

Cell & Gene Therapies and enabling the bioeconomy at UCL

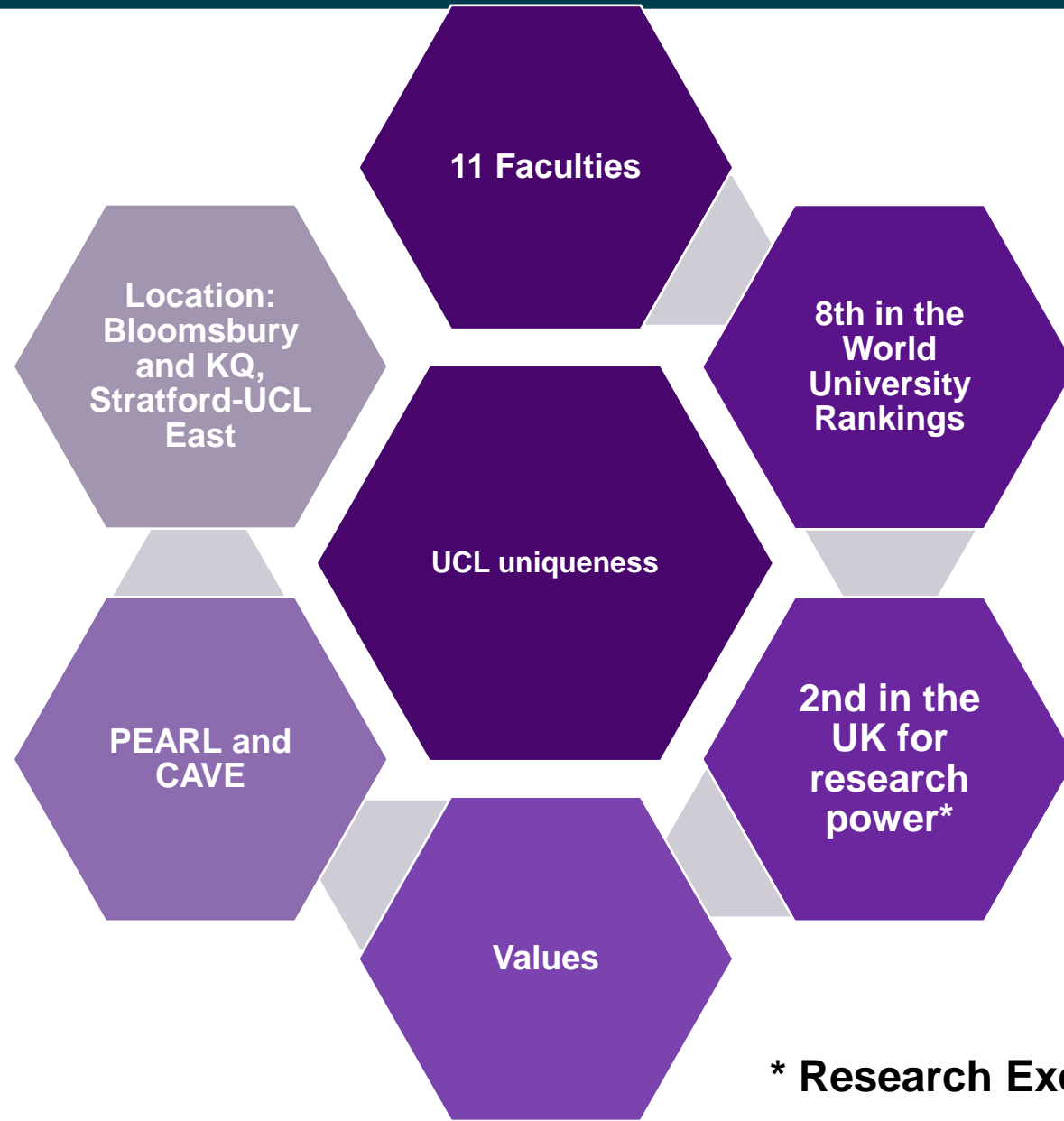
Dr Laura AS Ciccolini



