

Life Science Innovation

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CEO & Professor

BII



Denmark is **leading** within **life science research**, but we are **not** good enough at the **transition from science to market**

#1

Denmark is among the best life science **research** nations in the world



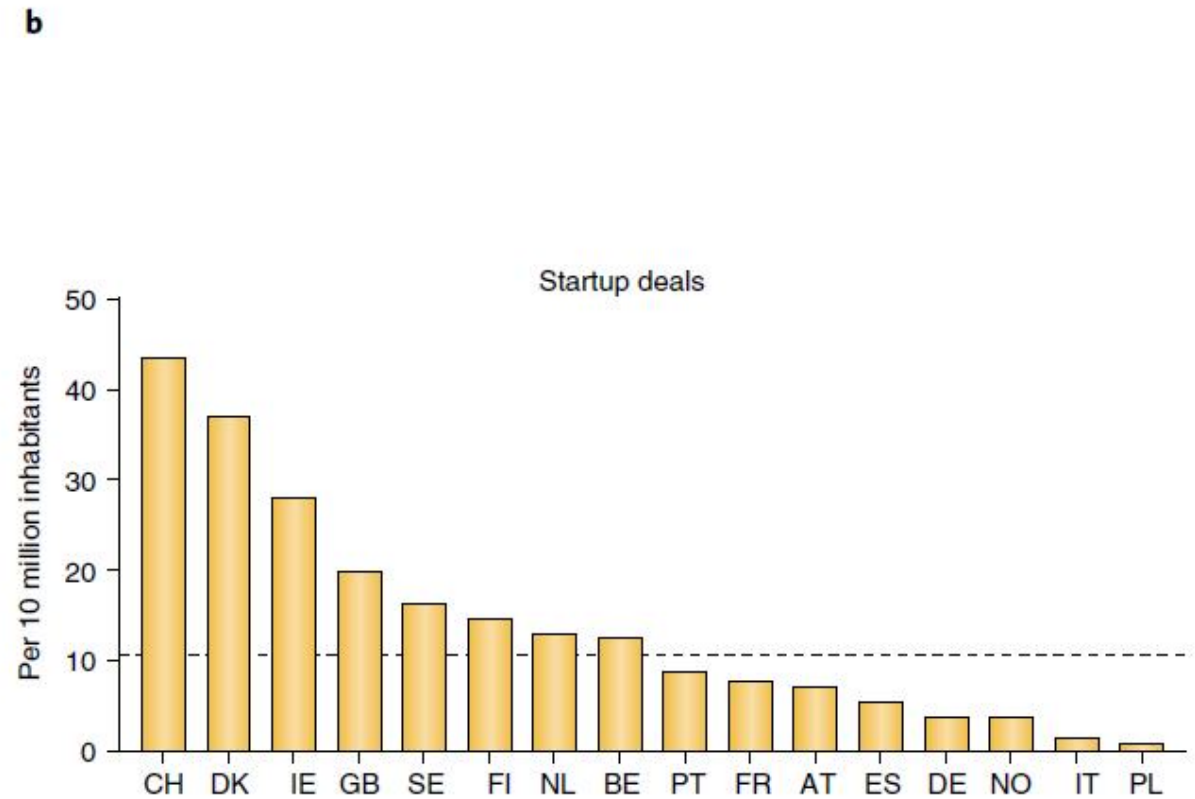
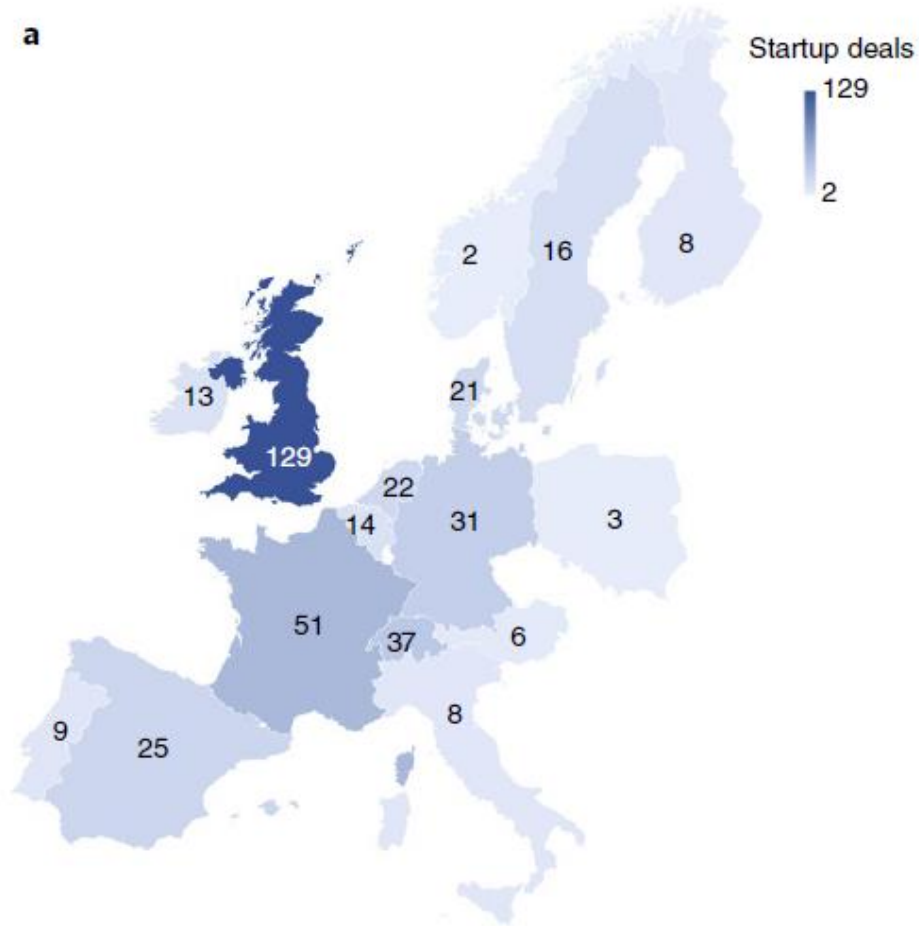
#7

