

Department of Immunotechnology



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Combining academic research with entrepreneurship?

June, 2006

Prof. Carl Borrebaeck



Is there a contradiction in the combination -
academic research vs. commercialization?



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Misconception #1

- You cannot combine cutting edge science with IPR protection



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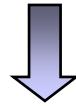
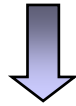
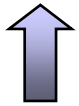
Patenting

0

6

12

18 months



Filing

Opinion

Re-filing/
additions

Publication

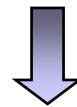
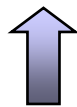
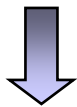
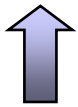
Publishing

0

2

4

8-9 months



Submit

Review

Re-submission

- On-line publication -

Publication



Misconception #1

- You cannot combine cutting edge science with with IPR protection

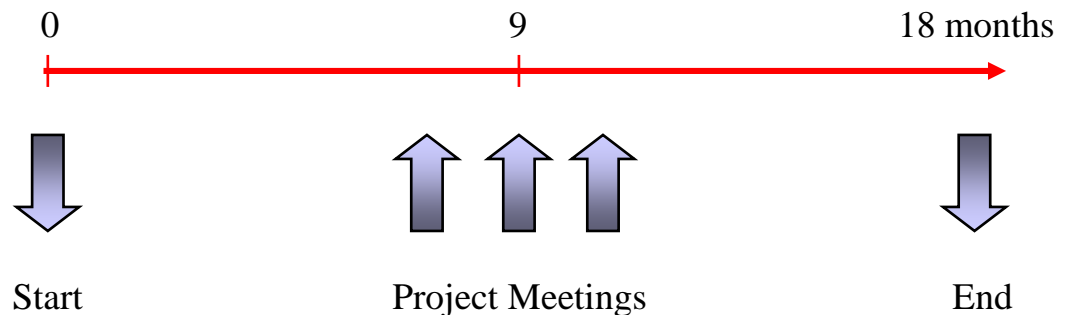
Misconception #2

- There is often a negative influence on science by industrial demands

• Agreement

- ✓ Aims
- ✓ Budget
- ✓ IPR
- ✓ Publications
- ✓ Termination
- ✓ Commercialization

Industrial Collaboration





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Misconception #3

- Graduate students have a weak interest in industrial/biomedical applications

This is changing rapidly today:

- ✓ Entrepreneurial courses are popular
- ✓ Increased awareness of IPR
- ✓ Possibility to apply science in society
- ✓ Possibility to make money



How can we improve this situation?

❑ Increase the awareness of scientists

- ❖ IPR - “anything can be patent but few things can be commercialized”
- ❖ Tech-transfer - how does it work?
- ❖ Financing - where and how much?

❑ Include patents in the activity-based faculty funding



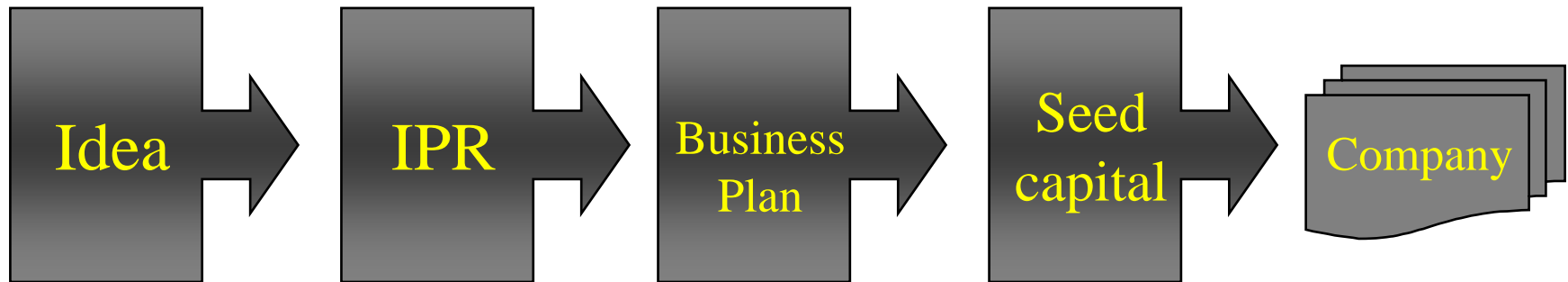
How can we improve this situation?

