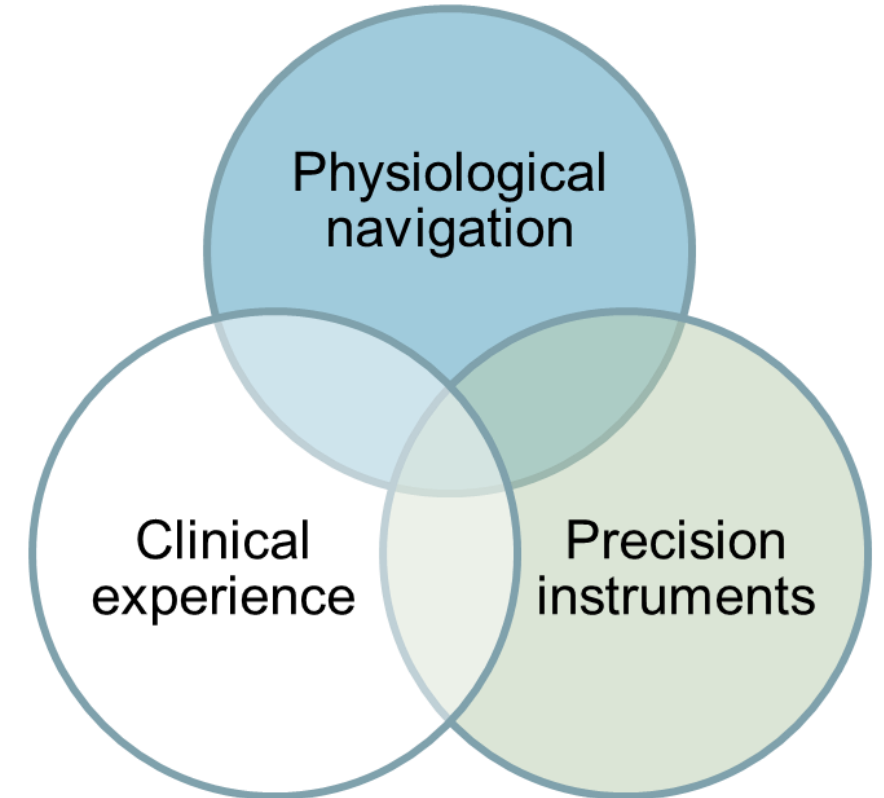
Enabling Vehicles:

- UCL Business
- UCL Joint Research Office
- UCL Public Engagement Unit
- UCL Technology Fund
- UCL Technology Research Office



- A unified Centre of excellence for **co-location of equipment and researchers** with expert skills and know-how **will catalyse the clinical translation of engineering innovations**
- The core team and infrastructure of the WEISS Centre **will cross the translational gap** by implementing **best practices in design and development** to ensure device/software safety and shorten bench-to-bedside time

<http://www.ucl.ac.uk/interventional-surgical-sciences>



Health technology assessment

System integration

Quality management



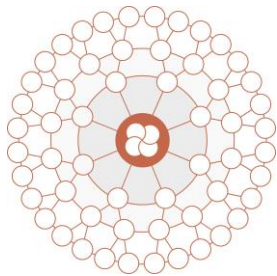
- **AIM:** To drive therapeutic innovation in the use and development of (a) medical devices and (b) diagnostics for effective translation into the clinic.
- **Short-term objectives:**
 - Utilise the IHE and the WEISS Centre to host the TIN and provide the infrastructure to translate research into the clinic, working closely with the TRO.
 - Establish a workflow for the design, development and evaluation of medical devices (QMS, Ethics Applications, Regulatory Guidance).
 - Communicate the innovation projects and pathway to the UCL community and external partners.
 - Educate project teams in regulation requirements and develop a teaching programme for use across the university.
 - Reinforce functional link with UCL Partner Hospitals

Contact us

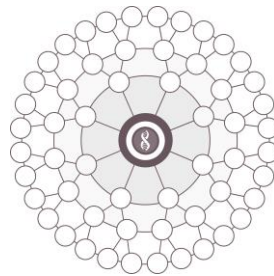


<http://www.ucl.ac.uk/slms/ovph/TINs>

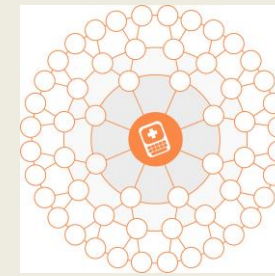
<https://www.ucl.ac.uk/slms/ovph/TINs/Registration>



