



**APPROACH**

# **ADVANCED PHOTONIC PROCESSES FOR NOVEL SOLAR ENERGY HARVESTING TECHNOLOGIES**

**Bridging the gap between academia  
and business  
NAME: Filip Fingl**





IPL Ventures was founded with a focus on the commercialization of scientific projects in cooperation with private capital. As part of its activities, it also supports companies in innovation, strategy and market entry.

IPL Ventures focuses on the commercialization of scientific projects in the field of so-called Scientific Projects. Tough tech

Our focus is mainly on physical innovations in the field of engineering, materials engineering, biochemistry, nanotechnology, but also in clean/ecotech, etc.

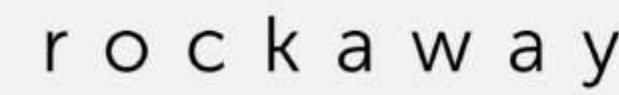
We select the best projects in terms of market potential and intellectual property and team quality, and build companies with global potential hand in hand with scientists and institutions



Filip Fingl

- Founder, CEO and Managing Partner of IP Lab Ventures
- EIC Jury Member, member of several commercialization boards of CZ institutions
- 4 years as CEO of Dáme Jídlo and Foodpanda SK
- Formerly an **investment manager at Rockaway Capital** with responsibility for the investment portfolio and **Strategy Director at MallGroup**
- Several years as a **management consultant at The Boston Consulting Group**, a global consulting company specializing in technology and energy, with projects in Europe and Australia

#### Our Experience



# For the success of the project, it is necessary to have prerequisites in several key areas

Areas of interest	Prerequisites for a successful project	Typical problems of (not only) scientific projects
Team	<ul style="list-style-type: none"> <li>A high-quality senior team with the ability to implement a business plan, ideally with experience from previous projects</li> </ul>	<ul style="list-style-type: none"> <li>✗ Lack of a commercial team and competencies</li> <li>✗ Fear or reluctance to do business</li> <li>✗ Lack of pragmatism and flexibility</li> </ul>
Market	<ul style="list-style-type: none"> <li>Possibility to target a large market with a significant growth trend, alternatively a smaller market with a significant competitive advantage</li> </ul>	<ul style="list-style-type: none"> <li>✗ Ignorance of the market and competition</li> <li>✗ Targets incorrect market, insufficient size</li> <li>✗ Ignorance of market entry barriers</li> </ul>
Proposition & Product	<ul style="list-style-type: none"> <li>A product solving a fundamental and acute problem, customers are willing to pay and has a sustainable advantage</li> </ul>	<ul style="list-style-type: none"> <li>✗ Technology in a low stage of development</li> <li>✗ Non-existent or bad product</li> <li>✗ Ignorance of the potential customer</li> <li>✗ The unverifiability of market fit</li> </ul>
Risks	<ul style="list-style-type: none"> <li>Clearly structured project risks and existing mitigations, absence of major red flags (e.g. extreme barriers to entry), early market entry</li> </ul>	<ul style="list-style-type: none"> <li>✗ No plan</li> <li>✗ Major barriers to market entry</li> <li>✗ Problematic licensing/patenting process</li> <li>✗ Cost barrier</li> </ul>
Financial potential	<ul style="list-style-type: none"> <li>Clear vision of costs and revenues, validation with the market, fast trajectory to profitability</li> </ul>	<ul style="list-style-type: none"> <li>✗ No business model</li> <li>✗ Complex monetization</li> <li>✗ Incremental innovation/non-transferability to other sectors</li> </ul>

# Questions to answer to identify a quality project for commercialization



## Team

- Clarification of ambition (i.e. intention to commercialize the technology and if so, how)
- Calibrating founders and their motivations
- Specification of the founders' involvement in the project, staffing and necessary competencies
- Personnel solution: Originators / institute (combination of employment at the institute/in the company, only in the company, conflict of interest, ...)



## Market potential

- Which market are we targeting and what is its potential (size, development, trends)



## Tech & IP

- Clear description of the technology, incl. TRL and added value
- Prepared IP search, assessment of Freedom to Operate and proposed protection options, or patent
- Optimally, first tests with industrial partners with documented outputs (i.e. we have some indication that it works)



## Spin-out readiness

- What is the participation of the institute (license, share, ...) and how to balance the interests of stake/shareholders?