- Offer an efficient tech-transfer infrastructure
- Universities should focus on co-ownerships in the innovation chain
- Keep the “lärarundantag” as incentive



What is the situation today in Öresund Region?

The innovation chain



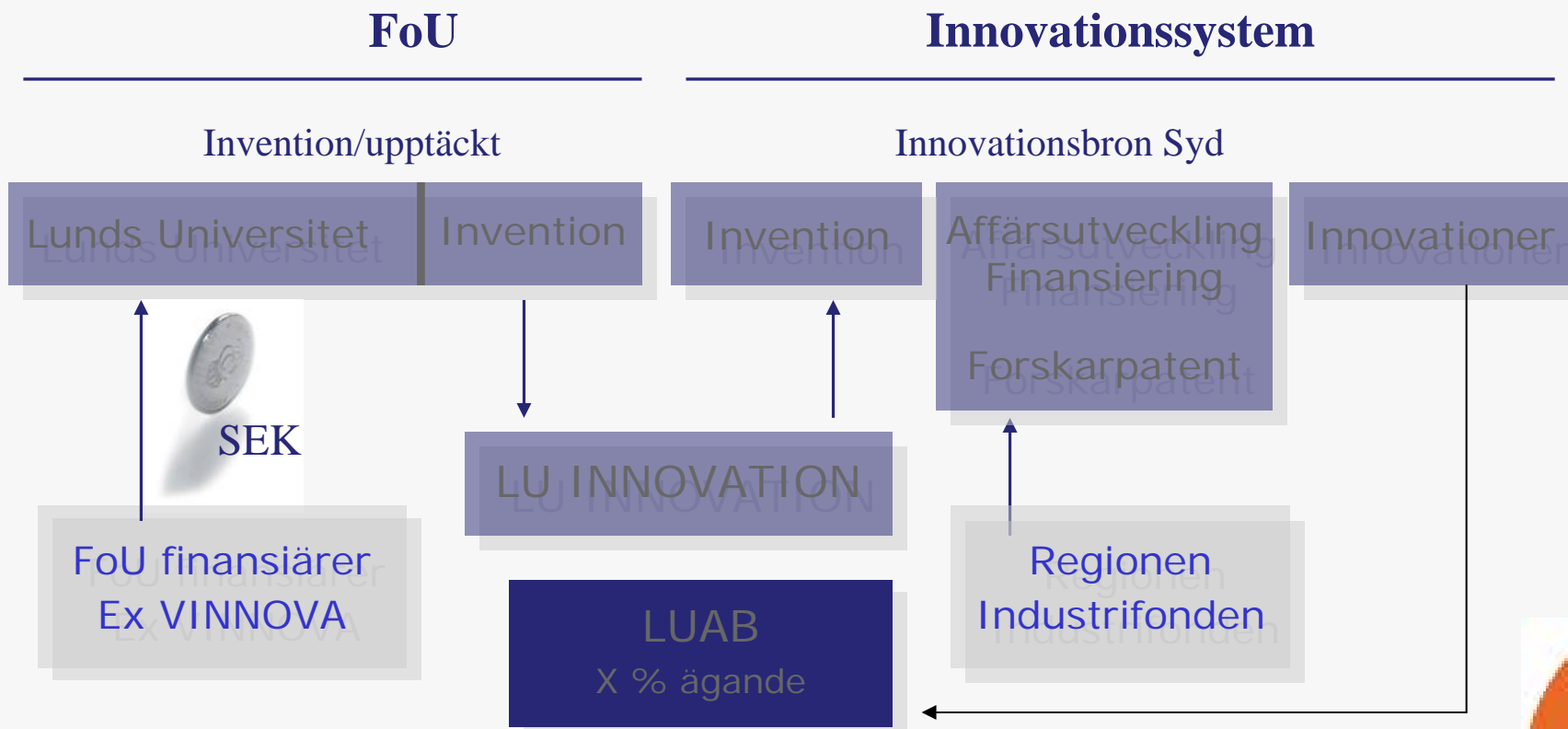