..but we are still not good enough at **translating** the research into patents and companies



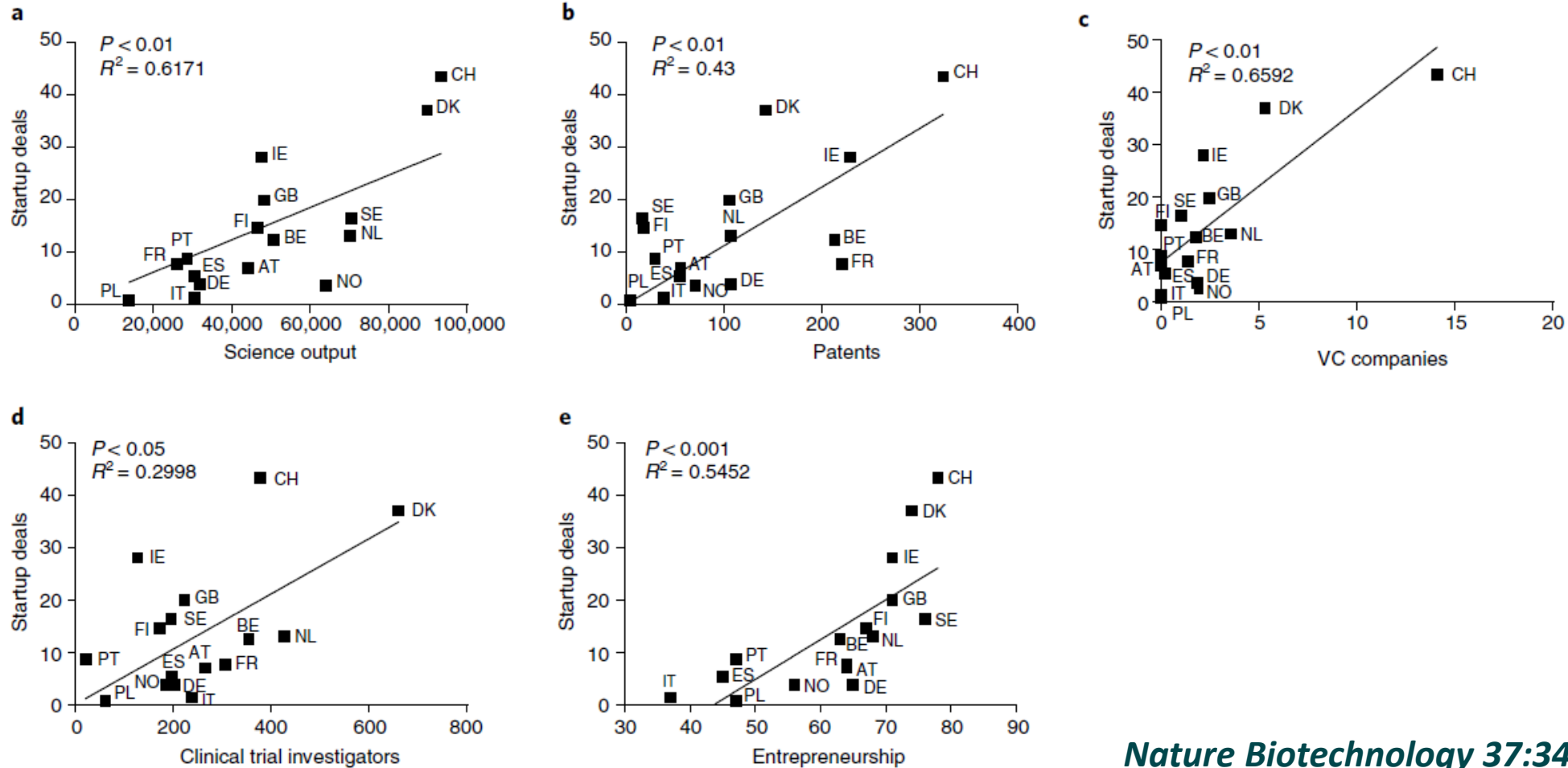
*Data from WIPO (World Intellectual Property Organization)