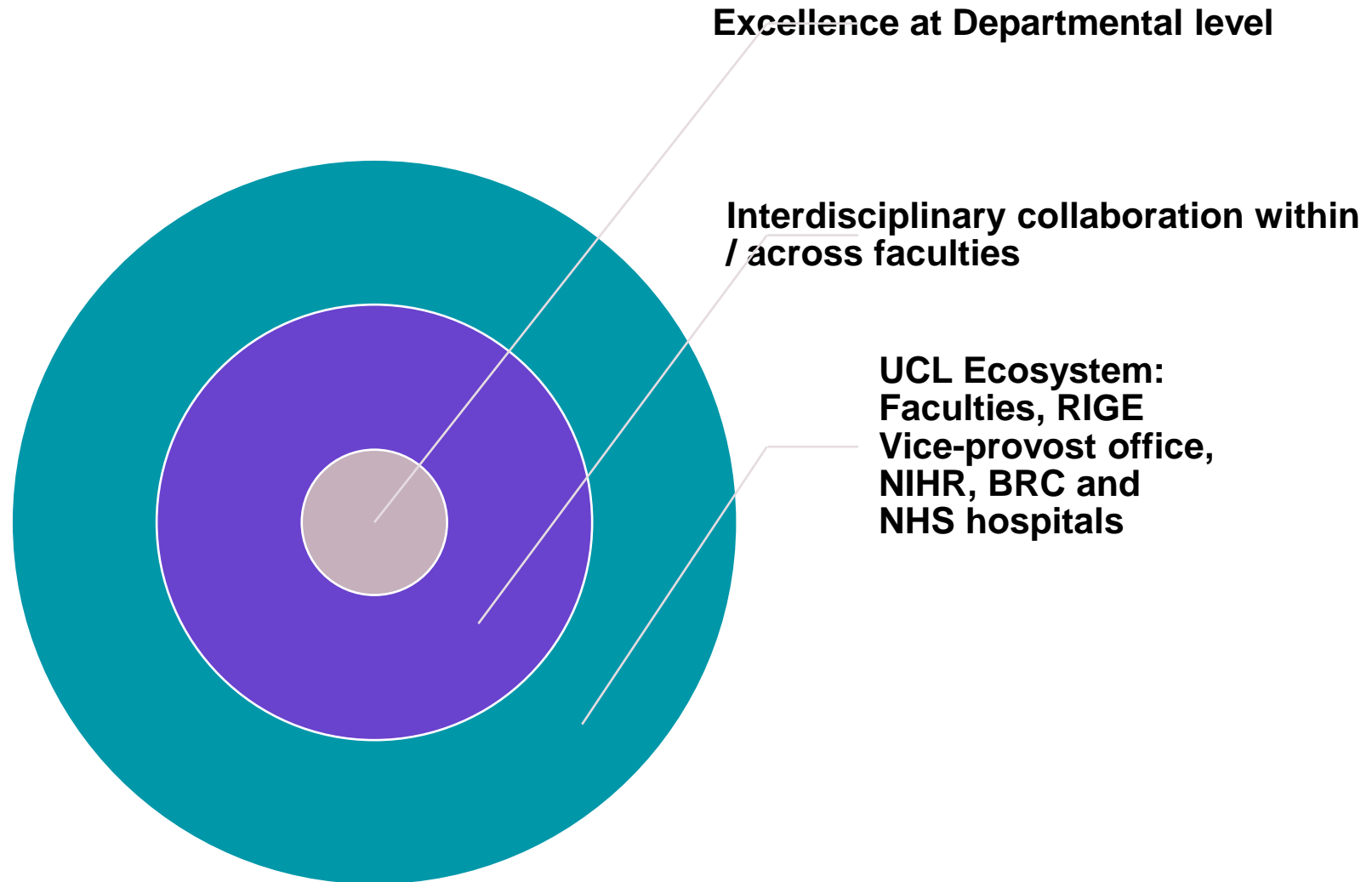
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UCL strength: unique traits