- Science
- Novelty

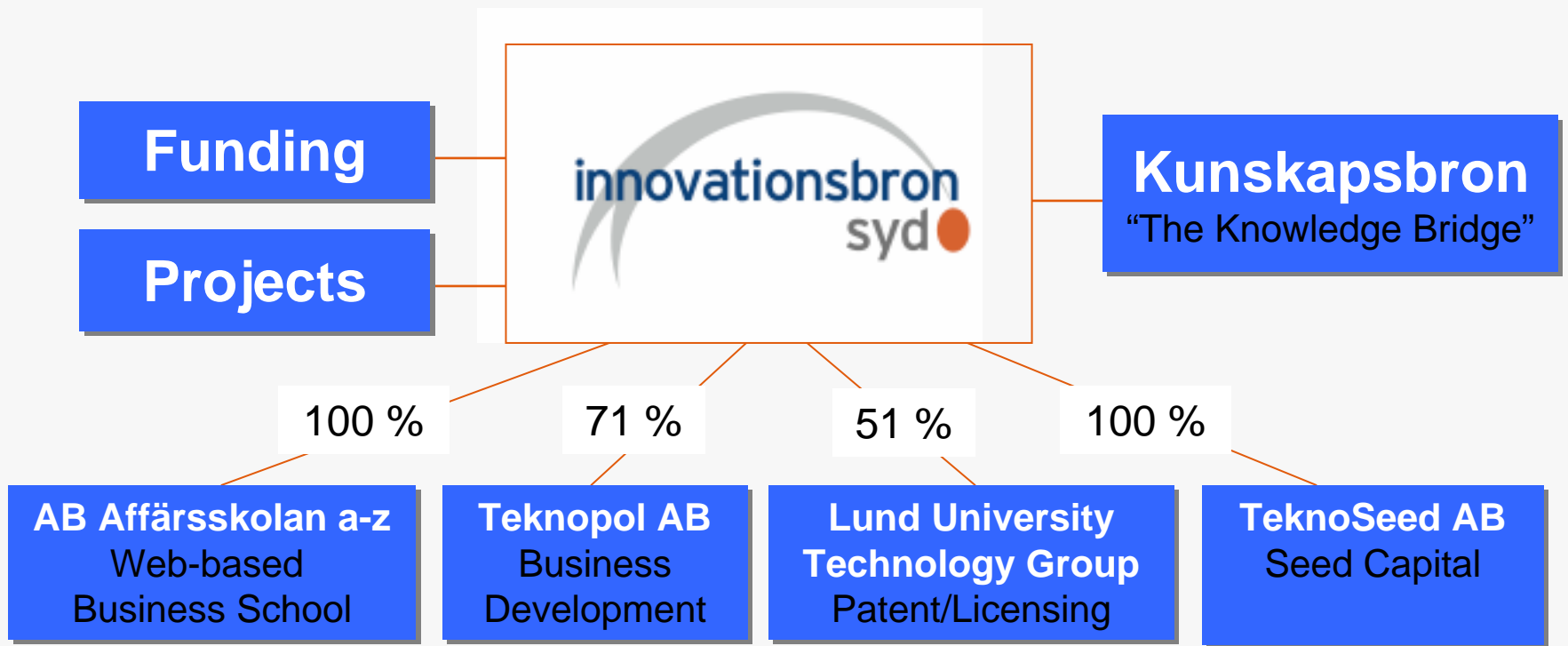
- Innovation
- Novelty

- Business idea
- Memorandum
- Market needs

- 0.5 M\$

Kommersialiseringssystem i Syd – Lund





Inflow

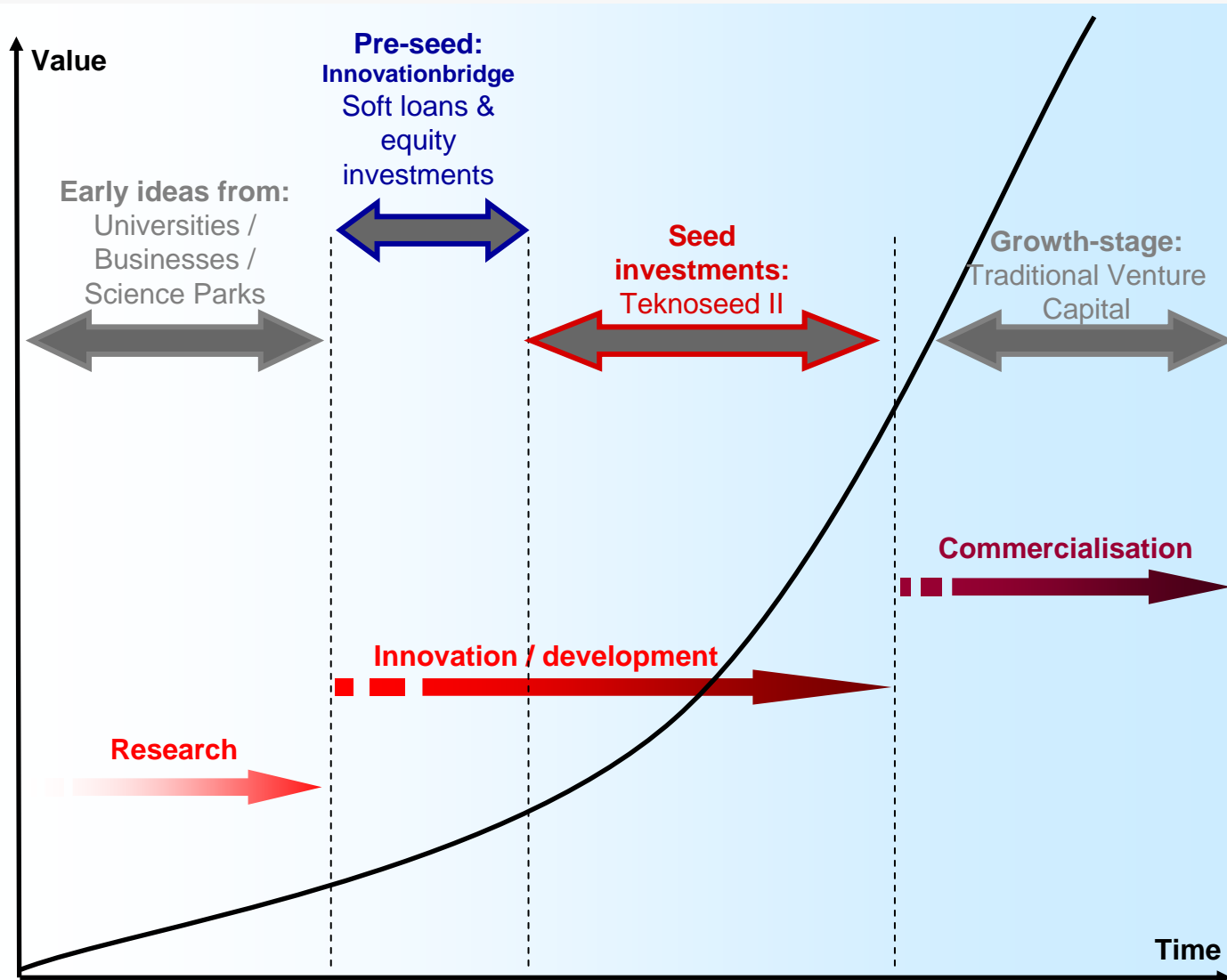


delivery



Bridging the Financing Gap

– A System for Developing Brilliant Ideas to Commercial Success





Provides services on IPR, licensing and
commercialization

www.forskarpatent.com



Can an academic career be combined with
commercial activity?

