

# LOOKBOOK 2025



Delivered by

# WELCOME

At Founders at the University of Cambridge, we believe that the most ambitious ideas deserve the strongest foundations.

We equip founders for growth through capital investment, multi-stage accelerator programs, intensive mentoring, and access to a global network of experts across technology, business, and academia.

This holistic support empowers them to transform bold ideas into high-impact ventures.

**START** is one of our flagship programmes - a pre-seed accelerator designed to accelerate the journey of existing ventures.

This booklet introduces you to the remarkable founders in our latest cohort, **START 2.0**, a diverse group of innovators tackling some of the world's most pressing challenges, from Al and deep tech to life sciences.

Over the course of the programme they hone their research and ideas, engage with expert mentors, customers, and entrepreneurs/operators-in-residence, and take critical steps toward becoming investment-ready.

We invite you to explore their stories, their startups, and their vision. This is where innovation meets action.

Welcome to Founders at the University of Cambridge.



WINNY SANCHITA

Senior Associate, Founders at The University of Cambridge

# ACCELERATING BRILLIANCE

Founders at the University of Cambridge empowers entrepreneurial minds at the University of Cambridge with expertise, capital and community so they can thrive and have a global impact.

FOUNDERS.CAM.AC.UK

You can also follow progress on LinkedIn at @founders-at-the-university-of-cambridge

We're thrilled to see the next generation of our inaugural programme, START, take shape. The founders in this cohort are trailblazers in AI, Sustainability, Life Sciences, Hardware, and BioTech, and join Founders at the University of Cambridge's growing alumni base of science and technology-led companies who are solving some of the world's greatest challenges.



MARK LAZAR Programme Director, Founders at The University of Cambridge

# CAMBRIDGE ADAPTIVE TESTING



Cambridge Adaptive Testing develops rapid, simple and precise mental health measurement using innovative technologies.

We provide innovative age-specific platforms for efficient, mental health assessment to identify who needs support for their mental health and to evaluate the effectiveness of individual and organisational-level interventions. We apply adaptive testing technology making our assessments quick, precise, efficient, personalised and engaging, with high acceptability of repeated measurements.

Our platforms are bundled together with a dashboard allowing organisational clients to easily distribute assessments, monitor data collection, and create bespoke reports, for individuals, managers and boards.



### Professor Peter Brian Jones CMO

Peter is Professor of Psychiatry Emeritus at the University of Cambridge and an honorary epidemiologist, he is a Clarivate Analytics highlycited researcher with experience of board-level management in the university, health and charity sectors.

### **CO-FOUNDERS**



Alison Howie CEO

Alison has 30 years' experience roles in commercial and R&D functions for a major multinational business and C-suite roles in early-stage companies. As a consultant, she has recently supported several healthcare innovators to optimise product



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latent variable modelling, graph networks, and computerised adaptive testing. He is Senior of Cambridge and Honorary Professor of Psychometrics at Charles University, Prague. Jan applies novel psychometric methods in neuropsychiatry to

### GASTROBODY ELECTRA BIO THERAPEUTICS

### **%**electra

Electra Bio is building a seamless interface between biology and electronics to unlock the full potential of the in-vitro drug discovery pipeline.

Over the past decade, there have emerged technologies that allow us to grow 3D mimics of our human organs in a petri dish, where drugs can be screened in a way that predict clinical outcomes better than any previous technology. However, all the methods currently used to extract data out of those 3D tissue models are extremely restrictive, getting adoption costs to prohibitive levels.

Electra Bio is developing systems that leverage electronic systems to extract data out of those 3D models more effectively than any other solution currently on the market.



Dr Douglas C. Van Nieker **CO-FOUNDER** 

Douglas hold a PhD in Bioelectronics and a Masters in sensors from the University of Cambridge, as well as undergraduate degrees in electronics and biomedical engineering from the University of the Witwatersrand. Having developed our core technology, he is a passionate interdisciplinarian and loves to learn and invent.