# For startups, equity financing is a typical source of investment, but there are also non-equity options

## Non-equity financing

### Bootstrapping

- Optimal for companies with existing cash flow/close to the customer, the advantage is independence, the disadvantage is the need for (often considerable) own resources, can't front load without money

### Public Financing

- Attractive for scientific startups, often a significant initial investment without a share split, the disadvantage is administration and optimization for grant outputs, not business, frequent need for co-financing

### Debt financing

- Bank financing – limited options for new companies
- Bonds – a risky instrument, the need to use professional services, may make sense for selected types of projects

## Equity financing (**venture capital**)

### Family, Friends and Fools

- Initial ticket often from friends and family
- Typically, unstructured conditions and lower requirements for return over time, the disadvantage is limited amount and if it fails, relationships suffer

### Angel investors

- Individuals with their own funds able to deposit orders of magnitude lower units of M CZK in the initial phase, they should then be able to help with obtaining a higher investment in the next rounds

### Venture Capital

- Specialized companies for investing entrusted funds in risky projects
- They evaluate, among other things, product quality, potential, phase and team behind project



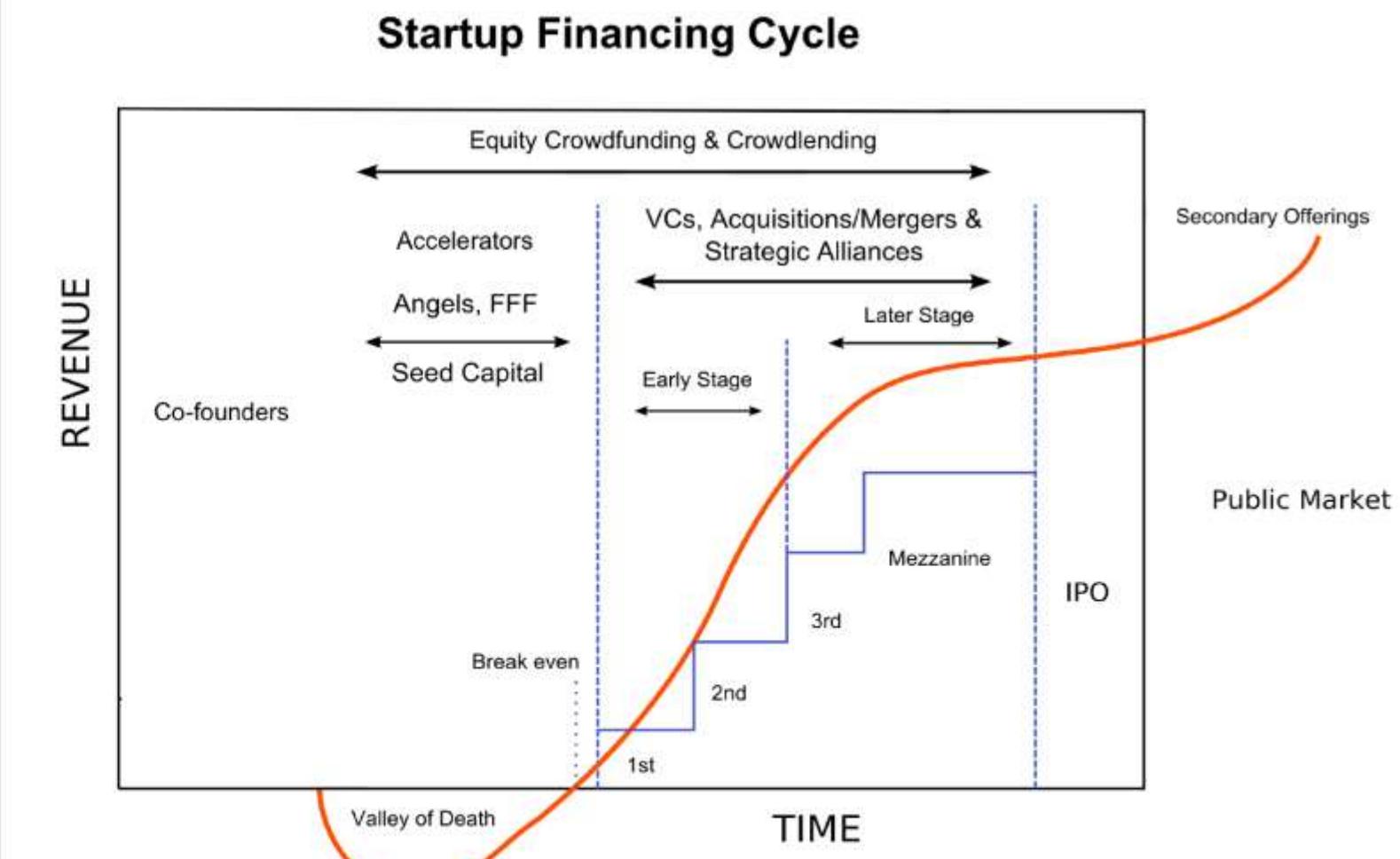
# Most scientific startups will require venture capital to commercialize