There are start-up deals in Denmark



Nature Biotechnology 37:345-349

Start-up deals correlate with scientific output



Nature Biotechnology 37:345-349

BII

ACADEMIA



BUSINESS

BII helps start-ups become **investment ready** by bridging the gap between **academia** and **business**.

BII



BII is a private **not-for-profit** Institute that supports **Life Science Innovation**



BII team of about **35 people** supports start-ups with knowledge, networks, financing and infrastructures



Funded by the Novo Nordisk Foundation with **~500 MEUR in 2021-2030** (70 MEUR in 2018-2020)

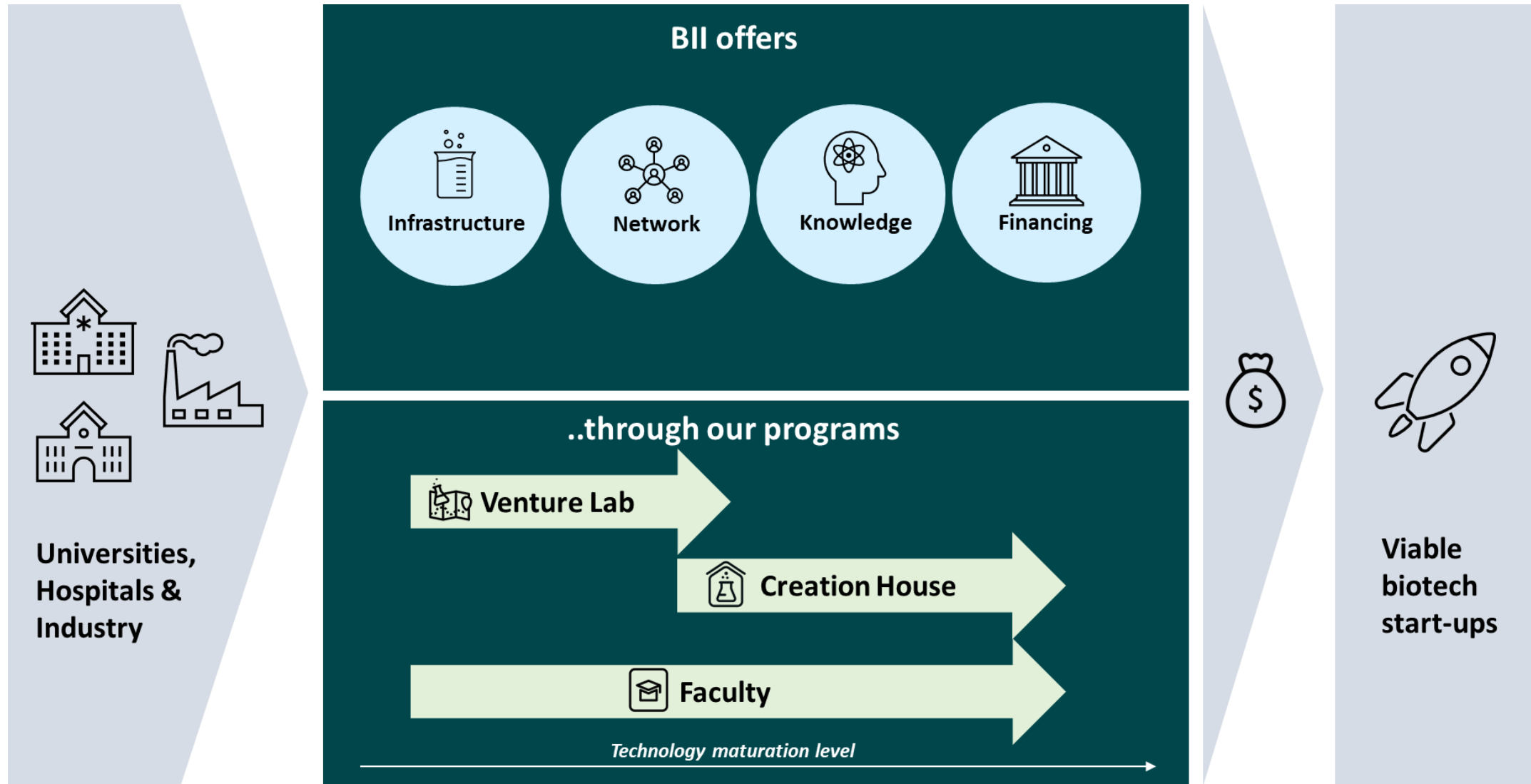


So far **granted about 30 MEUR** to early-stage start-ups



BII companies have already **raised >110 MEUR in financing**

The BII Model



BII - a unique place to be

Inspired by global hotspots

Creation House, inspired by...