* Research Excellence Framework 2021

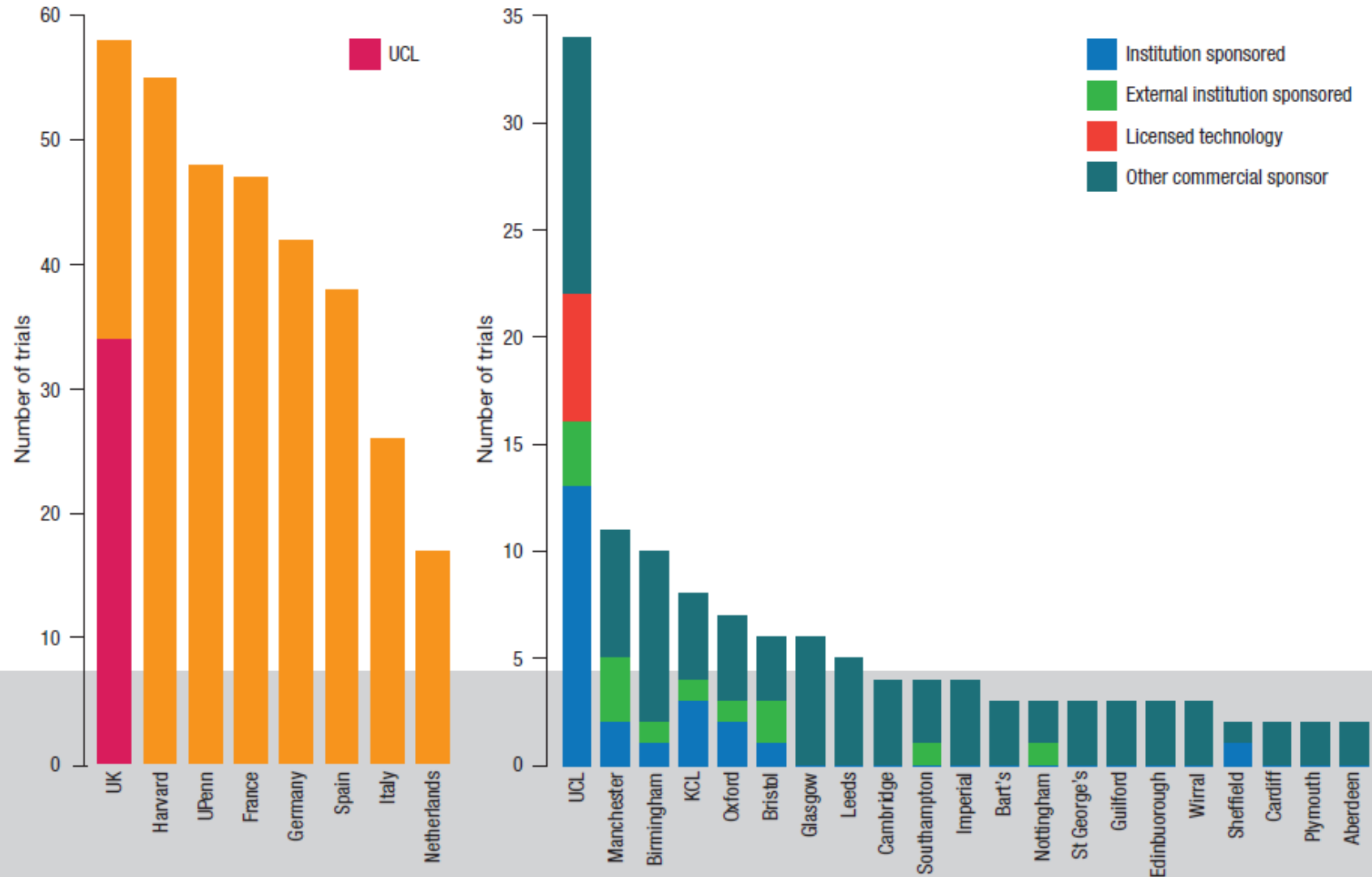


