



Science and Technology Venture Capital Fellowship

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Introduction

The Science and Technology Venture Capital Fellowship is a new mid-career programme geared towards VCs and recently exited founders transitioning into VC and offering a mix of business education together with practical exposure to frontier technologies. The Fellowship aims to support the next generation of leading UK-based Deep Tech and Life Sciences investors who will play a catalytic role in scaling firms in these sectors, taking centre stage in the translation of innovation into future industries.

As Fellows, the cohort will benefit from professional education and leadership development, paired with experiential learning, mentoring, and networking opportunities – to support the development of a strong talent pipeline in science and technology VC investment in the UK.

Delivered jointly by Imperial College London and the Royal Academy of Engineering, the Fellowship is supported by the Department for Science Innovation and Technology.

The Fellowship has been designed to allow Fellows to participate alongside their full-time employment, with core modules delivered as 20 intensive contact days between November 2024 and September 2025. Participants can expect an additional 10-15 hours of time commitment between each in-person session – for check-ins with mentors and coaches, case study preparation or project work, and virtual office hours outside of regular class sessions to support learning.

The Fellowship is structured in two parts – **Part 1: Foundational Content** and **Part 2: S&T Visits Outside London and Project Work for Experiential Learning.**

Part 1

Foundational Content

Four modules delivered between November 2024 and March 2025 will provide advanced content in business investment and finance, with Deep Tech and Life Sciences mainstreamed into the modules as case studies, examples and projects.

Taught by Imperial College Business School's finance Professors, paired with guest lectures from leading industry experts, modules will cover:

- 1 Raising and Structuring Life Science/ Deep Tech Venture Capital Funds** (Nov 2024), including an understanding of how the capital intensity of investments and longer time horizons to exit will impact fund size, structure, and the economics for partners and employees – with implications for how to measure performance as well as how to attract and retain diverse, high-quality talent.
- 2 Portfolio Management**, including an understanding of how the smaller number of deep pocketed S&T investors, particularly in the UK, makes estimating follow-on funding requirements more

critical and makes funds more vulnerable to market cycles. This has implications for how investors may choose to syndicate investments as well as how they prepare to support their ventures in market downturns.

- 3 Sourcing, Diligence and Investing in S&T based Startups**, involves recognizing the unique challenges in screening IP-heavy ventures with significant technical risks that operate in highly regulated markets. Participants will gain insights into the motivations of university actors, including academics and tech transfer offices. This knowledge is essential for building a robust pipeline of S&T investment opportunities and executing successful deals that set academic spinouts on the path to success.
- 4 Scaling and Exiting S&T Ventures**, including an understanding of value inflection points in S&T ventures, important considerations in scaling to the US and other foreign markets as well as an understanding of different exit modes.

Part 1

Foundational Content (continued)

Individual support, including mentoring and coaching to support leadership development:

- 1** Micro modules will look at leadership and draw on leaders within the industry to talk through their career journey and provide opportunities for networking.
- 2** Coaches with experience of working within the Deep Tech and/or Life Sciences ecosystems will provide dedicated individual mentoring over six 1:1 coaching sessions during the Fellowship programme. This will ensure that Fellows are expertly guided to identify and reflect upon their own individual strengths as well as key areas for development and growth, and are able to focus on building excellent leadership skills.
- 3** Fellows will also have regular check-ins with programme managers to ensure each fellow receives the support they need for successful completion of the Fellowship.

Panels and Networking:

Separate track-specific roundtable discussions around Life Science or Physical Sciences Deep Tech will deepen content and enable specialisation. Networking built around such roundtables will enable participants to meet startup founders, other investors, and key ecosystem players (including key corporate partners of the Fellowship) from across the UK that will enable strengthening relationships around a specific interest in Life Science or Physical Sciences Deep Tech.

Life Science and Deep Tech Observatory:

Each Module will focus on commercially relevant insights on key emerging technologies, provided through a combination of presentations from leading academics and practitioners.