biologicstin@ucl.ac.uk



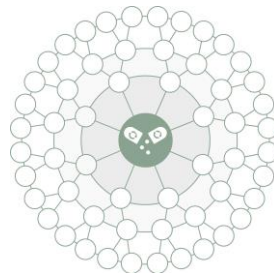
cgrmtherapies@ucl.ac.uk



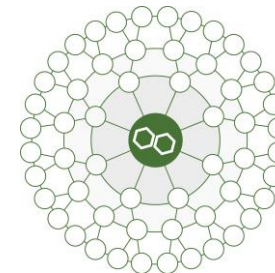
devicestin@ucl.ac.uk



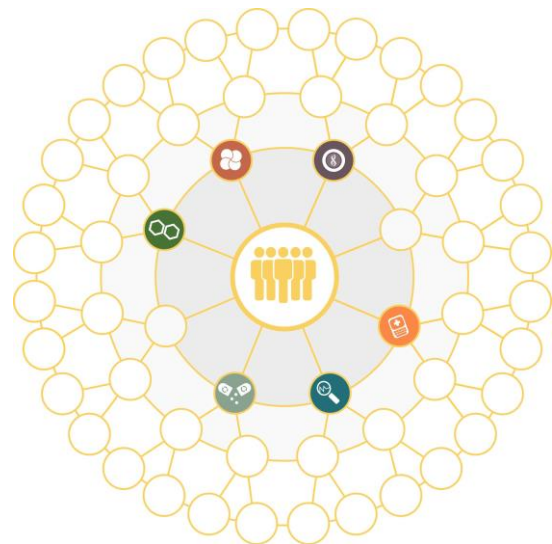
diagnosticstin@ucl.ac.uk



repurposingtin@ucl.ac.uk

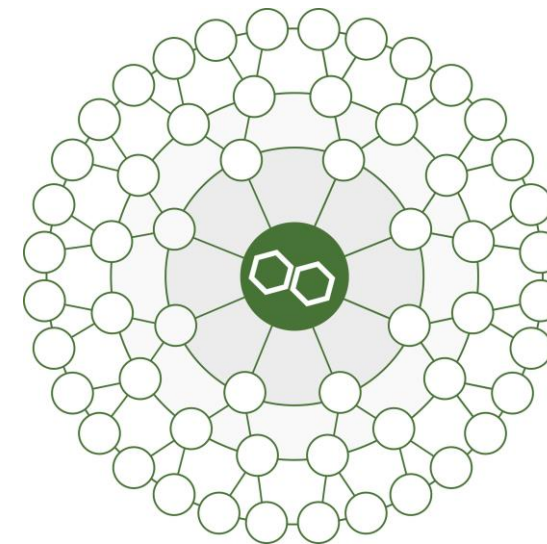


smallmoleculetin@ucl.ac.uk



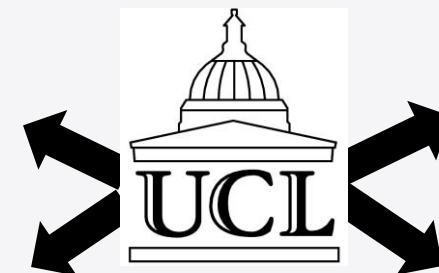
Small Molecule TIN

12th July 2018



Chair: Professor Bart Vanhaesebroeck
Therapeutic Innovation Networks
Launch, 12th July 2018

- To build a vibrant community for small molecule drug discovery at UCL
- To link that community to the wider drug discovery industry
- To shape small molecule drug discovery at UCL



Small Molecule TIN - Community



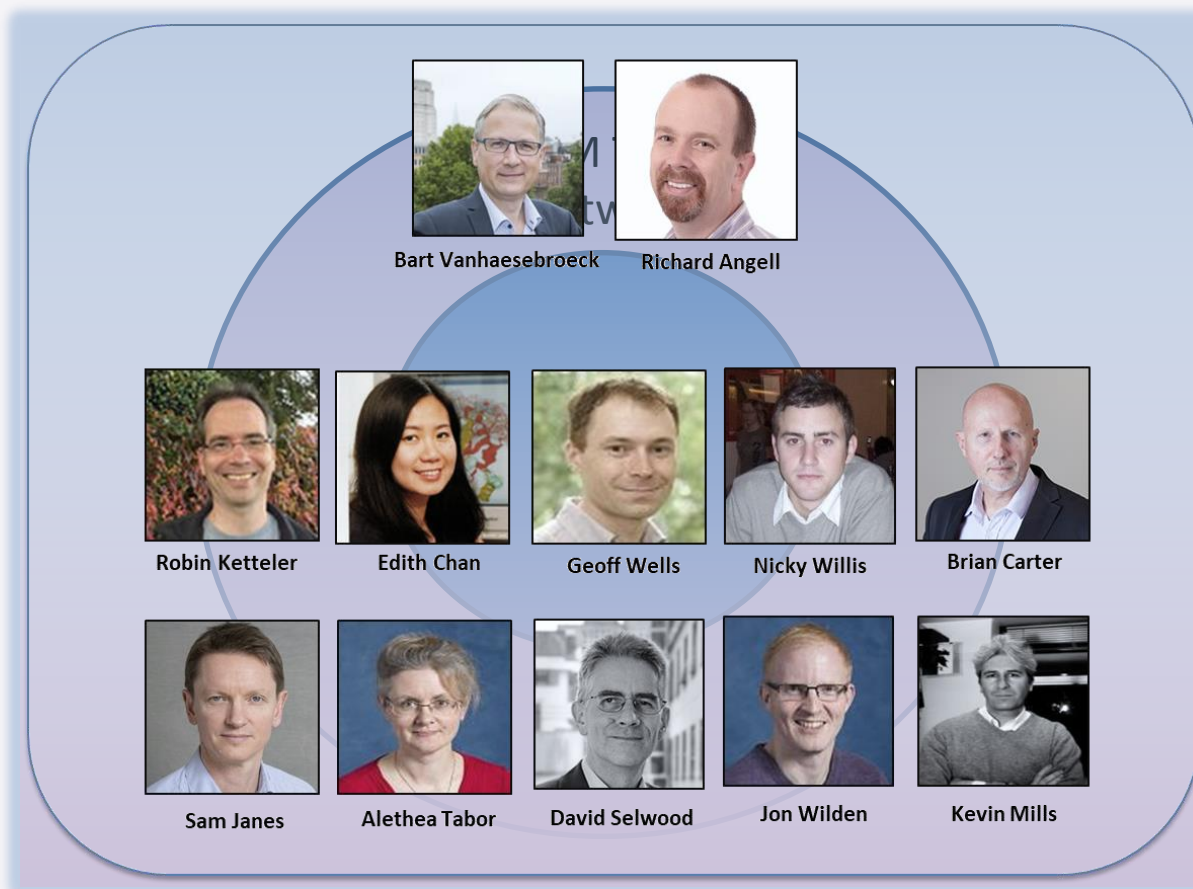
GOSH – ICH (UCL)



UCLH - UCL



Moorfields – IOO (UCL)



Small Molecule TIN - Objectives



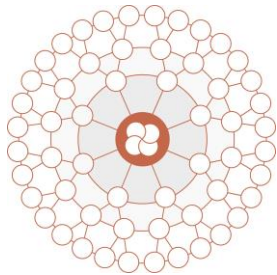
Short term Yr 1-2	<ol style="list-style-type: none">1. Established, with UCLH BRC Research Theme representation2. Catalogue existing SM drug development opportunities & capabilities3. Educate UCL researchers for SM drug discovery @ UCL
Mid term Yr 3-4	<ol style="list-style-type: none">1. A pipeline of SM drug discovery projects with exemplars in optimisation towards clinical development2. Have established at least 1 industrial collaboration supporting UCL-based SM drug discovery activity
Long term >5 Yrs	<ol style="list-style-type: none">1. Clinical impact: Projects enabled for FTIH/PoC clinical evaluation (UCL BRCs)2. Scientific impact: Maturing portfolios of approaches founded on UCL science3. Commercial impact: UCL-originated projects, established as SMEs and/or partnered with industry