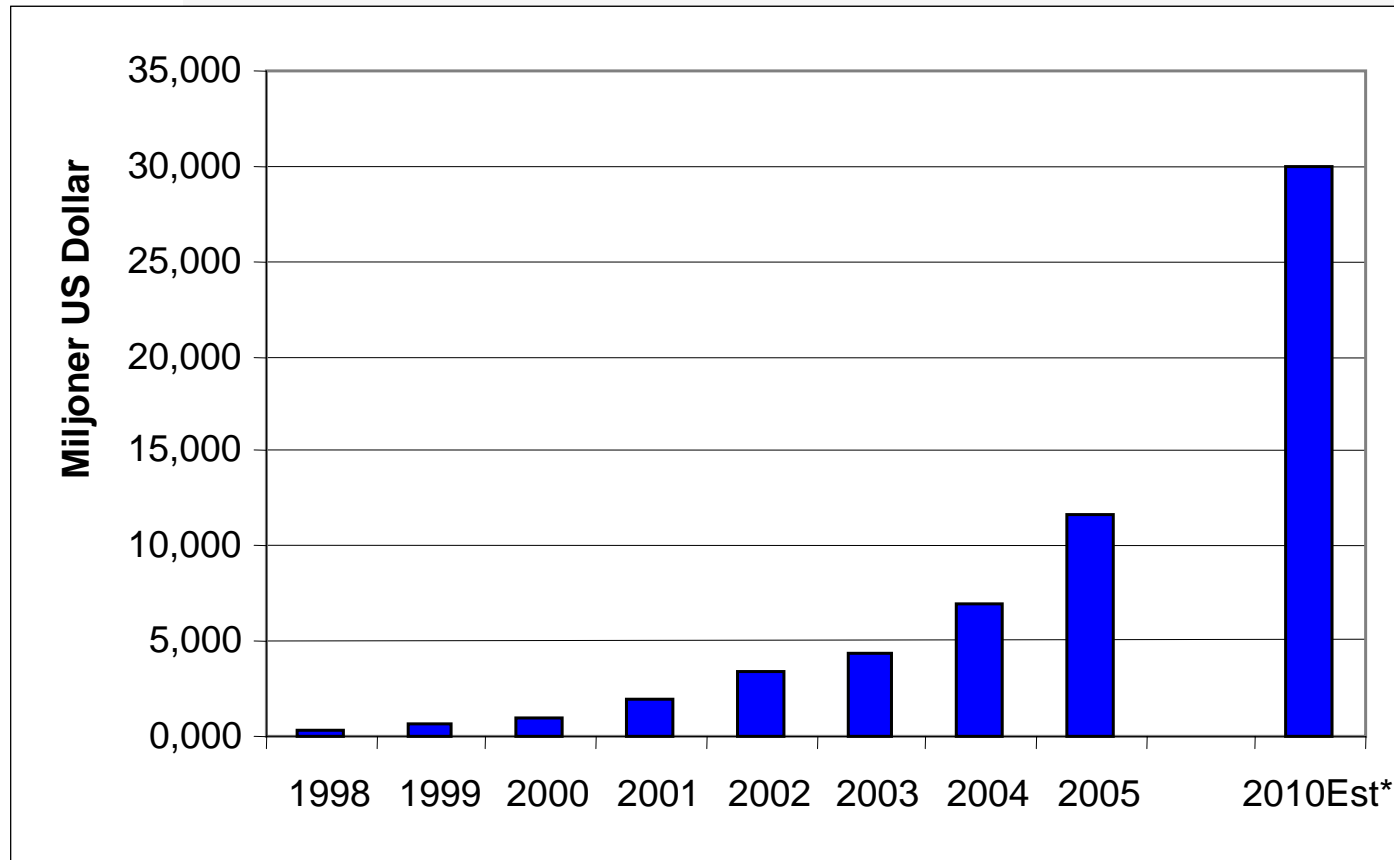
BioInvent International AB - Facts and Figures



- Located in Ideon Research Park, Lund, Sweden
- O-list Stockholm Exchange (BINV)
- Raised 700 MSEK since 1997
- Head count: approx 100
- Focus on therapeutic antibodies
- Sales 2005: 28 MSEK
- Proven by >20 collaborations

Antikroppar ett läkemedelssegment i stark tillväxt

Försäljning antikroppsläkemedel 1998-2005, 2010Est.