Part 2

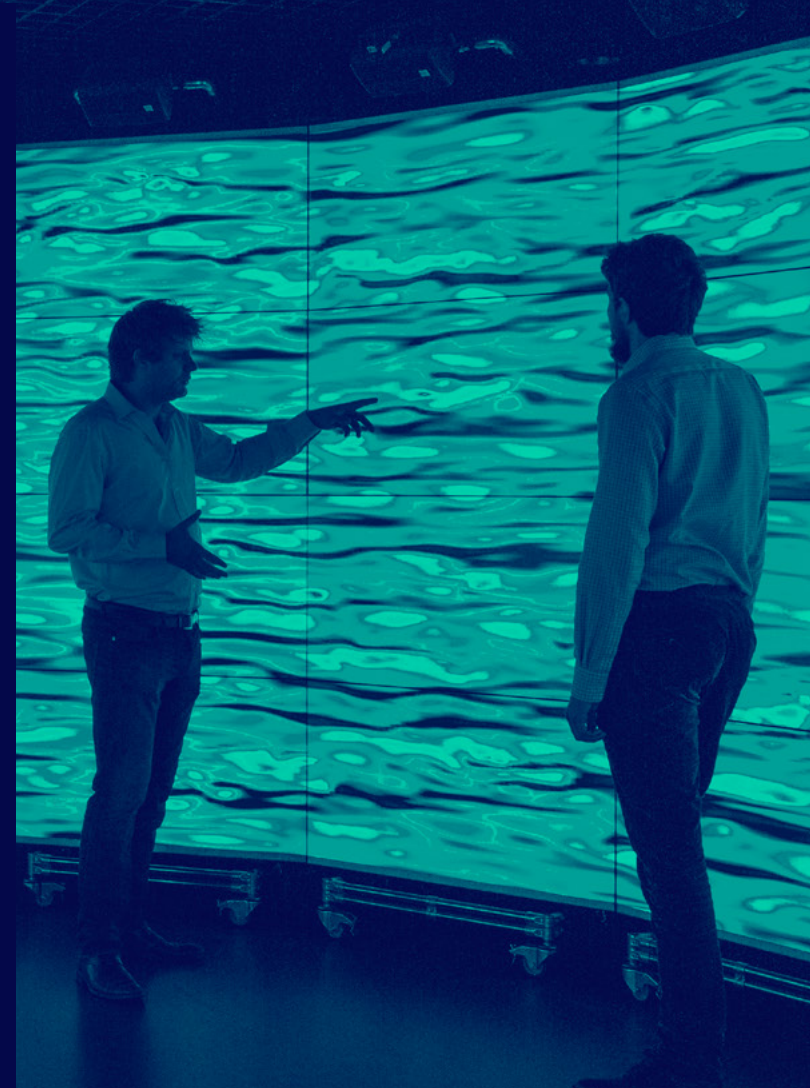
S&T Visits Outside London and Experiential Learning

This module will enable Fellows to extend their understanding of the material in modules 1-4 through a group project in one of two different areas:

- 1** Diligence on a real investment opportunity that enables deep engagement within a particular emerging technology by understanding technical, market, regulatory and financing needs. The goal is to provide recommendations of why it should (or should not) be funded.
- 2** Developing a pitch to LPs around a S&T VC fund including modelling returns, discussing unique and distinguishing elements.

In addition, this module will involve visits to technology hubs outside of London to help Fellows extend their knowledge and networks across the UK's priority science & technology sectors, as well as develop critical perspectives on frictions facing the funding and scale-up of such technologies. In 2024-25, the priority sectors as part of the S&T visits will be Engineering Biology, Quantum and AI, held at Royal Academy of Engineering regional hubs.

S&T visits outside London and project work for experiential learning will take place between May and September 2025.



Post-Fellowship Alumni Network

An alumni networking platform will support peer-to-peer learning and engagement during and beyond the duration of the Fellowship.

Special interest groups will be set up on the alumni platform to support bespoke engagement with the Fellows/alumni and foster collaboration.

The Fellowship will conclude with a closing event and the Fellowship Summit, the latter jointly organised by Imperial's Business School and Department for Science Innovation and Technology.

Programme Faculty

Foundational content will be delivered by Imperial's Business School Faculty including:



Ramana Nanda (Programme Lead)

Ramana is Professor of Entrepreneurial Finance and Academic Lead for the Institute for Deep Tech Entrepreneurship at Imperial College London, a research fellow in Financial Economics at the CEPR and a visiting scholar at Harvard Business School.



Cláudia Custódio

Cláudia is Professor of Finance at Imperial College Business School. Cláudia has spent time in the US working within the Department of Finance at the W. P. Carey School of Business, Arizona State University and in Lisbon at the NOVA School of Business and Economics.



Savitar Sunderesan

Savitar is Assistant Professor of Finance at Imperial College Business School. Savitar's work focuses on institutional investing as well as venture capital.



Celia Moore

Celia is Professor of Organisational Behaviour in the Department of Management & Entrepreneurship at Imperial College Business School, and Director of the Centre for Responsible Leadership. Celia's work focuses on the intersection of leadership and ethics.



Delivery Partners

The Science and Technology Venture Capital Fellowship is a partnership between Imperial College London and the Royal Academy of Engineering delivering specialised education and Fellowship programming with an unparalleled network of science, technology and engineering experts across the UK.