### CO-FOUNDERS

Dr Konstantinos Kallitsis **CO-FOUNDER** 

Konstantinos is an RAEng Enterprise Fellow at the Department of Chemical Engineering and Biotechnology at the University of Cambridge. His background is in Chemistry with a PhD in flexible electronics. Prior to Electra, Konstantinos was studying the interface between biological systems and electronics as a postdoctoral researcher at Professor Owens' group.



Professor Roisin M Owen **CSO** 

#### Roisin is a Professor of

Bioelectronics at the University of Cambridge and studies the integration of electronic devices with biological systems. She currently serves as the Deputy Head of the School of Technology and has over 130 publications and 11,000 citations. Roisin has also been the recipient of several prestigious awards, including the 2024 Biochemical Society AstraZeneca Award.

### Gastrobody

Therapeutics

Gastrobody Therapeutics is developing ultra-stable antibody mimetics capable of withstanding the harsh acidic and protease-rich conditions of the GI tract.

We aim to use our patented gastrobody platform to develop orally-administered biologics to transform the way we treat GI tract diseases such as Crohn's disease and Ulcerative Colitis.

The Gastrobody platform combines the exquisite specificity of antibodies with the stability of certain soybean proteins to generate a novel class of biologics which can be delivered directly to the GI tract rather than the systemic administration by injection which is used for existing antibodybased therapies.



Dr Ana Rossi **CSO** 

Ana Rossi completed her PhD at the University of Cambridge and currently works at the Department of Pharmacology where she applies her expertise in protein engineering to advance the Gastrobody platform She has held numerous prestigious fellowships and grants and is currently a Fellow at Queen's College, Cambridge.

### **CO-FOUNDERS**



Yasunori Watanabe **CEO** 

Yasunori Watanabe holds a DPhil in Biochemistry from the University of Oxford. He is passionate about developing novel therapeutic platforms and translating scientific concepts into real world applications. He has previously worked at AstraZeneca and Sanofi working on projects spanning from earlystage candidates to clinical-phase drugs.



#### Professor Mark Howarth **ADVISOR**

Mark Howarth is the Sheild Chair in the University of Cambridge Department of Pharmacology. He co-founded the company SpyBiotech and has been awarded the Royal Society of Chemistry Norman Heatley Award. His group focusses on innovating protein technologies including bacterial superglues, NeissLock, and Gastrobodies.

# PINEPEAK

# PRODROMIC

# Pinepeak

Pinepeak develops physicsdriven technology to predict wildfire risk and behaviour across any terrain, anywhere in the world.

By providing ultra-high-resolution forecasts and analytics at the individual asset level, Pinepeak aims to enhance re/insurance coverage, strengthen community climate resilience, and empower emergency responders in the fight against wildfires—helping protect lives and the environment.

### **CO-FOUNDERS**

Dr Savvas Gkantonas CEO

Savvas is a fire modelling expert with a PhD from the University of Cambridge. He co-founded two previous startups, developed predictive tools for industry leaders such as Rolls-Royce and Siemens, and created the Airborne.cam app, which has reached 120,000 users.



Dr Daniel Fredrich **CO-FOUNDER** 

Daniel is an accomplished computational engineer with a PhD from Imperial College London. Before co-founding Pinepeak, he conducted research in fluid dynamics at the University of Cambridge and worked with world-renowned engineering companies across the aerospace, automotive, and energy sectors.

### Prodromic

Prodromic makes brain health more intelligent so new treatments are developed faster and each person gets the right intervention at the right time.

Our multimodal AI engines use routine clinical data to separate "indistinguishable" patients at early dementia stages and predict disease trajectories over 5 years. Validated across diverse, international data sets, we have shown 3x sensitivity vs. standard of care, and rescued a "failed" Phase 3 trial in collaboration with a major pharmaceutical company.

Our SaaS solution accelerates new treatments: making clinical trials cheaper, faster and more effective. Through personalised predictions, we strengthen in market treatments, enhancing effectiveness and balancing side effect risks.