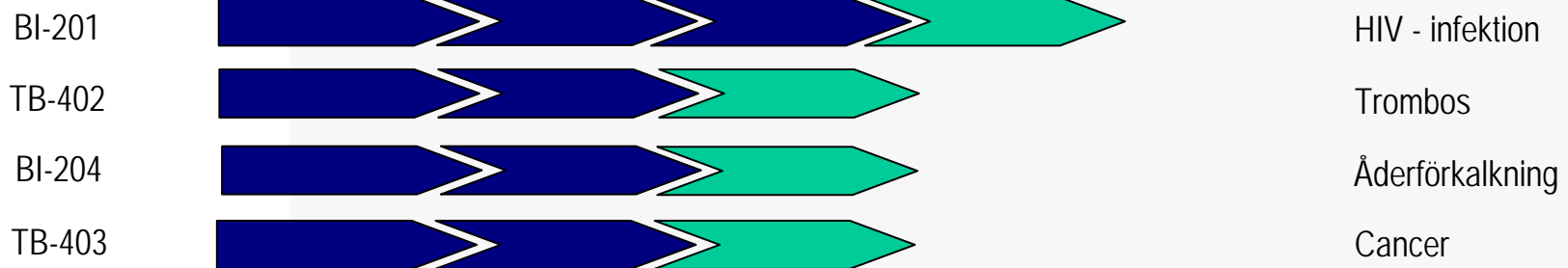
Källa: BioInvent estimat och IMS. *Källa: Data Monitor

Vår affär

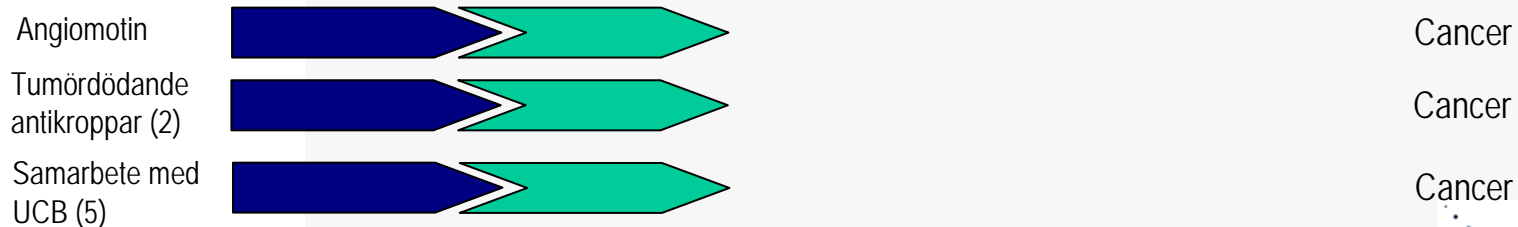
En växande portfölj av läkemedelsprojekt inom stora marknadssegment



Utvecklingsprojekt



Forskningsprojekt

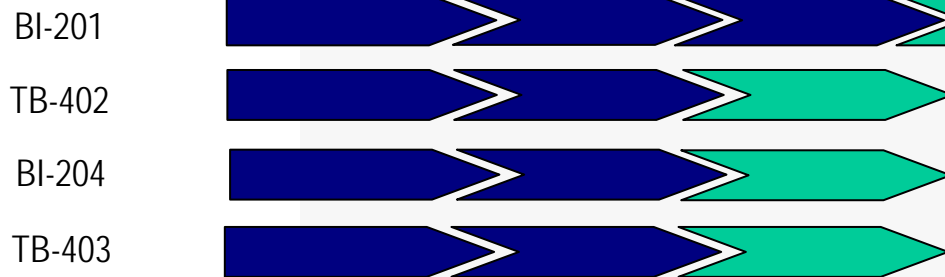


Vår affär

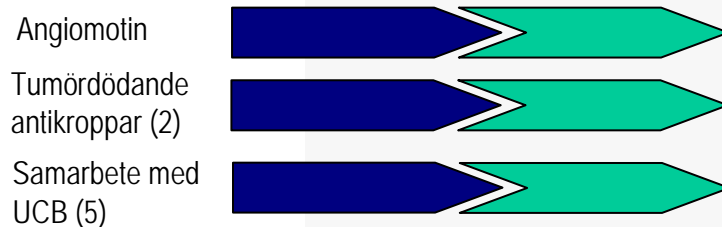
En växande portfölj av läkemedelsprojekt inom stora marknadssegment