Contact us

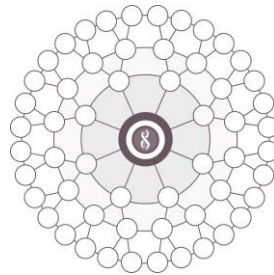


<http://www.ucl.ac.uk/slms/ovph/TINs>

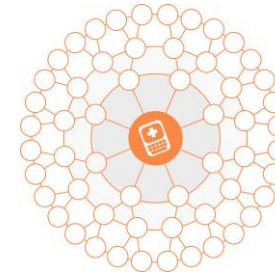
<https://www.ucl.ac.uk/slms/ovph/TINs/Registration>



biologicstin@ucl.ac.uk



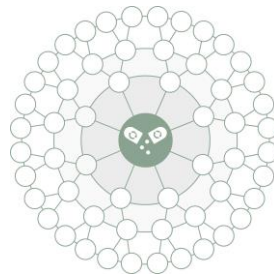
cgrmtherapies@ucl.ac.uk



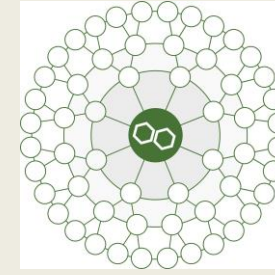
devicestin@ucl.ac.uk



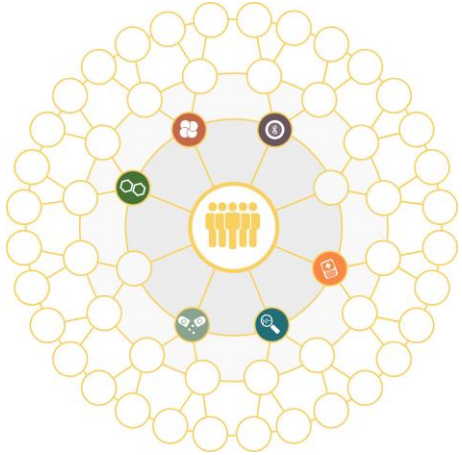
diagnosticstin@ucl.ac.uk



repurposingtin@ucl.ac.uk

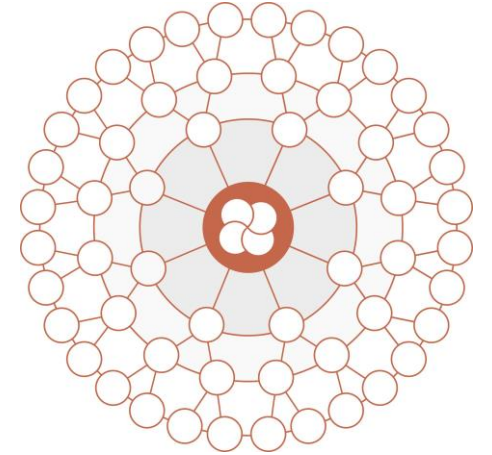


smallmoleculetin@ucl.ac.uk



Biologics Therapeutic Innovation Network

12th July 2018



Chair: Professor Paul Dalby
Therapeutic Innovation Networks Launch

Protein Therapeutics

Antibodies

Peptides

Oligonucleotides

Vaccines

Exosomes

Conjugates

Biosimilars

Synthetic Biology



1. A connected UCL community with a clear map of its own capabilities and therapeutic pipeline
2. A community working together to identify and overcome obstacles to translation
3. A community mobilised to respond to strategic opportunities
4. An outward-facing community projecting an informed picture of UCL Biologics externally
5. A community actively building sustainable external partnerships to drive translation
6. A community working internally and externally to shape future opportunities to accelerate therapeutic translation
7. A strengthened pipeline with increased discovery, pre-clinical and clinical projects

Healthcare Impact Partnerships 2018/2019

↑ Issue date:	14 June 2018
📅 Opening date:	14 June 2018
🕒 Closing date:	23 August 2018 at 16:00
📌 Status:	Open
🏷️ Tag:	Invitation for proposals
📄 Related themes:	Digital economy Engineering Healthcare technologies ICT Manufacturing the future Mathematical sciences Physical Sciences

Technology Touching Life Networks

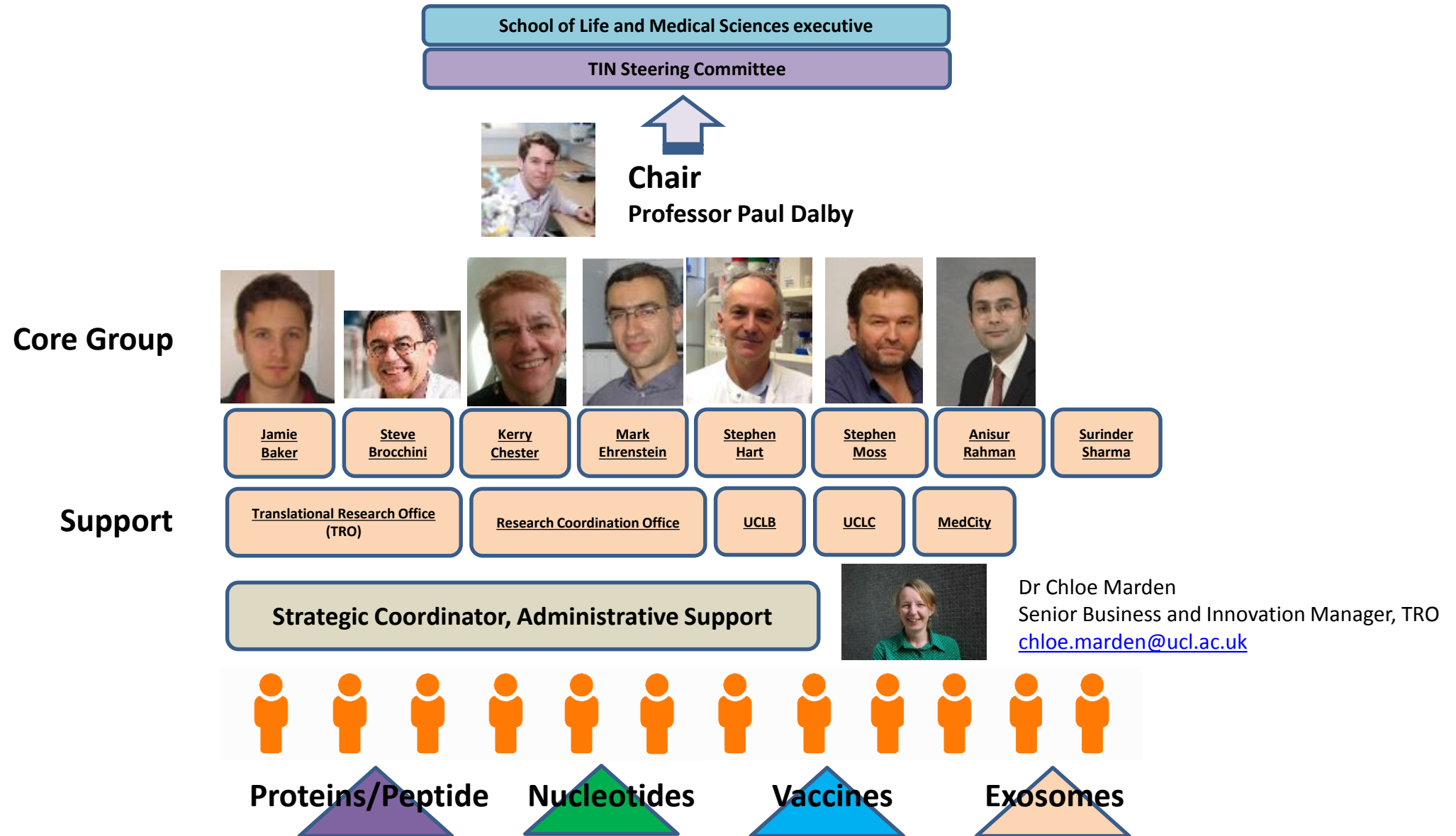
- **Status:** Closed
- **Open date:** 24 May 2017
- **Closing date:** 27 Jul 2017 17:00 GMT+1
- **Type:** Grants, MRC strategic
- **Categories:**