Imperial and the Academy have a track record of:

- 1** Bringing together diverse cohorts of exceptional candidates from across the UK for similar fellowship initiatives.
- 2** Deep knowledge of, and insight into S&T VC and across emerging and frontier technologies.
- 3** Providing an unparalleled breadth of access to networks including the Academy's Enterprise Hubs, expertise across multiple S&T sectors and hubs of activity throughout the UK and abroad.

Mentoring, Coaching and Networking will be led by the Royal Academy of Engineering Enterprise Hub. Its team has extensive experience in supporting talented entrepreneurs and decision makers to transform breakthrough engineering innovations into disruptive spinouts, startups and scaleups. The Fellows of this programme will be able to tap into a national and global network of the Academy's experts. With a dedicated presence across the UK, the Enterprise Hub will provide access to regional eco-systems.

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Advisory Board

Dame Kate Bingham DBE HonFRS HonFREng
HonFMedSci Managing Partner at SV Health

Charlie Foreman Senior Advisor at Lazard

Anne Glover CBE HonFREng CEO and
Co-Founder of Amadeus Capital

Dan Mahony Senior Partner at Novo Holdings
and Chair of Board of Bio Industry Association

Dame Fiona Murray DCMG CBE Associate
Dean for Innovation at MIT Sloan, Vice Chair of
Nato Innovation Fund

Patrick Pichette CQ Partner at Innovia Capital

Katie Rae CEO and Managing Partner at Engine
Ventures

Who should apply?

Mid-level VC investors and related investment professionals directly investing into Science & Technology ventures as well as asset managers allocating capital to Science and Technology VC, who are interested in enhancing their ability to evaluate and manage Venture Capital funds specialised in supporting science and engineering-based portfolio companies.

To be eligible for the programme you must:

- Be based in the UK
- Work in a UK based VC firm (or a VC firm investing in the UK), pension fund, institutional investor, or be an exited founder with the experience of raising equity funding at Series B+
- Have the ambition to become a significant investor in the science, technology and engineering startups/scale ups and be able to commit the required time to the Fellowship programme
- Have a minimum of 3 years of engagement in either the UK VC ecosystem or in the asset management industry
- Have the support from your firm/prospective employer to join the programme

The cost of the Fellowship is £10,000 which we expect in most cases will be covered by the applicant's employer. We have secured a limited number of scholarships for this programme, which can provide up to 50 per cent off the fee to support successful candidates who have not been able to secure sponsorship from their employers.

The programme is designed to run in conjunction with current employment: core instruction, experiential learning and networking sessions will be delivered across seven sessions between November 2024 and September 2025, see key dates below. Employers will be asked to approve participants' time spent on the Fellowship.

We welcome applications from underrepresented groups in the VC industry and from across the UK.

Key dates

How to apply

Final deadline for applications	31 October 2024
Session 1	25-27 November 2024
Launch event	January 2025
Session 2	20-22 January 2025
Session 3	10-12 February 2025
Session 4	17-19 March 2025
Session 5	12-13 May 2025
Session 6	23-24 June 2025
Session 7	8-9 September 2025
Close Event	22 September 2025

To apply please visit programme [website](#).

If you have any further questions, please contact the programme team on: STFellowships@raeng.org.uk

Module 1

Raising and Structuring Life Science / Deep Tech Venture Capital Funds

Activity	Learning Objectives
Lecture and Case Study Discussion to introduce conceptual insights in Module	<ul style="list-style-type: none">(i) Modelling to understand how capital intensity and step-ups across rounds impact fund returns. Given this, where do specialized S&T venture funds sit in terms of the risk-reward frontier compared to more traditional VC?(ii) From the perspective of pension funds how does one assess the value of allocating capital to specialised S&T VC funds compared to other funds in the broader VC asset class?(iii) What implications does longer time to liquidity have on partner economics as well as the ability to attract and retain high-quality talent?
Lectures from practising experts working in UK ecosystem	<ul style="list-style-type: none">(i) Legal, tax considerations of different fund structures (VCT / Balance Sheet fund / GP-LP Structure) and implications for hiring and talent development(ii) Incentive structures for funds tied to universities,(iii) Pension fund perspective on Mansion House compact, what they are looking for and how best to achieve it
Lunchtime Panel	Topic: Standing out from the crowd when pitching for your S&T VC fund (chance to learn and ask questions with experts in the ecosystem)
Evening Panel: Life Science Track	Topic: Raising a Life Science VC Fund and Managing LP relations - advice from experts. Followed by networking with Life Science ecosystem players
Evening Panel: Deep Tech Track	Topic: Raising a Deep Tech VC Fund and managing LP - advice from experts Followed by networking with Deep Tech ecosystem players
Developing soft skills	Building a diverse and inclusive team
Life Science / Deep Tech Observatory	Understand commercially relevant frontier for technologies that key to UK growth agenda. In Module 1 we will focus on Future Information Technology