Utvecklingsprojekt



Forskningsprojekt



Partneravtal



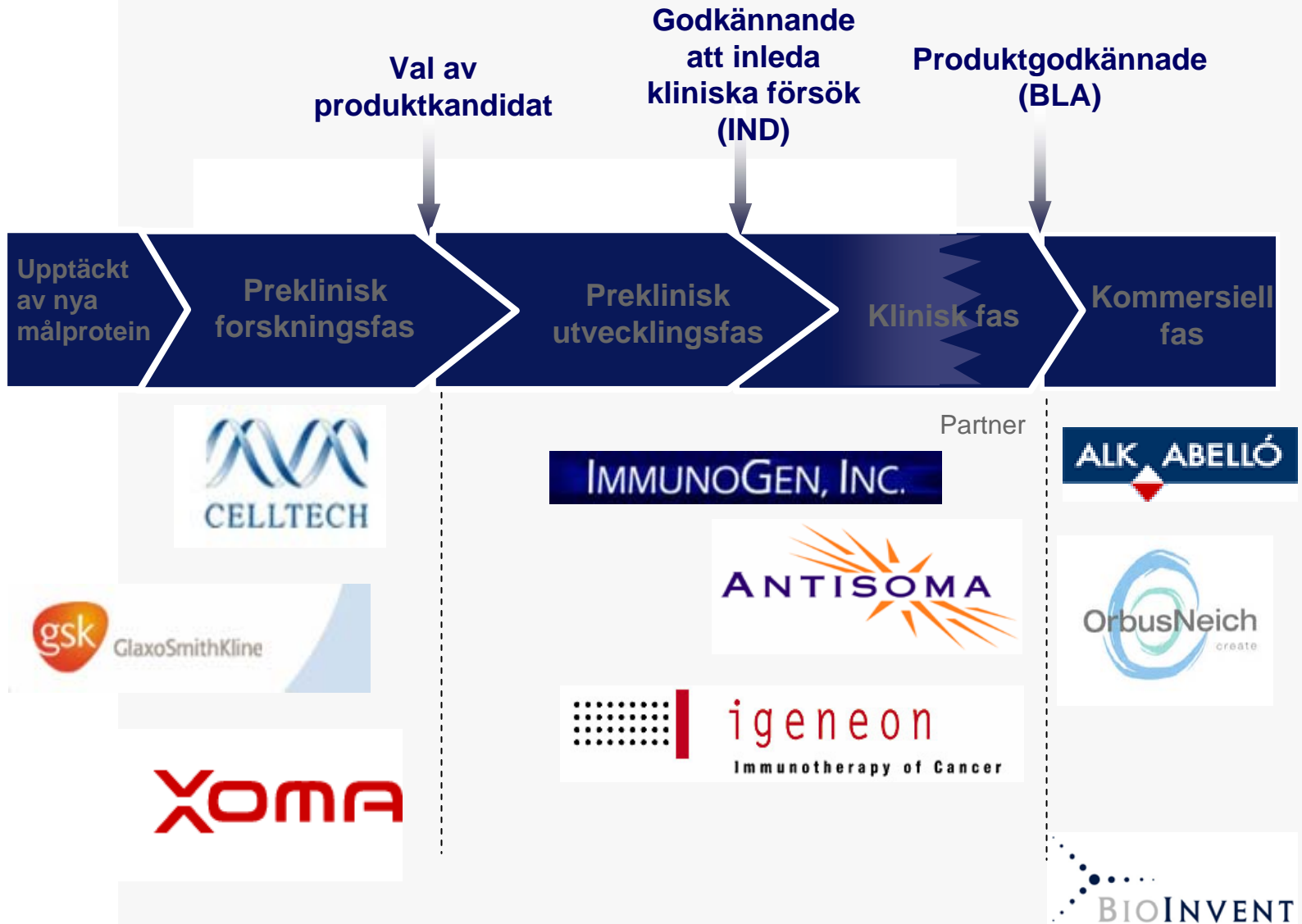
BioInvents intäkter

- Kontant ersättning
- FoU-milestones
- Ersättning för produktion
- Royalty



Vår affär

En växande portfölj av läkemedelsprojekt inom stora marknadssegment