Interdisciplinary Research Collaboration (IRC) in Targeted Therapeutic Delivery

↑ Issue date:	05 January 2018
📅 Opening date:	05 January 2018
🕒 Closing date:	13 March 2018 at 16:00
📌 Status:	Closed
🏷️ Tag:	Invitation for proposals
📄 Related themes:	All themes

We need to be better prepared!

Biologics Therapeutic Innovation Network



Target validation /
Diagnostics

Product leads ?

Product conjugation

Manufacturing tech

Analytics ?

Formulation ?

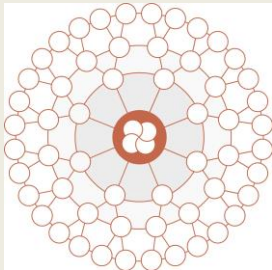


Contact us

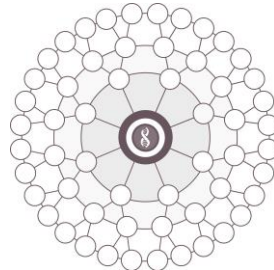


<http://www.ucl.ac.uk/slms/ovph/TINs>

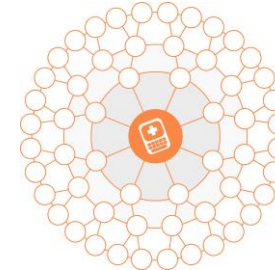
<https://www.ucl.ac.uk/slms/ovph/TINs/Registration>