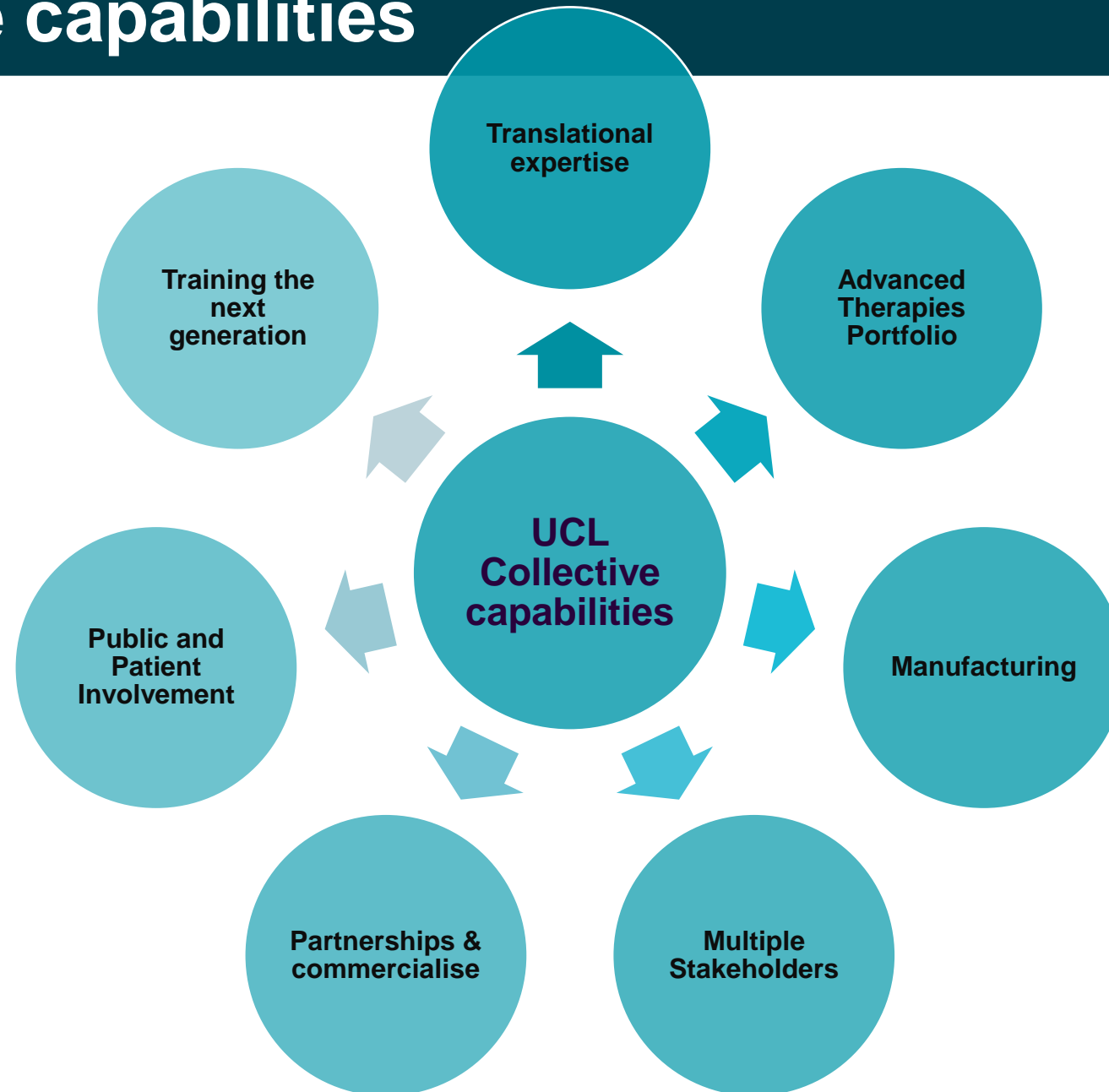
UCL world leader in clinical translation