Incubator

Accelerator

Venture Lab, inspired by...



Residence Program, inspired by..



Residence
Incubator

"Innovation
Hub"

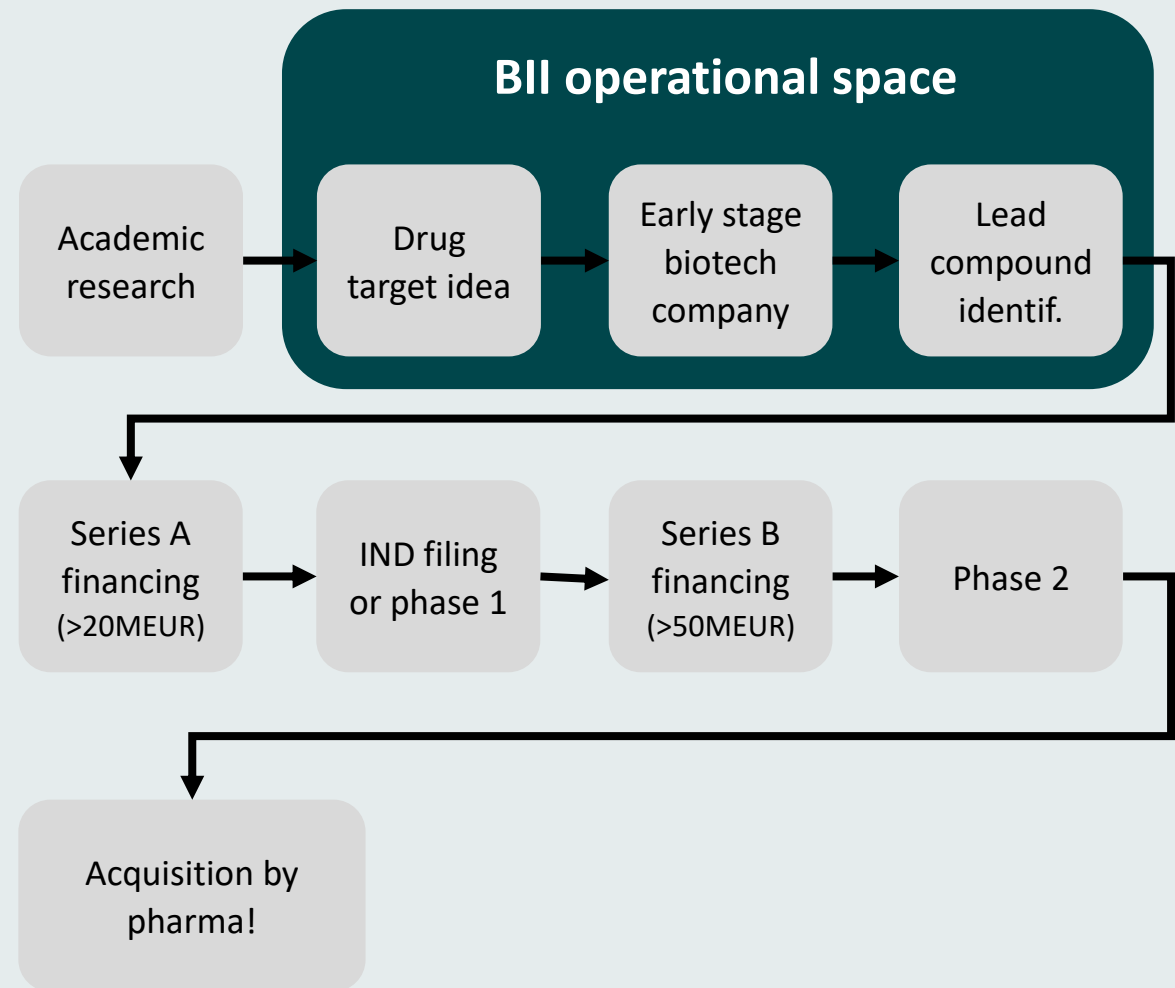
Faculty Program, inspired by...



The Pharmaceutical Industry

The pharmaceutical industry has learned to source from biotech start-ups

An ecosystem of innovation has been established



Johnson & Johnson

INNOVATION | JLABS

Venture Lab

- Venture Lab is designed to help newly established start-ups in the early phases
 - 12 months incubation
 - Up to five loans granted per open call
 - Convertible loan of 500,000 euros (4M DKK)
-

Access:

- Lab facilities
 - Dedicated BII Anchor
 - VC and Industry Network
-

Eligibility:

- Research-based idea with high-growth commercial potential



Venture Lab program supports early-stage startups in their journey from cutting-edge, transformative ideas into validated concepts.