Module 2

Portfolio Management in Life Science / Deep Tech VC Funds

Activity	Learning Objectives
Lecture and Case Study Discussion to introduce conceptual insights in Module	(i) Understand diversification-ownership trade-off and how interaction with startup's capital needs and VC fund size impacts target number of investments, allocation for first cheque vs. dry powder for follow-on and syndication strategies (ii) How does interaction of technical and market risk impact follow-on investment decisions? (iii) Syndication strategies, particularly for smaller funds
Lectures from practising experts working in UK ecosystem	(i) Modelling initial investment vs. follow-on - interaction with fund size and portfolio company characteristics (ii) Working effectively with Corporate Venture Capital investors (iii) Managing difficult issues in syndication (asymmetric incentives in sideways outcomes)
Lunchtime Panel	Topic: Investing across market cycles and technology hype cycles
Evening Panel: Life Science Track	Topic: Portfolio Management in Life Science VC - advice from experts. Followed by networking with Life Science ecosystem players
Evening Panel: Deep Tech Track	Topic: Portfolio Management in Deep Tech VC - advice from experts. Followed by networking with Deep Tech ecosystem players
Developing soft skills	Stakeholder management (with syndicate partners, entrepreneurs and LPs)
Life Science / Deep Tech Observatory	Understand commercially relevant frontier for technologies that key to UK growth agenda. In Module 2 we will focus on technologies at frontier for Net Zero transition (Nuclear including fusion, solar and batteries, Hydrogen)

Module 3

Sourcing, Diligence and Investing in S&T based startups

Activity	Learning Objectives
Lecture and Case Study Discussion to introduce conceptual insights in Module	<ul style="list-style-type: none"> (i) Key differences in screening IP-heavy ventures with substantial technical risk that operate in highly regulated markets. Different models for sourcing, diligence and investing in S&T based startups (ii) Understand the incentives of university actors, including academics and university tech transfer offices. (iii) Valuation benchmarks, and necessary conditions for successful deal execution that sets up an academic spinout for ultimate success
Lectures from practising experts working in UK ecosystem	<ul style="list-style-type: none"> (i) Modelling, doing diligence, valuation and writing investment memo for IP rich firms (ii) Dealing with 'messy cap tables'; what is the appropriate role for technical founders in university spinouts? (iii) IP-strategies for life science and deep tech startups whose large firm customers are also their competitors. Company structure and IP strategies of Platform Technologies
Lunchtime Panel	Topic: Productive approaches to engaging with university TTO and other pipelines of deal flow
Evening Panel: Life Science Track	Topic: How to develop S&T pipelines to maximize generation of high impact Life Science ventures; what is the role of technical founders. Followed by networking with Life Science ecosystem players
Evening Panel: Deep Tech Track	Topic: How to develop S&T pipelines to maximize generation of high impact Deep Tech ventures; what is the role of technical founders Followed by networking with Deep Tech ecosystem players
Developing soft skills	Negotiation best practice
Life Science / Deep Tech Observatory	Understand commercially relevant frontier for technologies that key to UK growth agenda. In Module 3 we will focus on Drug development, Synthetic Biology and frontiers of Medtech

Module 4

Scaling and Existing Life Science and Deep Tech Ventures

Activity	Learning Objectives
Lecture and Case Study Discussion to introduce conceptual insights in Module	<ul style="list-style-type: none"> i. Understanding of value inflection points in S&T ventures (how far to go before considering exits) ii. Role of corporate partners, regulators and investors in the US / external markets and how to set up for success iii. Exits and Secondaries
Lectures from practising experts working in UK ecosystem	<ul style="list-style-type: none"> i. Exits – Acquisitions, IPOs and key issues to consider when dealing with IP-rich S&T ventures. ii. Regulatory considerations for Life Science and Deep Tech Ventures expanding abroad (including issues around National Security)
Lunchtime Panel	Topic: Scaling and Going public in the UK
Evening Panel: Life Science Track	Topic: CEO Perspective on what VCs can do to support scaling of Life Science Ventures. Followed by networking with Life Science ecosystem players
Evening Panel: Deep Tech Track	Topic: CEO Perspective on what VCs can do to support scaling of Deep Tech Ventures. Followed by networking with Deep Tech ecosystem players
Developing soft skills	Difficult conversations (CEO transitions)
Life Science / Deep Tech Observatory	Understand commercially relevant frontier for technologies that key to UK growth agenda. In Module 4 we will focus on Defence-related technologies

Note 1: In addition to the in-person programming described above, all Fellows will have access to mentoring and up to six 1:1 coaching sessions, outlining goals for Fellowship (including leadership development) and working towards these.