Participation in advanced therapy clinical trials September 2017

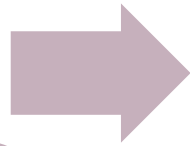
Source: clinicaltrials.gov





SCOUTING

- Assets to address high unmet need
- Seed funding



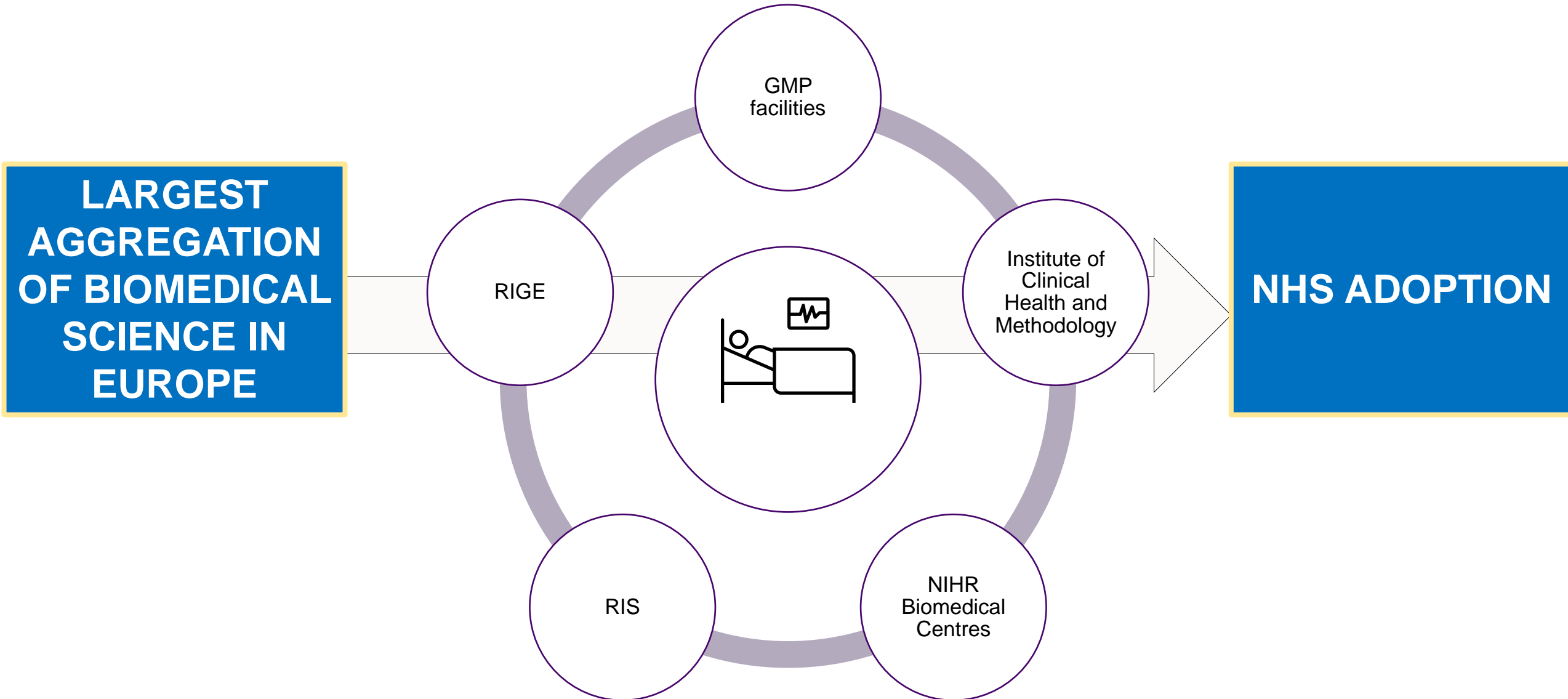
VALIDATE

- Scientific and Business strategy
- Preclinical POC
- Clinical POC