biologicstin@ucl.ac.uk



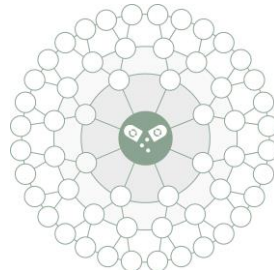
cgrmtherapies@ucl.ac.uk



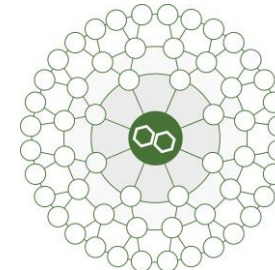
devicestin@ucl.ac.uk



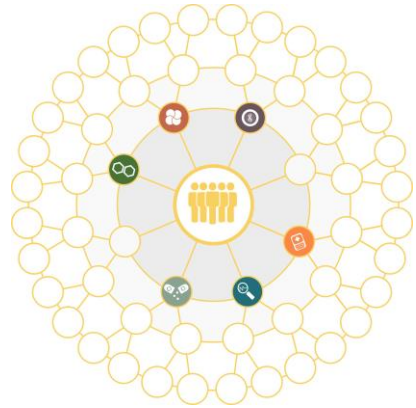
diagnosticstin@ucl.ac.uk



repurposingtin@ucl.ac.uk

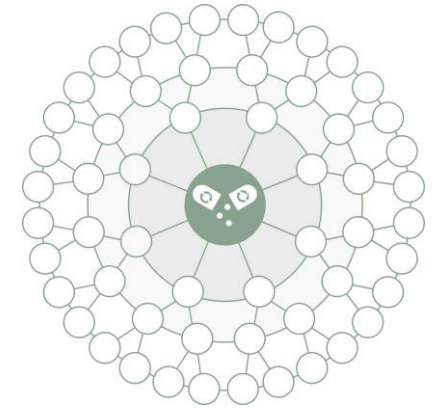


smallmoleculetin@ucl.ac.uk



Repurposing Therapeutic Innovation Network

12th July 2018



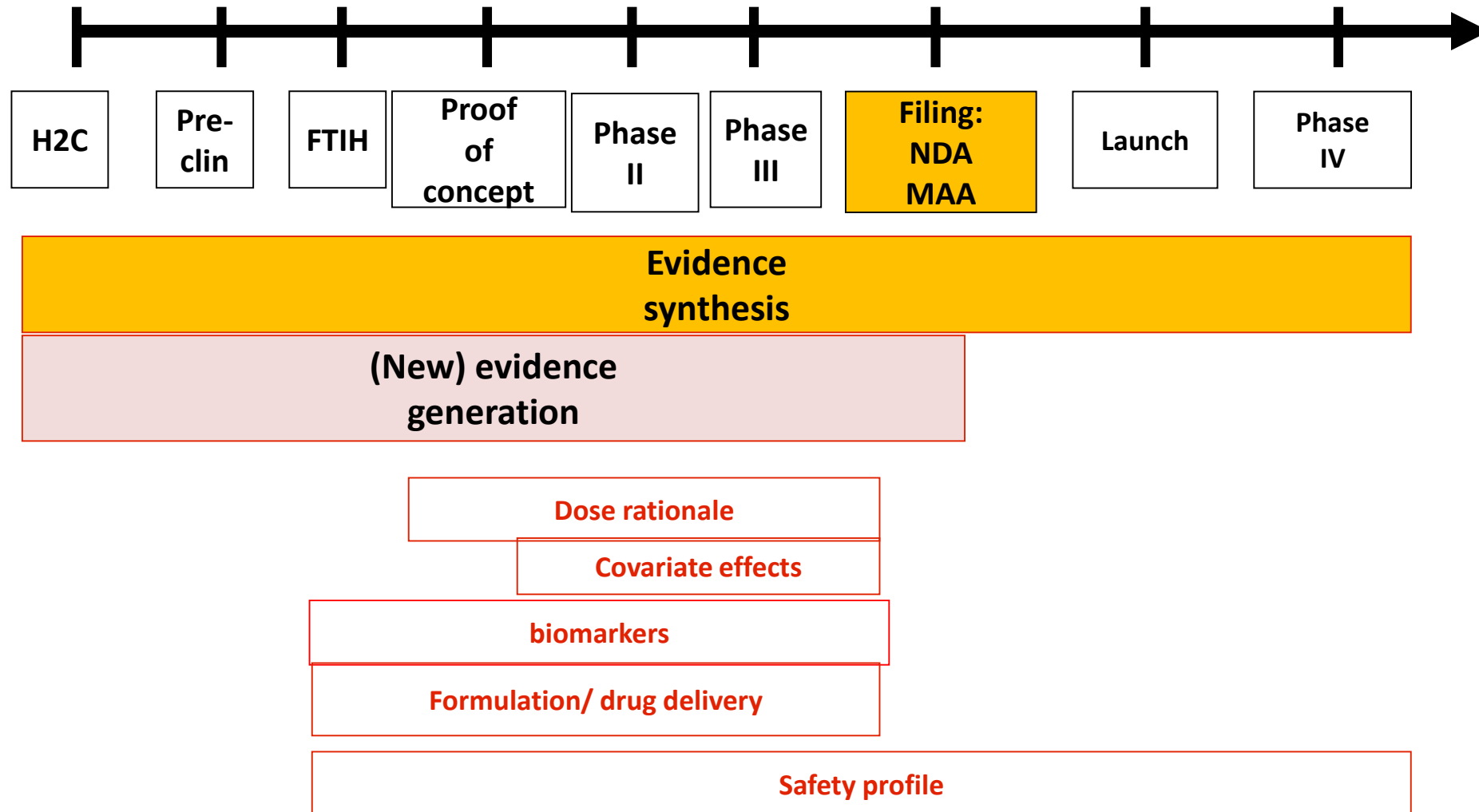
Chair: Professor Oscar Della Pasqua
Therapeutic Innovation Networks Launch

Short-term objectives

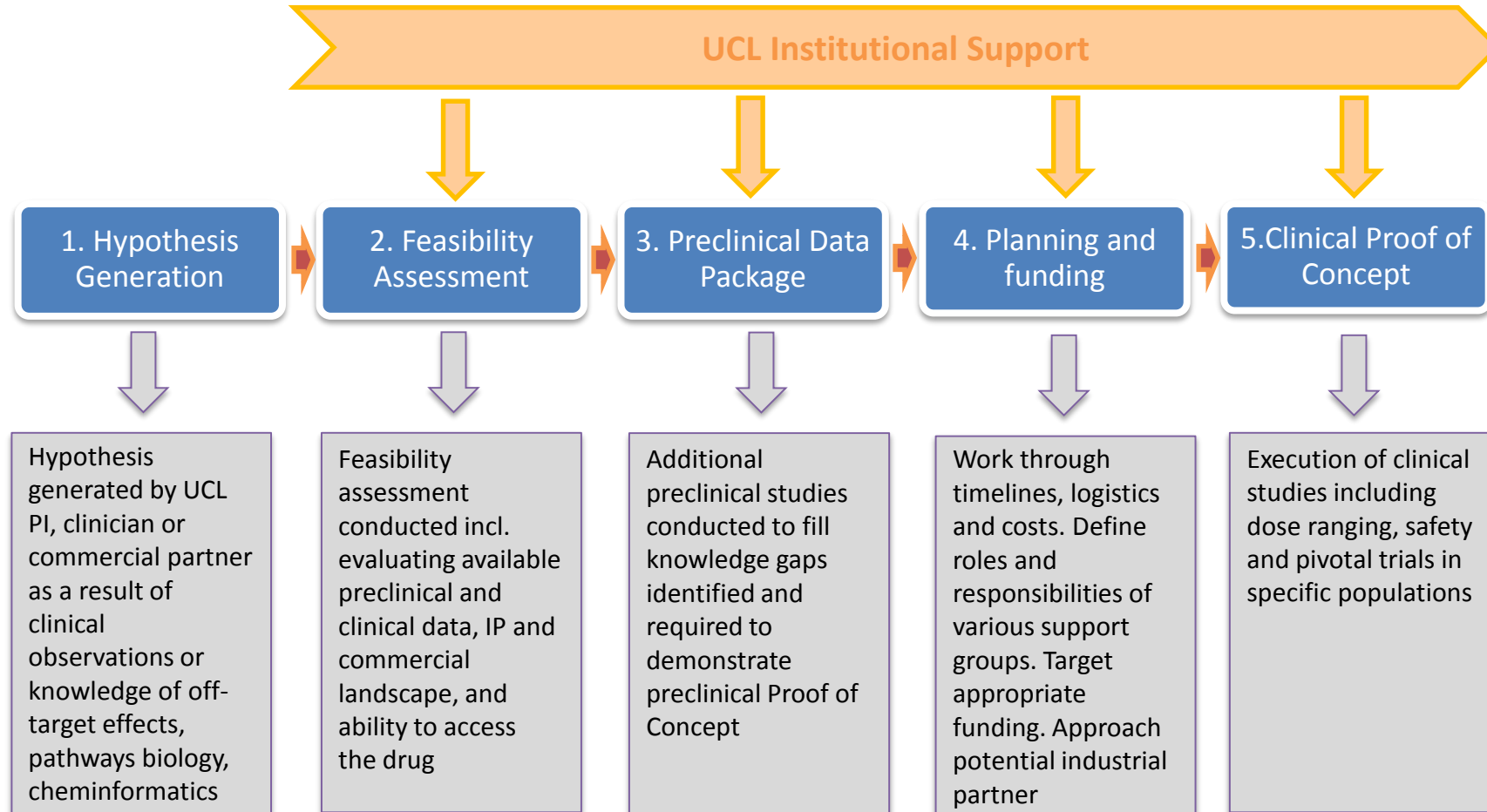
Objectives	Deliverables
1. Identify the UCL repurposing community	<ul style="list-style-type: none">• Scope and engage with new members• Overview of key issues within the community• Plan theme and expected outcomes for workshop
2. Attract and educate the existing repurposing community	<ol style="list-style-type: none">1. Drug repurposing - opportunities for new indications2. Formulation - Reformulation can access different indications/ patient cohorts.3. Rare disease - Dose rationale, support protocol design and increase confidence (evidence synthesis)
3. Workshop: Repurposing Opportunities	<p>Participants: UCL community, industry, funders</p> <ul style="list-style-type: none">• Case studies of ongoing activity• Explore new opportunities• Funding/translation advice.