Creation House

- 18 months incubation
 - Up to eight loans granted per open call
 - Convertible loan of EUR 1,3M (DKK 10M)
-

Access:

- Lab facilities
 - Dedicated BII Anchor
 - VC and Industry Network
-

Eligibility:

- Proof of concept and initial business plan
- No previous investments/loans
- Must establish Danish entity and deploy operational team at BII if approved



The program is designed to mature companies to a competitive international level and prepare teams for discussions with investors and industry.

The end-goal is to support your company in raising Series A funding and a key outcome is a prototype or lead candidate.

Faculty

- Up to 3 years
 - 4-6 projects per year
 - Grant, up to 6M DKK per year
-

Access:

- Lab facilities
 - Dedicated BII Anchor
 - VC and Industry Network
-

Eligibility:

- PI with a strong scientific and entrepreneurial track-record, innovative research idea with commercial potential



BII Faculty Program supports entrepreneurial academic researchers in translating their science into innovative products and solutions.

BII have a unique **international network** of selected **partners** providing access to **financing options** and **business acceleration**

Venture capital partners

SOFINNOVA
PARTNERS

NEA®

THE
MARCH
FUND

wellingtonpartners

novo
holdings

BioVentures
MedTech Funds

ROCK
HEALTH

SR One

 **Abingworth**
partners in life science investing

Selected **other** partners


BACK BAY
LIFE SCIENCE ADVISORS

 药明康德
WuXi AppTec

FERRING
PHARMACEUTICALS

Coulter:Partners

HØIBERG
European Patent Attorneys

Venture Capital Engagement



* At least met with BII BD and proceed to review one or more of our portfolio companies.

.... and an **internally recognized SAB**, which is **actively engaged** and provide **general advice** for BII's programs



Robert Langer

Professor at MIT, USA.
Founder of >40 biotech companies and the most cited engineer of all time.



Mathias Uhlen

Professor at KTH, Sweden.
Founder of >10 biotech companies and one of the most cited scientists in Sweden.



Feng Zhang

Professor at the Broad Institute, USA. Founder of several biotech companies and the most networked CRISPR/Cas9 pioneer.



Christina Smolke

Professor at Stanford, USA.
Founder of a pioneering yeast synthetic biology company and a world leader in synthetic biology research.



Sang Yup Lee

Professor at KAIST, South Korea. A world leader in industrial biotechnology.



Eran Segal

Professor at the Weismann Institute, Israel. Founder of several biotech companies and world leader in systems biology.

From Zero to One: Transformative start-ups

No other segment has observed as fast growth as the IT/tech industry with several prime examples of Zero to One, e.g., Uber, Airbnb, and Facebook

Difficult to capture the same concept in biotech start-ups, but the mindset should be the same:



Do NOT focus
on marginal
improvements

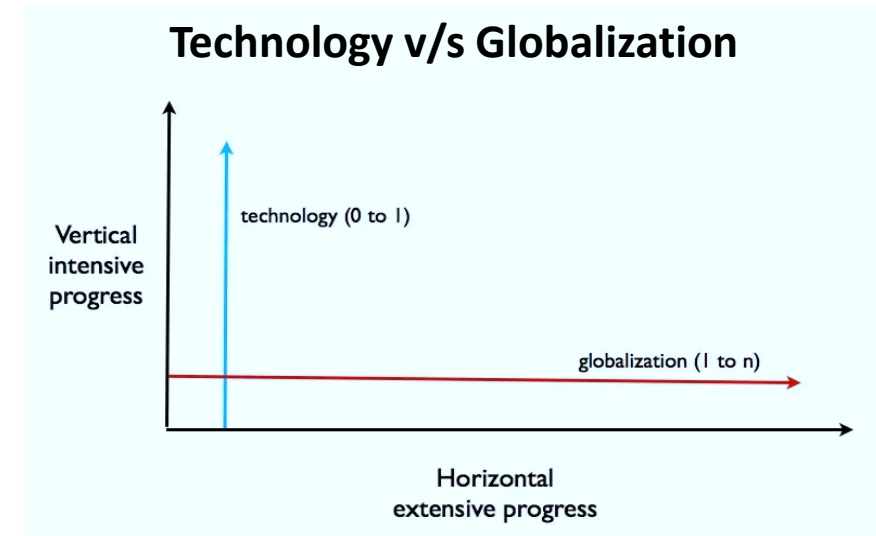


Do NOT look
at product
replacements



Aim for significant
changes &
opportunities to scale

Big difference though between Europe and USA in terms of vision and financing.