PARTNERSHIPS

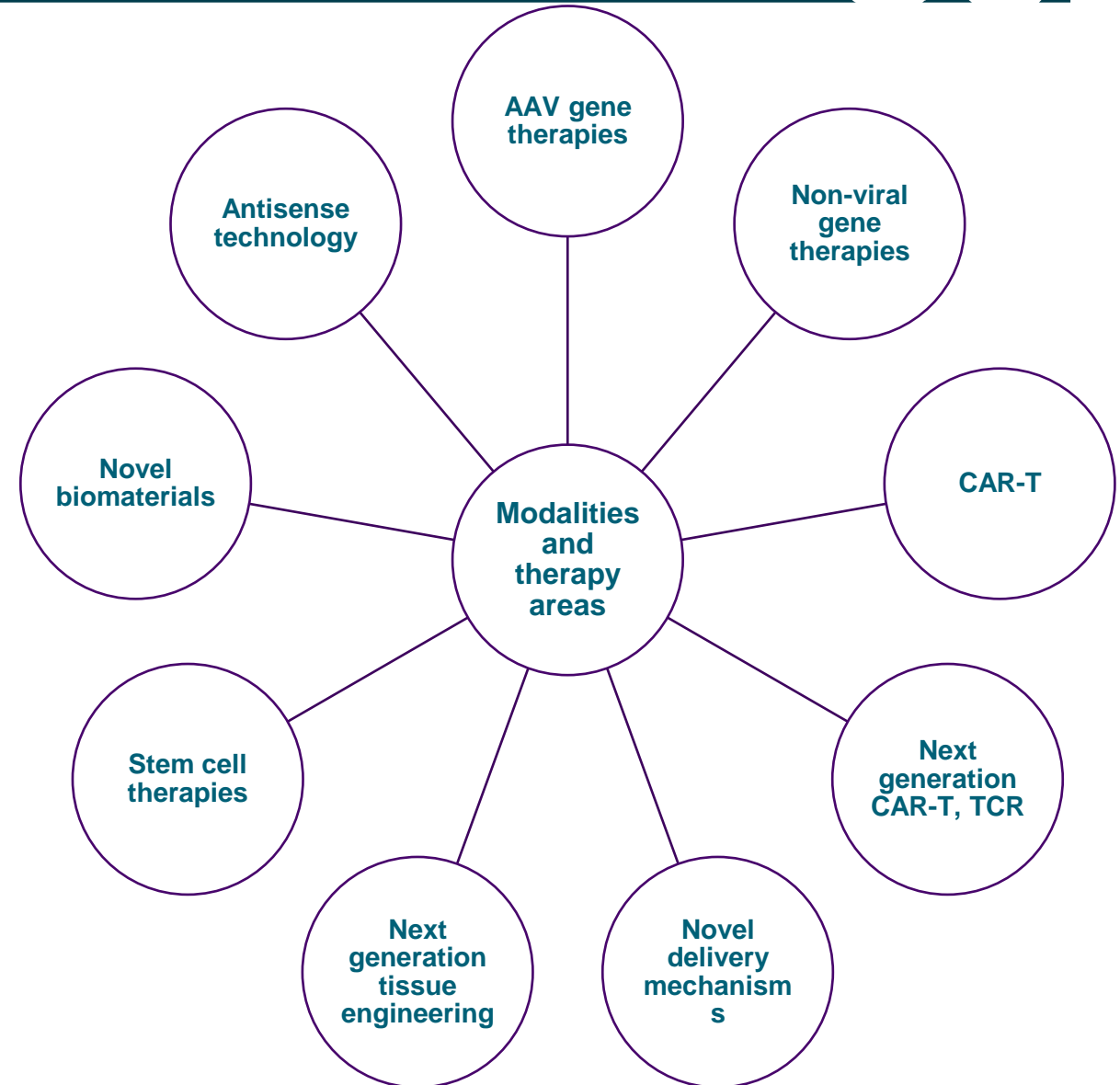
- Licensing
- Strategic collaborations
- New company creation
- Venture capital funding



UCL Portfolio Advanced Therapies

Facts and Figures:

- > 100 principal investigators
- >130 projects in discovery in 2017
- Funding by Research Councils, charities, government and industry