This capital supports projects at a stage where they are not bankable in any other external way

## Venture capital is key for start-ups

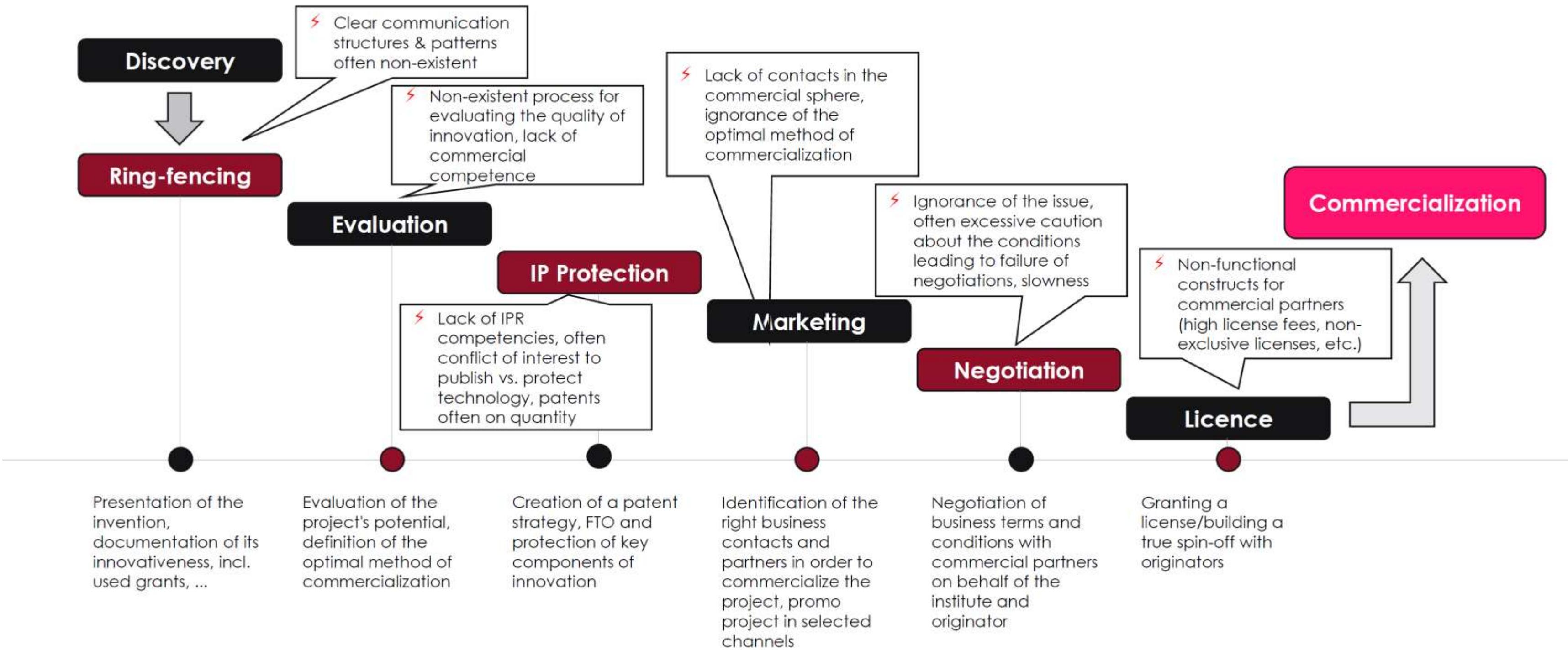
- **Private Equity capital intended to finance innovative projects and the initial development of a company**
- **Medium- to long-term nature with a high level of risk provided for a share in the registered capital of the target company**
- **The main role of the real estate agency is to help startups overcome the phase of commercialization of innovation, where their funding allows them to build infrastructure for the growth of the company (production, marketing, sales, working capital, etc.).**
- **The capital inflow is usually managed through VC funds or through Angel investors (independent investors with high assets, so-called HNWI1)**