Check-point inhibitors: Transformative drugs

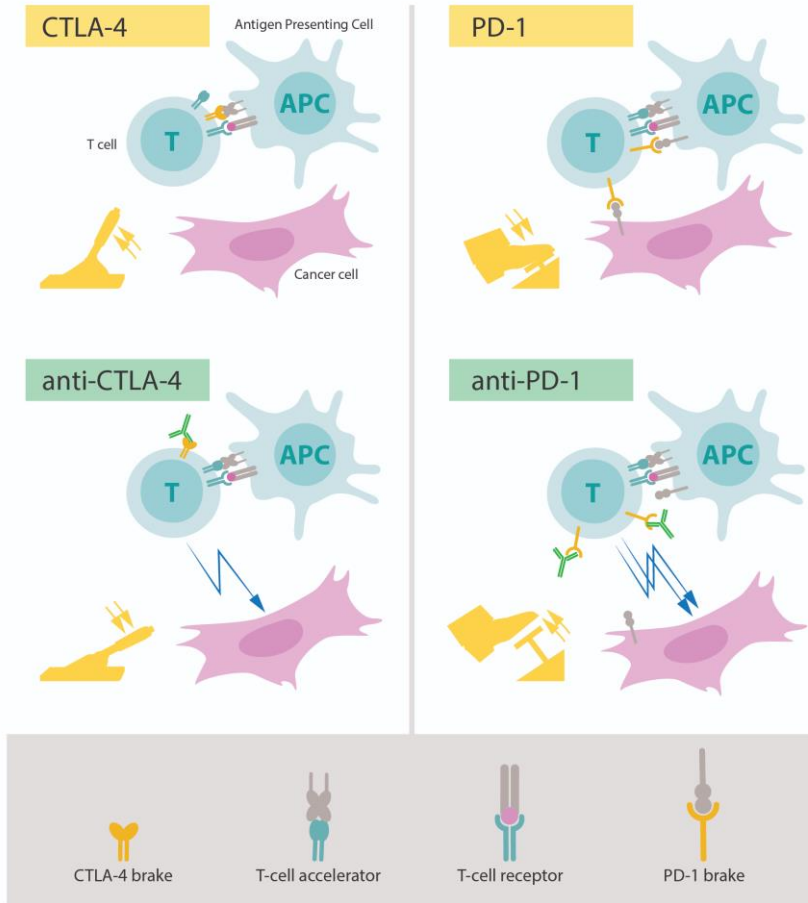
Nobel Prize in Medicine 2018



James P. Allison



Tasuku Honjo



In principle, any new drug that addresses an unmet medical need is a zero-to-one solution

However, most new drugs replace existing therapies, with relevant improvements

In rare occasions **new biological discoveries**, like the idea of using antibodies to target immune regulation, results in transformation of therapy

But, there are many biological solutions to this problem (due to the nature of biology) and hence the first movers do not get a monopoly position!

Life sciences is therefore very different from IT/tech.

Another Example



A transformative case of addressing the issue of drug delivery through the use of engineered red blood cells

An initial market cap of >2 BUSD when going IPO in 2019



PROVIDING RELIEF FROM TREATMENT-RESISTANT DEPRESSION

Lophora is a preclinical biotech company located in Copenhagen, Denmark, developing a lead candidate for treatment-resistant depression based on a new treatment-paradigm: Psychedelic Assisted Psychotherapy

Lophora is developing small molecules that modulate the Serotonin 2A receptor for psychiatric conditions



Founders

Jesper Kristiansen, Prof. U Copenhagen
Bo Tandrup, serial entrepreneur



Program participation

Entered in 2019
PoC, VentureLab, Creation House



Funding

354k EUR



TWELVE.BIO

INNOVATIVE SOLUTIONS USING NEXT GENERATION CRISPR-cas12a TECHNOLOGY

Twelve Bio is focusing on CRISPr technology for gene editing. By employing a structural based rational design to manipulate the CRISPR-Cas12a system.

Twelve Bio's approach combined with innovative methods to identify diseases related to DNA sequences allows them to tackle unique indications



Founders

Stefano Stella, Università di Camerino



Program participation

Entered in 2019

Novoseeds Preseed, VentureLab, Creation House



Funding

4.28 Million EUR



DEVELOPING ANTIBODY-DRUG CONJUGATES FOR CANCER TREATMENT

Adcendo ApS is a Copenhagen-based biotech company dedicated to developing antibody-drug conjugates (ADCs) for treatment of cancer.

Adcendo are taking the ADC approach to new levels through a focus on cancer-associated targets that are professional internalizers and allow for superior selectivity via highly preferential cancer expression.



Founders

Henrik Stage, serial entrepreneur
Christoffer Nielsen, AU
Niels Behrendt, Prof. U Copenhagen
Lars H. Engelholm, U Copenhagen



Program participation

Entered Creation House 2019



Funding

50,9 Million EUR



EvodiaBio

MAKING NON-ALCOHOLIC BEER TASTE GREAT

EvodiaBio is a bio-industrial company producing sustainable, natural aromas for the food and beverage industry. The disruptive yeast-based technology enables consumers to enjoy the benefits of non-alcoholic beer without having to compromise on taste.