Discovery & Design



Pre-clinical Development



Clinical Delivery

**Centre for Cell, Gene and
Tissue Therapeutics,
Royal Free Hospital**

**Cellular Therapies
manufacturing unit
Zayed Building**

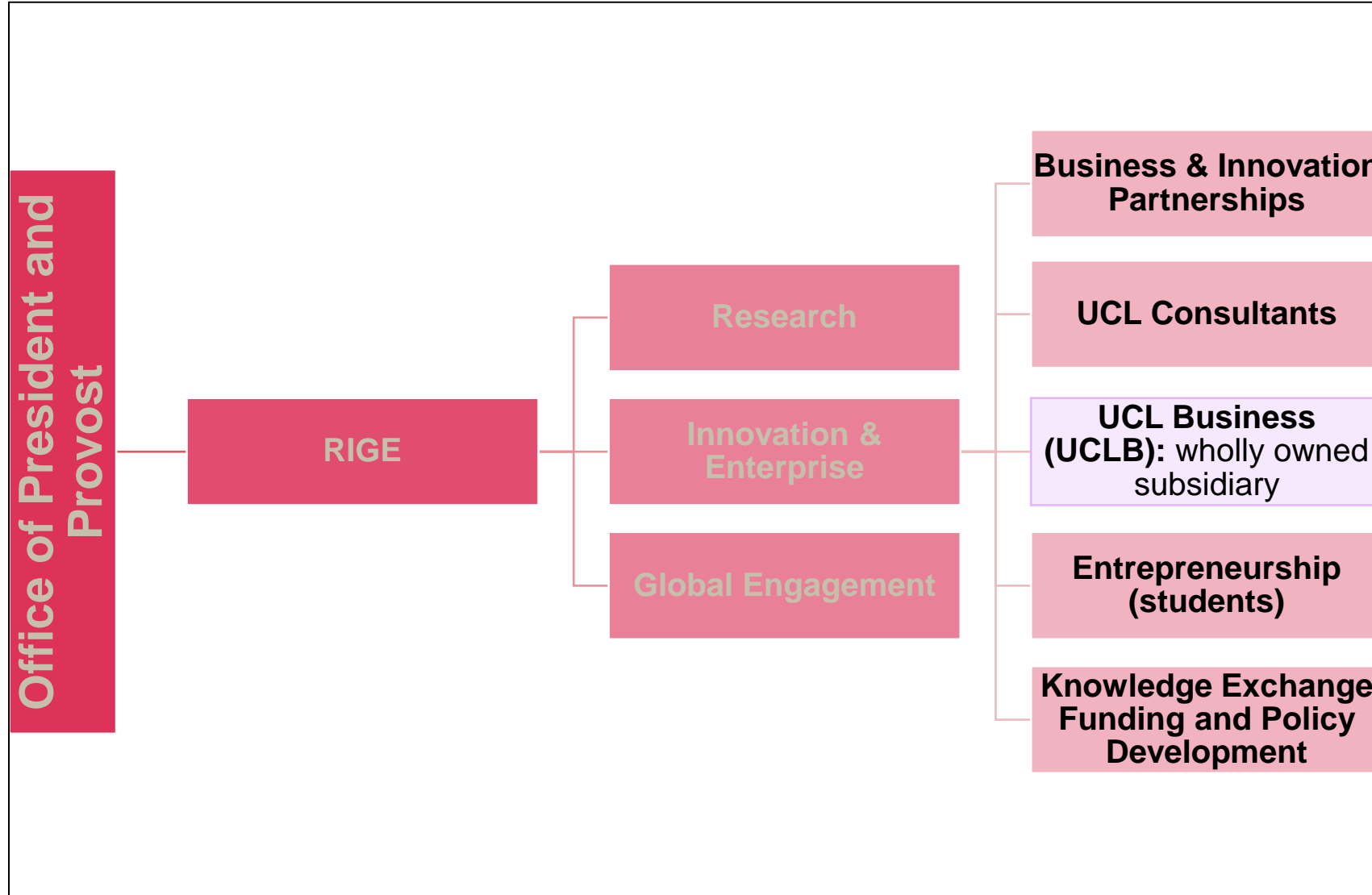
**Biochemical
Engineering:
Expertise**

**Cell for Sight Stem Cell
Therapy Research Unit
MEH**

**UCL Wolfson Gene
Therapy Unit**

Commercialisation

UCL spin-outs in Cell & Gene Therapies



UCLB realises commercial potential of in-house research Activity.

Patents, licensing deals, funding opportunities.

Creation of spinout companies.

Commercialisation UCL spin-outs in Cell & Gene Therapies



Autolus



FREELINE





Collaborate with Higher Education institutions, Industry, contract research and manufacturing Organisations.