Note 2: The Fellowship will provide corporate finance training – if needed – to ensure all Fellows can effectively lead financial statements, conduct a VC-based valuation and work with capitalization tables. This will be made available through a combination of online content and the opportunity to schedule office hours with experienced professors from Imperial's finance department between the Modules.

Module 5–7


S&T visits outside London and project work for Experiential Learning


Activity	Learning Objectives
Project Work as part of experiential learning	<p>i. Due diligence of a specific investment opportunity with opportunity to gain in-depth knowledge on (and feedback from friendly VC) on a new technology, diligence process and writing a strong investment memo</p> <p>OR</p> <p>ii. Opportunity to develop a pitch for a new S&T VC fund, including modelling returns and pitch this to friendly LPs</p> <p>Additional goal to develop strong ties between individuals working together on similar interests during the Fellowship</p>
Site visit to organisation in S&T ecosystem	Get to know key players in the S&T ecosystem and part of broader objective to build a strong LS and DT investing community in UK
Lunchtime Panel	Topic: Innovator/ Startup perspective on LS/DT funding in the hub
Evening Panel	Topic: Investor perspective on LS/DT funding in the hub

Scheduling template for Modules 1–4

London-based sessions

	Day 1 (Monday)	Day 2 (Tuesday)	Day 3 (Wednesday)
8:00-8:30	Travel	Breakfast	Breakfast
8:30-9:00			
9:00-9:30			
9:30-10:00			
10:00-10:30			
10:30-11:00	Space to schedule 1:1 meetings with mentors / coaches	Guest lectures from practising experts working in UK ecosystem	LS/DT Observatory (Commercially relevant insights on key technology trajectories)
11:00-11:30			
11:30-12:00			
12:00-12:30	Study-Group discussion over lunch	Lunchtime panel	Module wrap and planning for next Session
12:30-13:00			
13:00-13:30			
13:30-14:00	Module Overview	Facilitated discussion summarising learnings	Lunch and Cohort Networking
14:00-14:30	Lecture and Case Study Discussion to introduce conceptual insights in Module		
14:30-15:00			
15:00-15:30			
15:30-16:00			
16:00-16:30			
16:30-17:00			
17:00-17:30	Travel to RAEng (or S&T destination in London)	Travel to RAEng (or S&T destination in London)	Space to schedule 1:1 meetings with mentors / coaches / follow-ups from networking sessions
17:30-18:00			
18:00-18:30			
18:30-19:00	Track Specific Panel and Networking (DT)	Track Specific Panel and Networking (LS)	
19:00-19:30			
19:30-20:00			
20:00-20:30			

 Activities part of core curriculum.


 Optional activities scheduled by participants at time noted or any other mutually convenient time.


Schedule does not include remedial content / office hours that is available for fellows between Modules.

Scheduling template for Modules 5–7

Outside-London sessions

	Day 1 (Monday)	Day 2 (Tuesday)
8:00-8:30	Travel to RAEng Hub Destination	Experiential learning-related project work - conducted in groups of three that will span Modules 5-7
8:30-9:00		
9:00-9:30		
9:30-10:00		
10:00-10:30		
10:30-11:00		
11:00-11:30		
11:30-12:00	Lunchtime panel	Moderated discussion on what can be done to engage specific local ecosystem more effectively
12:00-12:30		Lunch / Recap of Visit, next steps
12:30-13:00		
13:00-13:30	Site visit to representative company/ Catalput Centre or similar organisation	Space to schedule 1:1 meetings for follow-ups from networking sessions
13:30-14:00		
14:00-14:30		
14:30-15:00		
15:00-15:30		
15:30-16:00		
16:00-16:30	Travel / Break	Travel back
16:30-17:00		
17:00-17:30	Panel discussion with local experts focused on key commercialisation frictions faced by technologies coming out of region, followed by track-specific networking	
17:30-18:00		
18:00-18:30		
18:30-19:00		
19:00-19:30		
19:30-20:00		
20:00-20:30		

 Activities part of core curriculum.

 Optional activities scheduled by participants at time noted or any other mutually convenient time.

Schedule does not include remedial content / office hours that is available for fellows between Modules.