Founders

Simon Dusséaux, U Copenhagen
Victor Forman, U Copenhagen
Sotirios Kampranis, Prof. U Copenhagen



Program participation

Entered VentureLab 2021



Funding

They have not received funding yet

26

start-ups
from 2018-2021

20

Start-ups
received
external funding

0

Series A
investments
> 10M EUR

4

Seed
investments
> 1M EUR

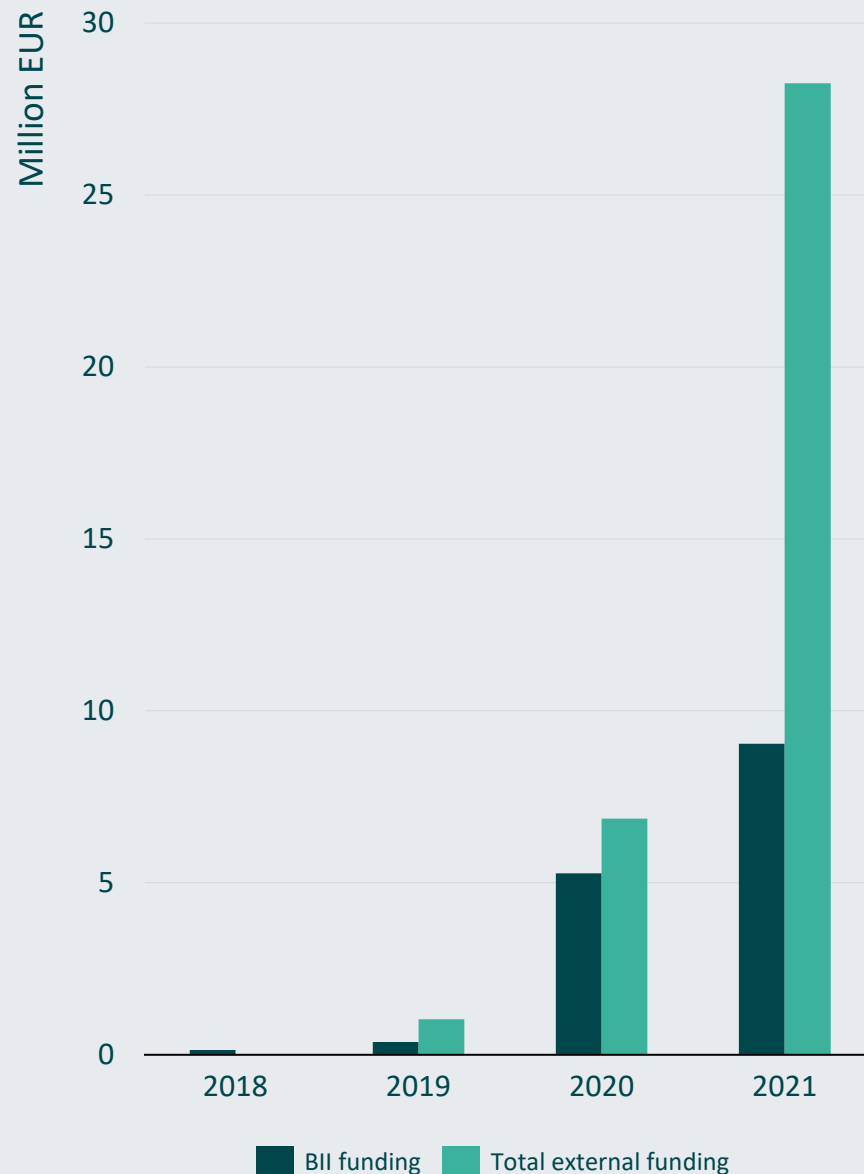
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Minor
investments
< 1M EUR

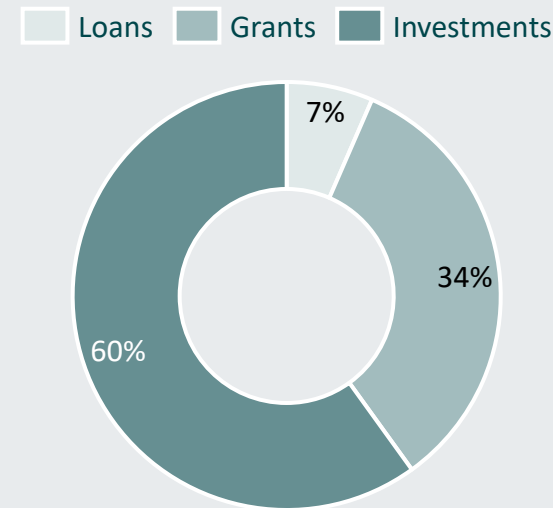
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Additional
grants

Granted funding by BII vs. granted external funding
(accumulated)



