



## **With \$75 Million from Apple Tree Partners, Initial Therapeutics Launches to Create a New Kind of Drug Designed to Stop the Formation of Difficult-to-Drug Protein Targets**

*Initial was created to take on undruggable disease-causing proteins by discriminately intercepting their translation in the exit tunnel of the ribosome*

*Initial's platform brings together scientific breakthroughs from the labs of Jamie H.D. Cate, Brian Paegel, and Kevan Shokat*

*Company's novel approach seeks to halt serious diseases in initial stages*

**NEW YORK and SOUTH SAN FRANCISCO, May 1, 2023** – **Apple Tree Partners (ATP)**, a leader in life sciences venture capital, today announced the launch of **Initial Therapeutics**, a biotechnology company created to make medicines that block notoriously difficult-to-drug protein targets with a new mode of action: selective termination of protein synthesis (STOPS). Initial developed its proprietary STOPS platform to discover new therapeutics based on the recently demonstrated scientific premise that translation of a specific protein can be selectively interrupted at the moment in which its linear sequence is first produced in the exit tunnel of the ribosome.

Initial was created by ATP with \$75 million in Series A funding and co-founders **Jamie H.D. Cate, Ph.D.**, Professor of Chemistry, Biochemistry, Biophysics, and Structural Biology at the University of California (UC) Berkeley; **Brian Paegel, Ph.D.**, Professor of Pharmaceutical Sciences, Chemistry, and Biomedical Engineering at UC Irvine; and **Kevan Shokat, Ph.D.**, Professor of Cellular and Molecular Pharmacology at UC San Francisco (UCSF) and Chemistry at UC Berkeley.

“Initial grew out of conversations between Jamie, Kevan, Brian, and me about work we had each been doing in these intersecting areas of protein synthesis kinetics, ribosome profiling, rapid chemistry, etc., and how we could collaborate to build something new to expand on the idea of selectively modulating protein translation, which we all saw as potentially transformative,” said **Spiros Liras, Ph.D.**, founding CEO of Initial Therapeutics and a venture partner at ATP. “The resulting combination of unmatched expertise and technologies brought by our founders grants Initial unique abilities to prosecute this new approach, and we are very excited about its promise to fight certain cancers and other serious illnesses.”

Groundbreaking structural biology work from the Cate Lab has revealed how protein synthesis can be affected selectively in any phase of translation by interactions of small molecules with a complex that includes the ribosome and the nascent peptide chain of a target protein. Within Initial, this work has been industrialized with custom ribosomal assays scaled to ultra-large library screening using miniaturized microfluidics technology from the Paegel Lab.

“We started Initial Therapeutics to go after therapeutically important proteins that no one has been able to target successfully. I'm thrilled to see the amazing progress the Initial team has made on that front, with profound implications for the treatment of life-threatening diseases,” Dr. Cate said.

Initial designs small molecule therapeutics to modulate the cellular synthesis of known, well-validated, high-value targets. Unlike interventions that work with mature proteins, such as targeted protein stabilization and protein degradation, Initial's strategy circumvents the need to accommodate the cellular activity of the fully formed protein or to structurally solve for docking. Moreover, preventing protein synthesis may stave off aggregate formations and other disease-related molecular pathologies that are difficult to reverse, and in that regard Initial's approach may offer therapeutic benefit.

“Where other drug modalities involve recognition of the three-dimensional shape of the protein, Initial's modality recognizes the primary linear sequence. I see that as a game-changer,” said Dr. Shokat. “Some proteins don't have ligandable pockets, but a linear sequence, that's in everything. Initial's bespoke platform allows us to go into the ribosome, the machinery of mRNA translation, in a selective way that has never before been technically possible.”

“When the therapeutic approach doesn't concern mature proteins, the rules of drug discovery change and the universe of what is 'druggable' expands significantly,” Dr. Paegel said.

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## **About Initial Therapeutics**

Initial Therapeutics discovers and develops new small molecule treatments focused on known, rationally selected targets that play key roles in cancer and other serious illnesses. Initial interdicts high-value protein targets with its STOPS (selective termination of protein synthesis) platform. Selectively modulating translation of pathogenic proteins in the exit tunnel of the ribosome, when the proteins are in their linear sequence stage and before they are fully formed, makes possible a new kind of therapeutic with the potential to stop disease processes in their initial, earliest stages.

Located in South San Francisco, Initial Therapeutics was founded by life sciences venture capital firm Apple Tree Partners and a team of prominent, veteran biotechnology entrepreneurs who have pioneered advances in ribosome biochemistry, proteomics, medicinal chemistry, DNA-encoded library technology, and chemical genetics. Initial's proprietary platform brings together technologies from its founders into uniquely enabling combinations of expertise and capabilities. For more information, visit [www.initialtx.com](http://www.initialtx.com).

## **About ATP**

Founded in 1999, Apple Tree Partners (ATP) is a leader in life sciences venture capital, with \$2.65 billion in committed capital and offices in New York, London, San Francisco, and Cambridge, MA. ATP creates companies starting at various stages, from pre-IP ideas to asset

spinouts, investing in them from seed stage through IPO and beyond. The core of ATP's strategy is providing flexible capital and access to a world-class team of venture partners and EIRs, to build sustainable, research-driven enterprises that deliver therapeutics to improve human lives. For more information, visit [www.appletpartners.com](http://www.appletpartners.com).

**Media Contact**

Sally Jacob

[sjacob@appletpartners.com](mailto:sjacob@appletpartners.com)