## Venture capital has a firm place in capital markets



1. High Net Worth Individual

# The theory and reality of technology transfer are often very different

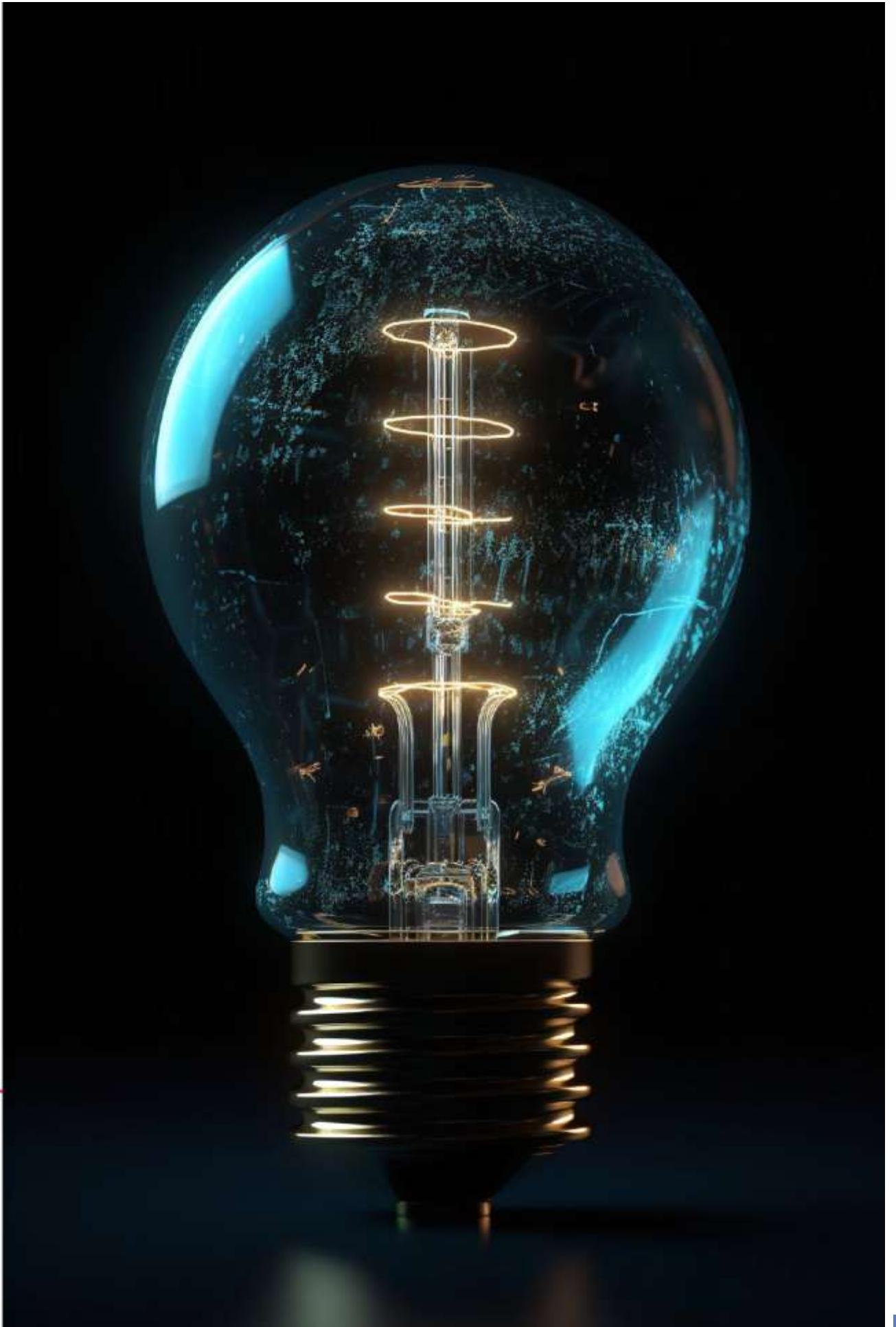


# Thank you for your attention

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## Addressable market

Insecticide market: 20 B USD p.a. with 6% CAGR, personal pest market: 1+ B USD p.a. without mosquitoes



## Strategic Value

Unparalleled selective ecological insecticides, faster and cheaper insecticide development