### **CO-FOUNDERS**



Dr Andrew Welchman **CEO** 

Andrew is a neuroscientist, strategist and entrepreneur with a background in academia (Professor of Neural Intelligence at Cambridge), research investment (led Neuroscience and Mental health at Wellcome) and scalable, Al-driven health tech (Executive at ieso Digital Health).



Professor Zoe Kourtzi **CSO** 

Zoe is a Royal Society Industry Fellow, Cambridge Lead at the Alan Turing Institute and Codirector of Cambridge's Centre for Data Driven Discovery. Her work sits at the interface between Al, brain imaging and cognition, developing predictive models of brain and mental health for early diagnosis and personalised interventions.





Sqwish is building a smart performance layer between AI apps and model providers, so developers get the best results without the overhead.

Sqwish, founded by Dr Ushnish Sengupta and Federica Freddi, is building a smart performance layer that sits between Al applications and model or compute providers - dynamically optimising performance, speed, cost, and reliability at scale: without the headache.

Scaling AI apps today often means battling rising costs, unpredictable latency, and inconsistent performance - forcing developers into a constant juggling act to deliver seamless user experiences. Sqwish's real-time input optimisation API (their first offering) improves AI output quality, while also cutting down on costs and speed. For long inputs, this means reducing costs up to 10x, with 2x faster responses and 14% improved output accuracy.

### **CO-FOUNDERS**

Dr Ushnish Sengupta

Ushnish is Founder and CEO of Sqwish. He holds a PhD from the University of Cambridge, applying AI to engineering problems like rocket engine instabilities. Previously at MediaTek Research, he improved generative AI algorithms for image generation and foundation models for wireless communication. He has published extensively in NeurIPS and leading AI venues.



Federica is Founder and CTO of Sqwish. She holds an MEng from the University of Cambridge, and developed her expertise in model pruning, retrieval-augmented generation, and meta-learning. Previously at MediaTek Research, she co-authored the FishLeg optimiser. She also held roles at ARM and Bending Spoons, balancing deeptech with practical engineering.

## trismik

Trismik is a pioneering company dedicated to revolutionising the field of Large Language Model (LLM) testing.

Our mission is to establish the gold standard in LLM evaluation by providing an adversarial testing platform that ensures model accuracy, safety, and alignment with societal values.

Through efficient and cost-effective testing, we aim to empower AI professionals to build trustworthy applications, enabling faster deployments and mitigating risks such as hallucinations and misalignment. Our vision is to create a future where AI contributes positively to human well-being.

### **CO-FOUNDERS**



Rebekka Mikkola **CEO** 

Rebekka is the CEO and Co-Founder of Trismik. An experienced entrepreneur and enterprise software sales expert, she worked at Salesforce and earned the Achievers Club Award for top performance. Her previous startup was featured on Sky News, The Guardian, GQ Magazine, and TEDx.



Professor Nigel Collie: CHIEF SCIENTIST

Nigel is the Chief Scientist and Co-Founder of Trismik. A Professor of Natural Language Processing at the University of Cambridge, he has over 30 years' experience in Al. He was awarded Fellowships from the Alan Turing Institute, EPSRC, JST, as well as other accolades.

# OUR PARTNERS

### Sponsor Partners



AstraZeneca brings deep industry knowledge and a commitment to encouraging innovation in life sciences and helping the next generation of entrepreneurs.



Known for their cutting-edge research in the technology space, Hitachi is an essential partner on our journey.



With a legacy of excellence in financial and legal services, KPMG adds a wealth of experience to our community, alongside a vast global client network.

### Investment Partners

### CAMBRIDGE Enterprise Ventures

Cambridge Enterprise Ventures invests University of Cambridge capital into high impact, high growth Cambridge spin-outs and start-ups, enabling the entrepreneurial academics, students, graduates, and recent alumni from Cambridge to grow by providing earlystage equity investment and support.

### Parkwalk

Investing in Innovation

Parkwalk is the UK's most active investor in the UK university spinout sector and has been supporting University of Cambridge spin-outs since 2012.