Core Team – Oscar Della Pasqua (Chair), Pamela Tranter (TRO), Richard Fagan (UCLB),
Representatives from each activity in objective 2 (TBC)

Clinical Development Plan



TIN: Pathway to Drug Repurposing at UCL



Example of Drug Repurposing

Nicotinamide Riboside for mitochondrial diseases

Question1: What is the dose rationale for NR in patients with mitochondrial diseases?

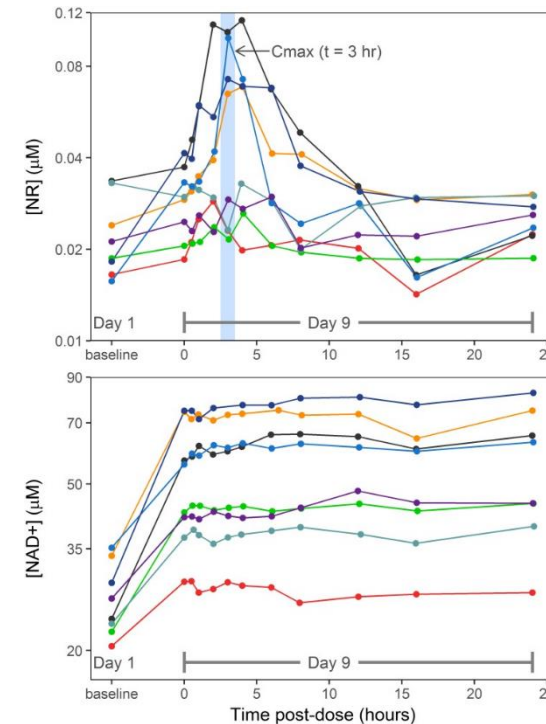
Question2: How can NR be delivered as a medicinal product given that it is currently approved as a food supplement

Question3: Can target exposure be achieved using current formulations/route of administration?

RESEARCH ARTICLE

An open-label, non-randomized study of the pharmacokinetics of the nutritional supplement nicotinamide riboside (NR) and its effects on blood NAD⁺ levels in healthy volunteers

Sophia E. Airhart^{1*}, Laura M. Shireman², Linda J. Risler², Gail D. Anderson³, G. A. Nagana Gowda^{4,5}, Daniel Raftery^{4,5}, Rong Tian⁵, Danny D. Shen^{2,3}, Kevin D. O'Brien^{1*}

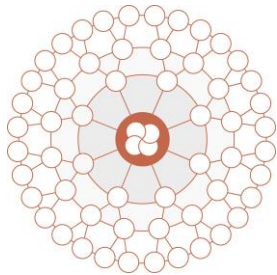


Contact us

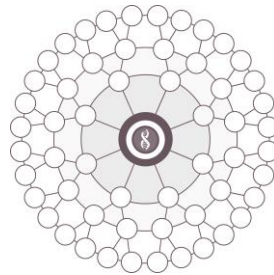


<http://www.ucl.ac.uk/slms/ovph/TINs>

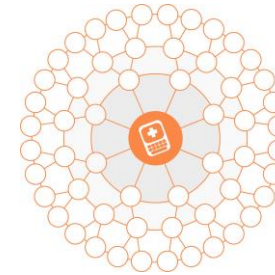
<https://www.ucl.ac.uk/slms/ovph/TINs/Registration>