>80 strategic partnerships



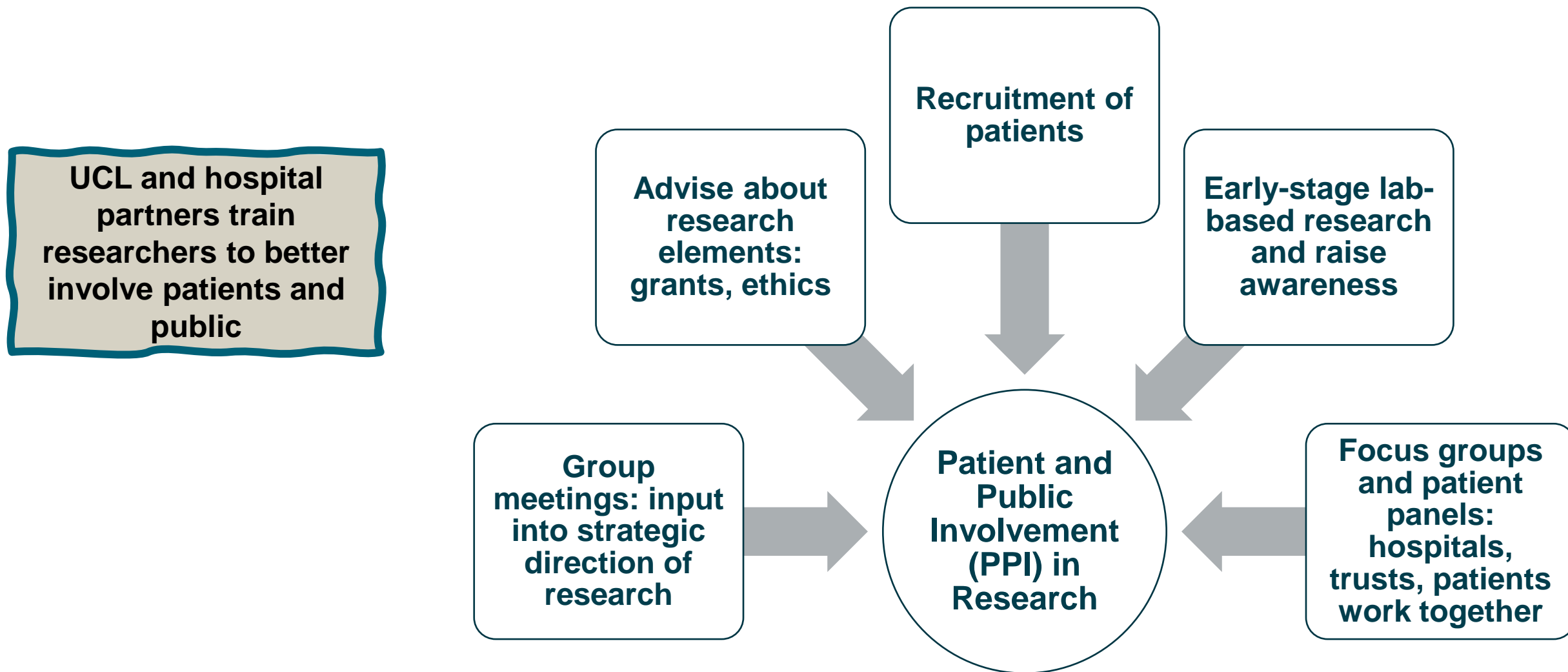
UCL expertise offered through UCL Consultants



Our partners and UCL solve challenges for societal benefits.

Partners access:

- cutting edge-science
- clinicians and patients
- expertise in clinical operations to deliver trials



**Department of
Biochemical
Engineering**

Educate patients and clinicians

Work with industry: upskill workforce

Train more qualified persons QPs

Increase # regulatory advisors

Enhance clinical infrastructure at hospitals

**Department of
Biochemical
Engineering
EDUCATION**

MSc/PGDip/PGCert programme
in Cell and Gene Therapy

BEng/MEng Regenerative
Medicine Manufacturing Minor

**Department of
Biochemical
Engineering
TRAINING**

MBI Module

Human pluripotent Stem Cells in Culture:
hands-on training

Biochemical Engineering and Bioprocessing
Leadership EngD

Regulatory Science for Advanced Therapies-
Bench to medicine 4 days course



FOCUS & FUTURE

Our new UCL East campus in London's culture and innovation quarter

UCL Bloomsbury →
Campus



Stratford Station

Westfield Stratford City

Stratford International Station

Lee Valley VeloPark

London Aquatics Center

UCL

UCL East Campus

BBC

Sadler's Wells

UAL London College of Fashion

V&A East

Queen Elizabeth Olympic Park

The O2

ArcelorMittal Orbit

Canary Wharf

Copper Box Arena

UCL

UCL at Here East

UCL shaping future of manufacturing at newest East London campus: The Manufacturing Futures Laboratory (MFL)



- Multi-disciplinary research and teaching
- Strategic research
- Innovative industry collaborations
- Sustainable products and manufacturing processes of the future.
- Biochemical sciences, engineering disciplines. Microscopic to Macroscale.

SUSTAINABLE DEVELOPMENT GOALS





THANK YOU



CONTACT DETAILS:
DR Laura AS Ciccolini
Email: l.ciccolini@ucl.ac.uk
Phone: +44(0)7564 580771