Split between loans, grants and investments



53%

of portfolio have raised
external funding since 2018

28M

EUR raised in external funding
by our portfolio

3,1x

external funding leverage in
average across portfolio

Numbers from Q3 2021

22

start-ups
from 2018-2021

18

Start-ups
received
external funding

2

Series A
investments
> 10M EUR

2

Seed
investments
> 1M EUR

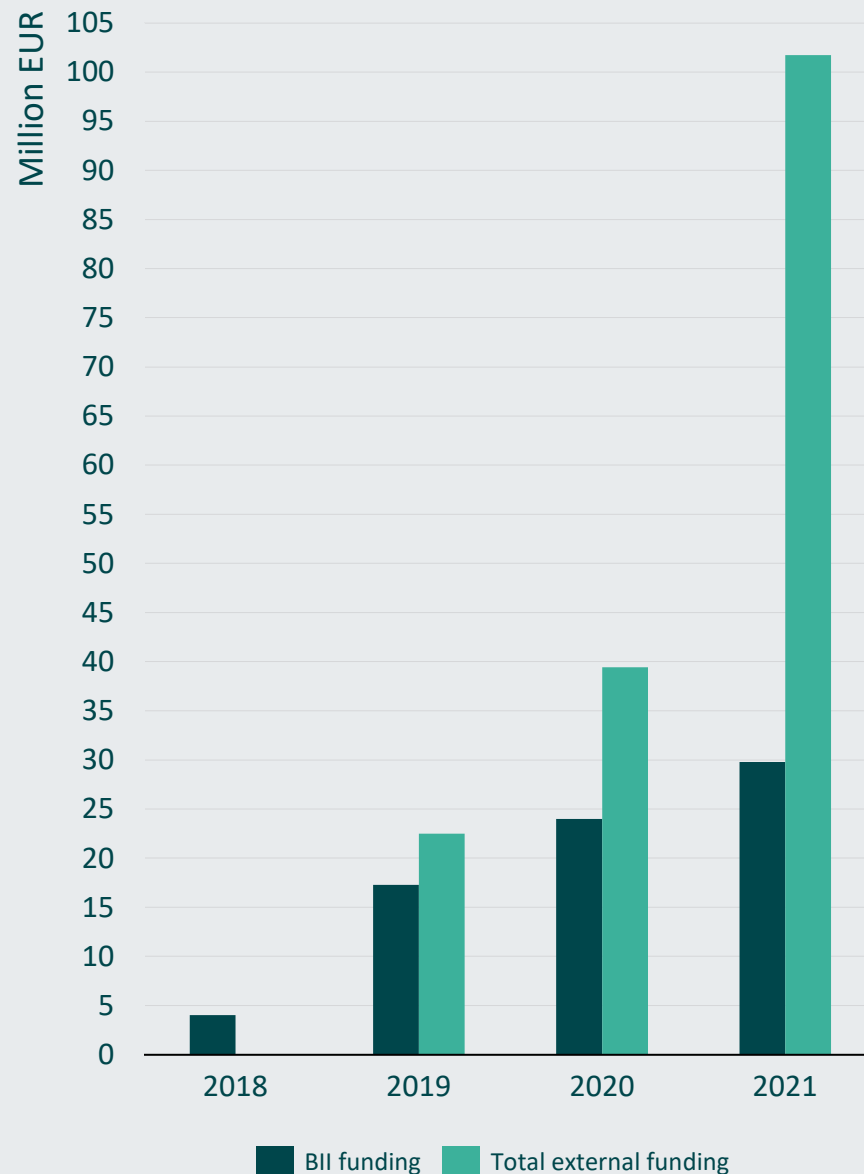
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Minor
investments
< 1M EUR

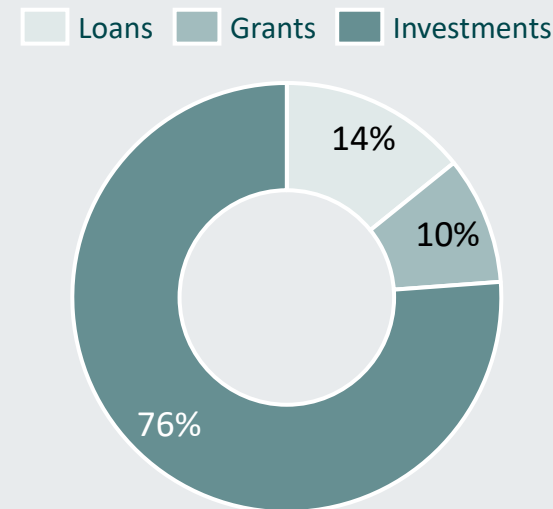
23

Additional
grants

Granted funding by BII vs. granted external funding
(accumulated)



Split between loans, grants and investments



82%

of portfolio have raised
external funding since 2018

102M

EUR raised in external funding
by our portfolio

3,4x

external funding leverage in
average across portfolio

Numbers from Q3 2021

Questions?

Apply on our webpage
and stay in touch

BII

BioInnovation
Institute



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E-mail: info@bii.dk