biologicstin@ucl.ac.uk



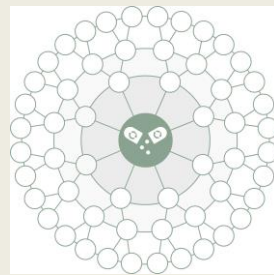
cgrmtherapies@ucl.ac.uk



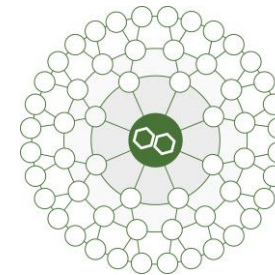
devicestin@ucl.ac.uk



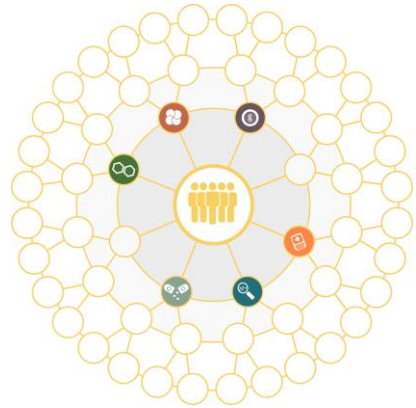
diagnosticstin@ucl.ac.uk



repurposingtin@ucl.ac.uk



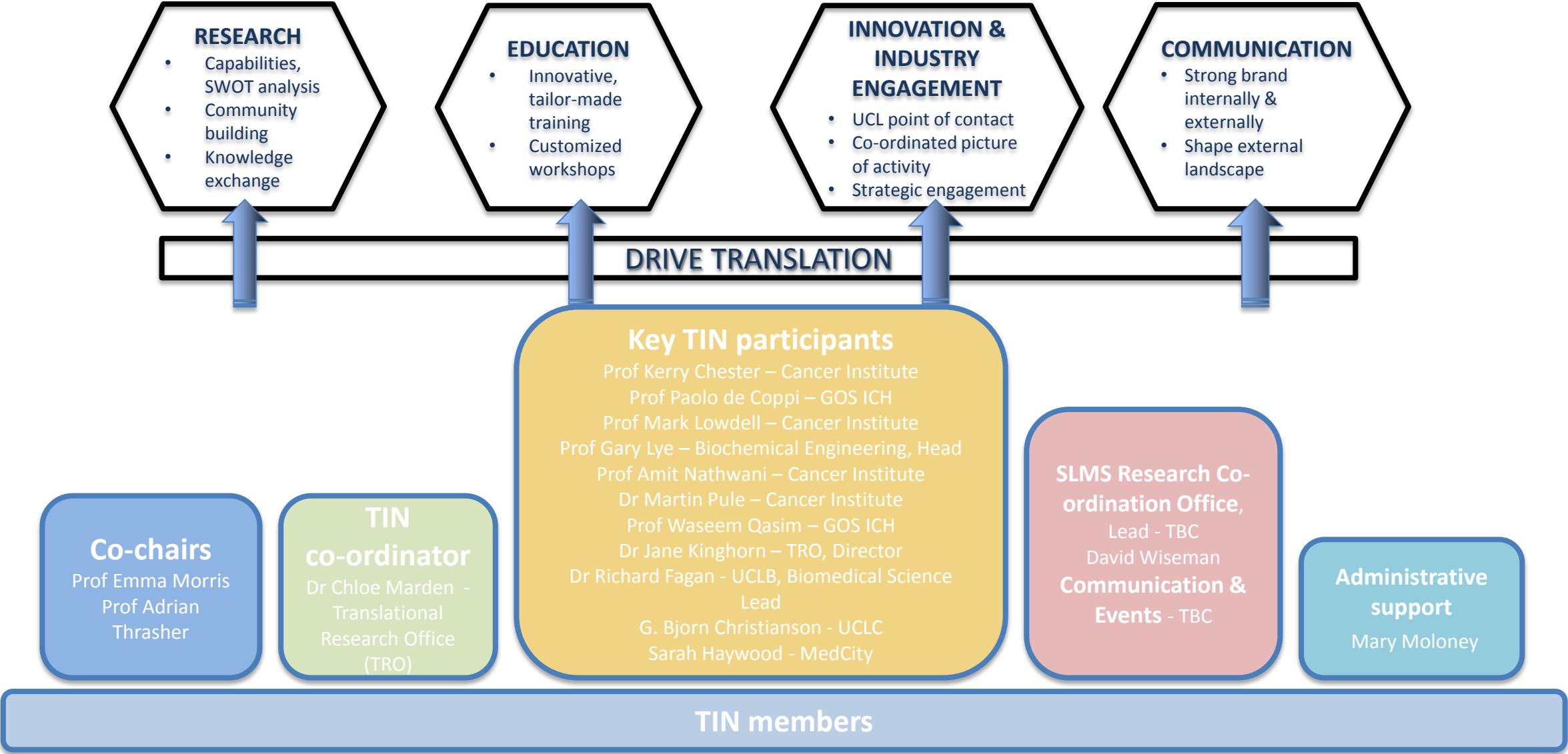
smallmoleculetin@ucl.ac.uk



Cell, Gene and Regenerative Medicines Therapeutic Innovation Network

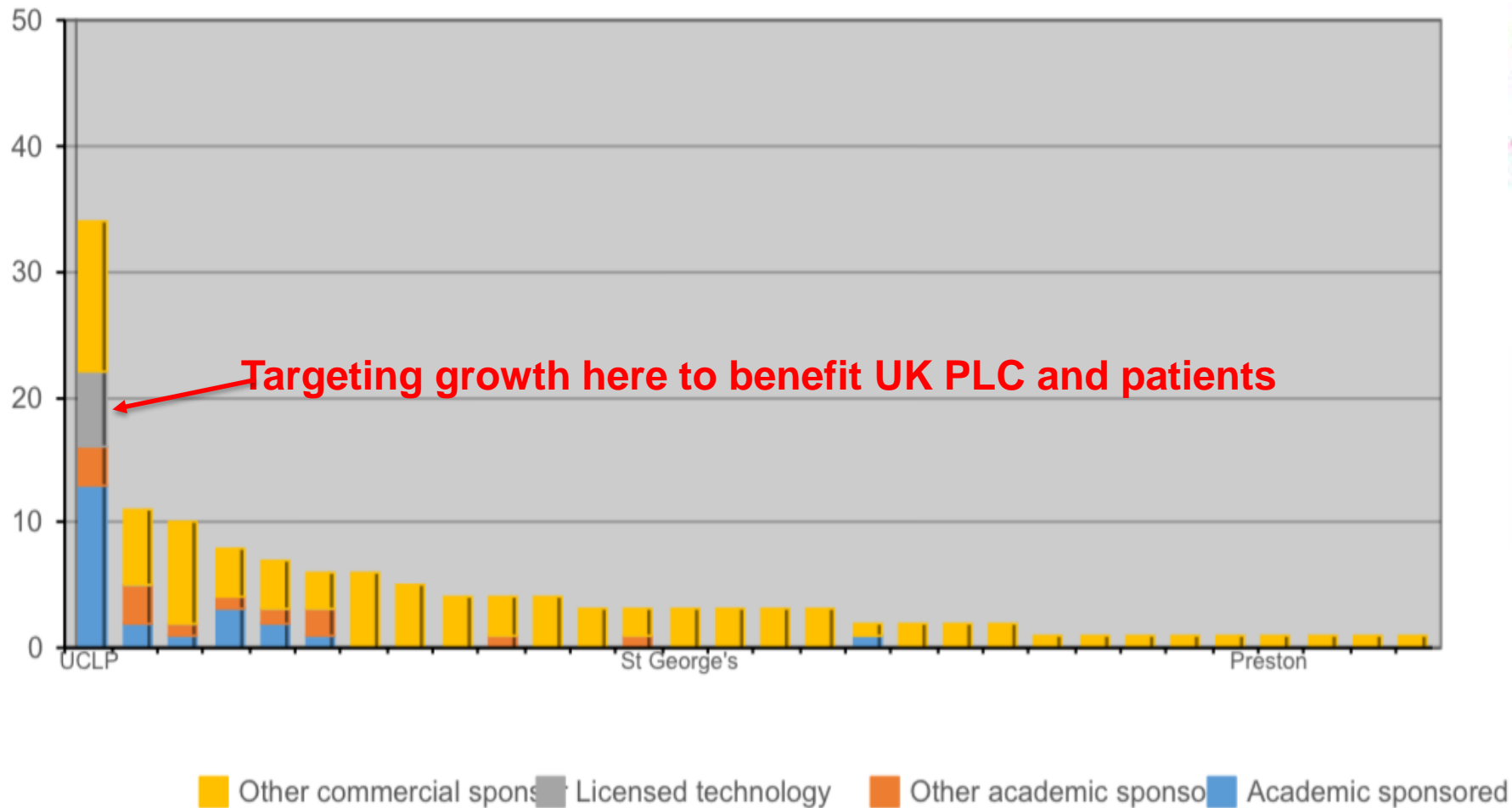
12th July 2018

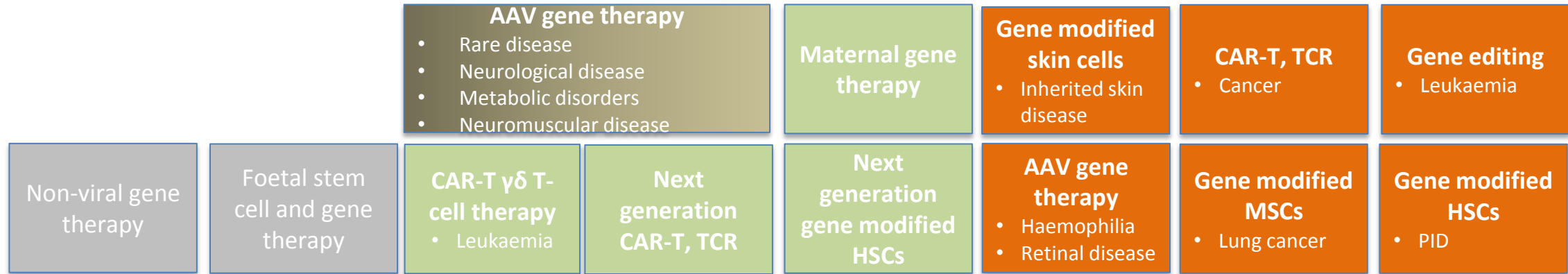
Chair: Professor Emma Morris
Therapeutic Innovation Networks Launch



UCLP: National impact in advanced therapies