## Founders

Ing. David Sedlák, PhD.  
Prof. Marek Jindra



## Type of Venture

s.r.o., spin-off with exclusive license agreement, no university equity share



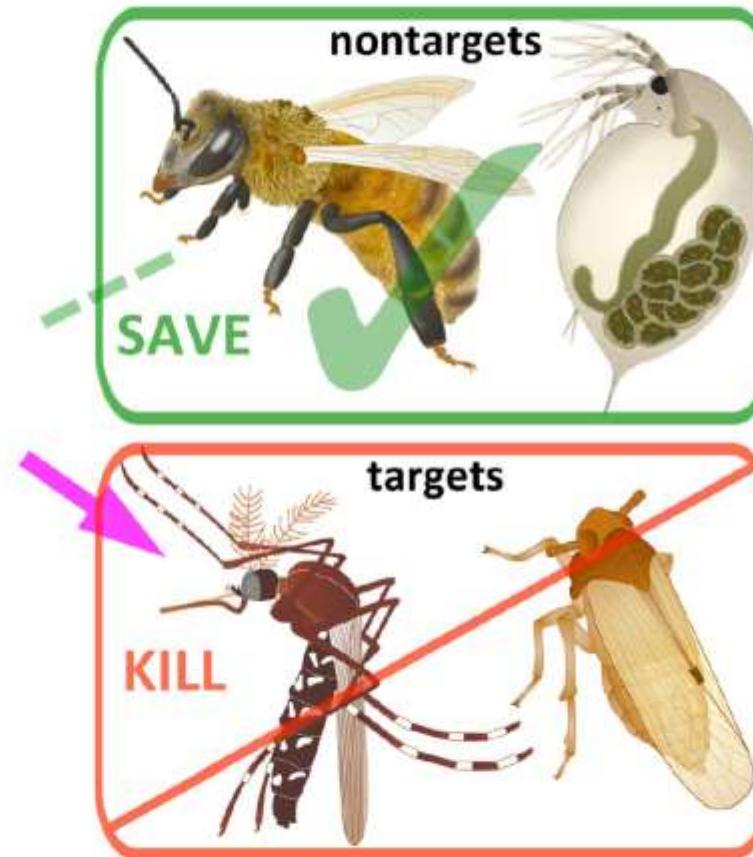
License and cooperation agreement with Biological Center AV, all future patents in possession of Preagon

## Selective eco-friendly insecticides

In response to widely indiscriminately used highly toxic insecticides with substantial adverse effects on nature, biodiversity largely ineffective against resistant pests, Preagon develops precision insecticides with a novel mode of action: PreaX. targeting pest without harming beneficial species, humans & the environment. Their activity can be tuned for targeting specific pest (precision control). They are effective, inexpensive to synthesize & able to combat the resistance.

## Value Proposition

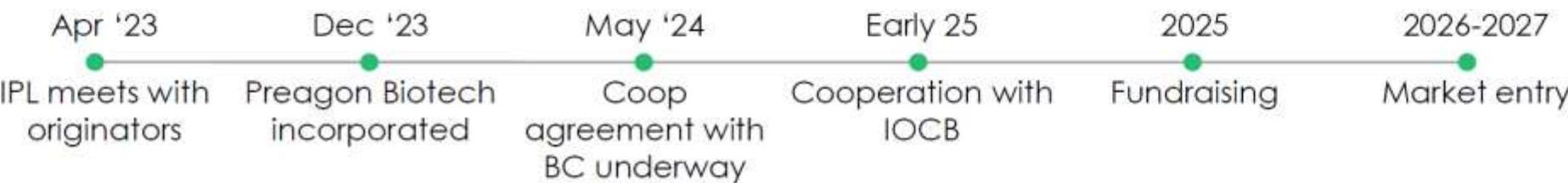
Develop a new insecticide targeting multiple pests at once without touching non-target species and to optimize the insecticide development pipeline, making it faster and cheaper to bring to market.



## Traction:

- Dec 2023 – established Preagon entity
- Jan 2024 – Memorandum of Understanding with Biological Center AV
- Mar 2024 – established consortium with Enamine, Weissman Institute, Cambridge for EIF Pathfinder
- Mar 2024 – cooperation agreement with National Health Authority, CZ & North Shore Mosquito Abatement District, IL, USA
- Jun 2024 – Received 200k EUR as a support from CzechInvest

## Key Milestones





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# THANK YOU

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