ATMP clinical trials (Sept 2017)

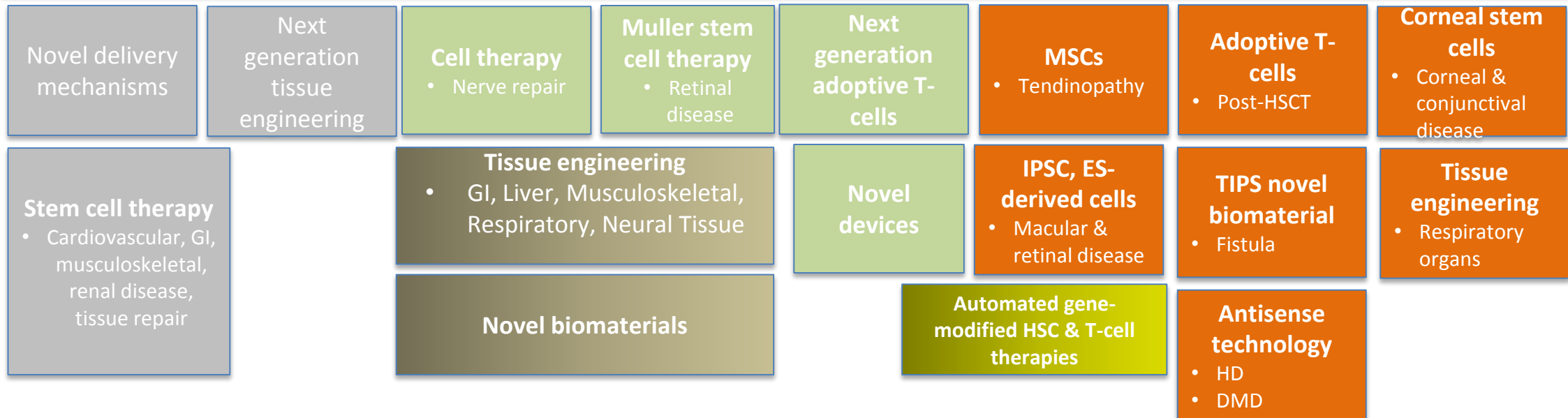




DISCOVERY & DESIGN

PRE-CLINICAL DEVELOPMENT

CLINICAL DELIVERY (OR SET-UP)

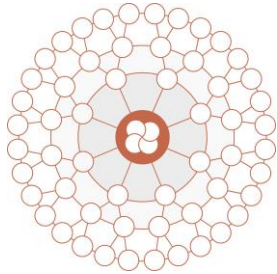


Contact us



<http://www.ucl.ac.uk/slms/ovph/TINs>

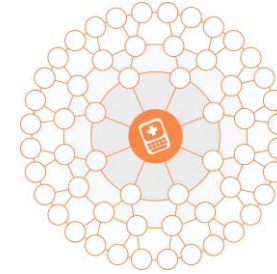
<https://www.ucl.ac.uk/slms/ovph/TINs/Registration>



biologicstin@ucl.ac.uk



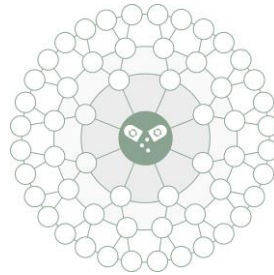
cgrmtherapies@ucl.ac.uk



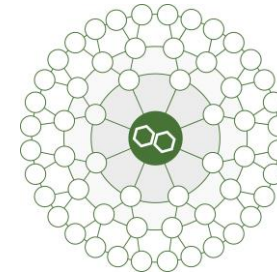
devicestin@ucl.ac.uk



diagnosticstin@ucl.ac.uk



repurposingtin@ucl.ac.uk



smallmoleculetin@ucl.ac.uk

Thank you!