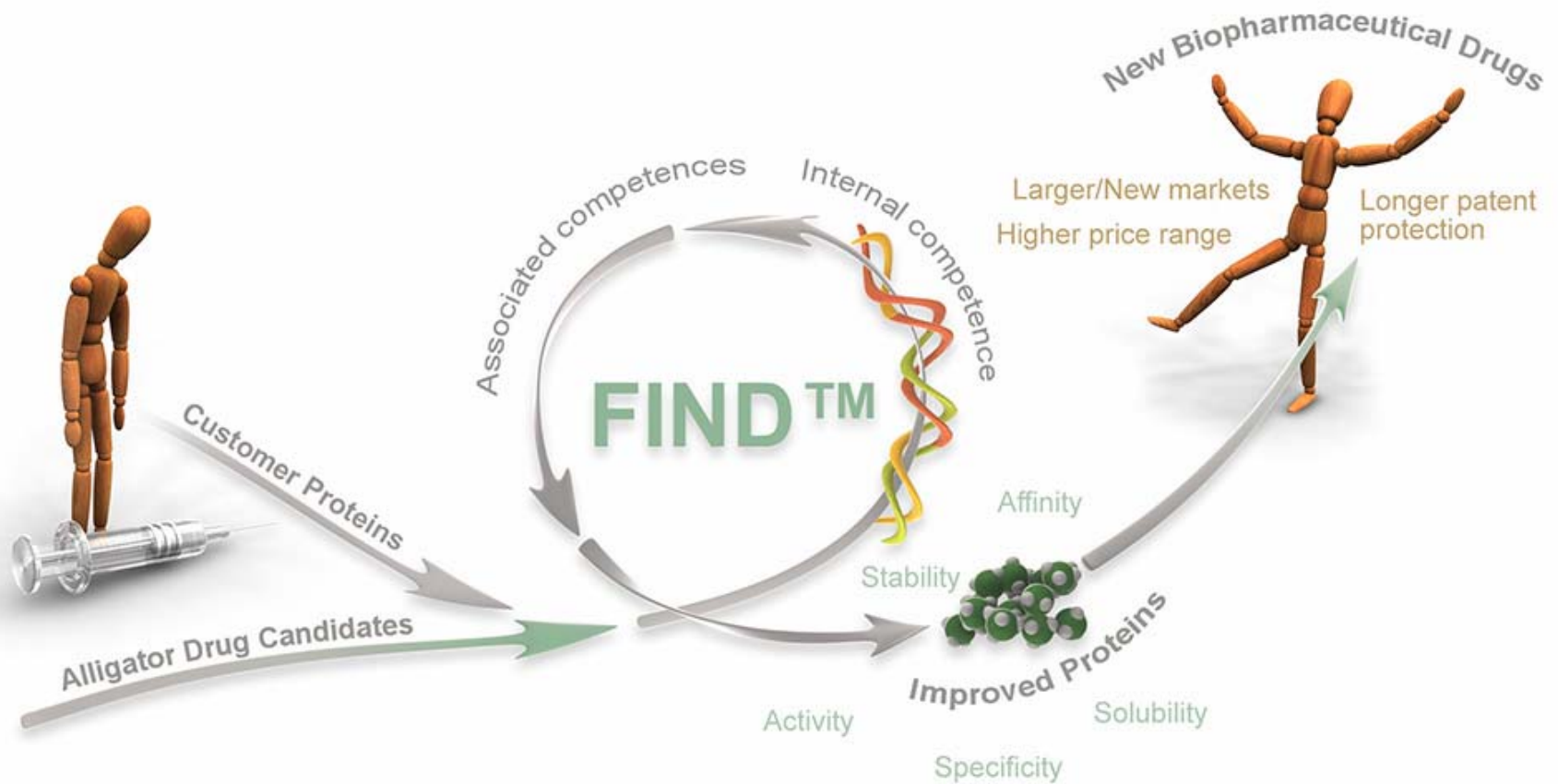




Evolution in a test tube

- Launched 2001 based on research from Department of Immunotechnology
- Raised 125 MSEK
- Last emission in March 2006
- 22 employees
- Target the protein pharmaceutical marker

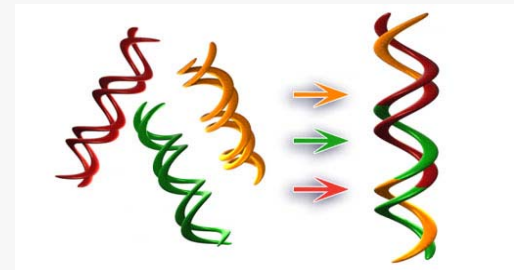
Alligator Bioscience AB

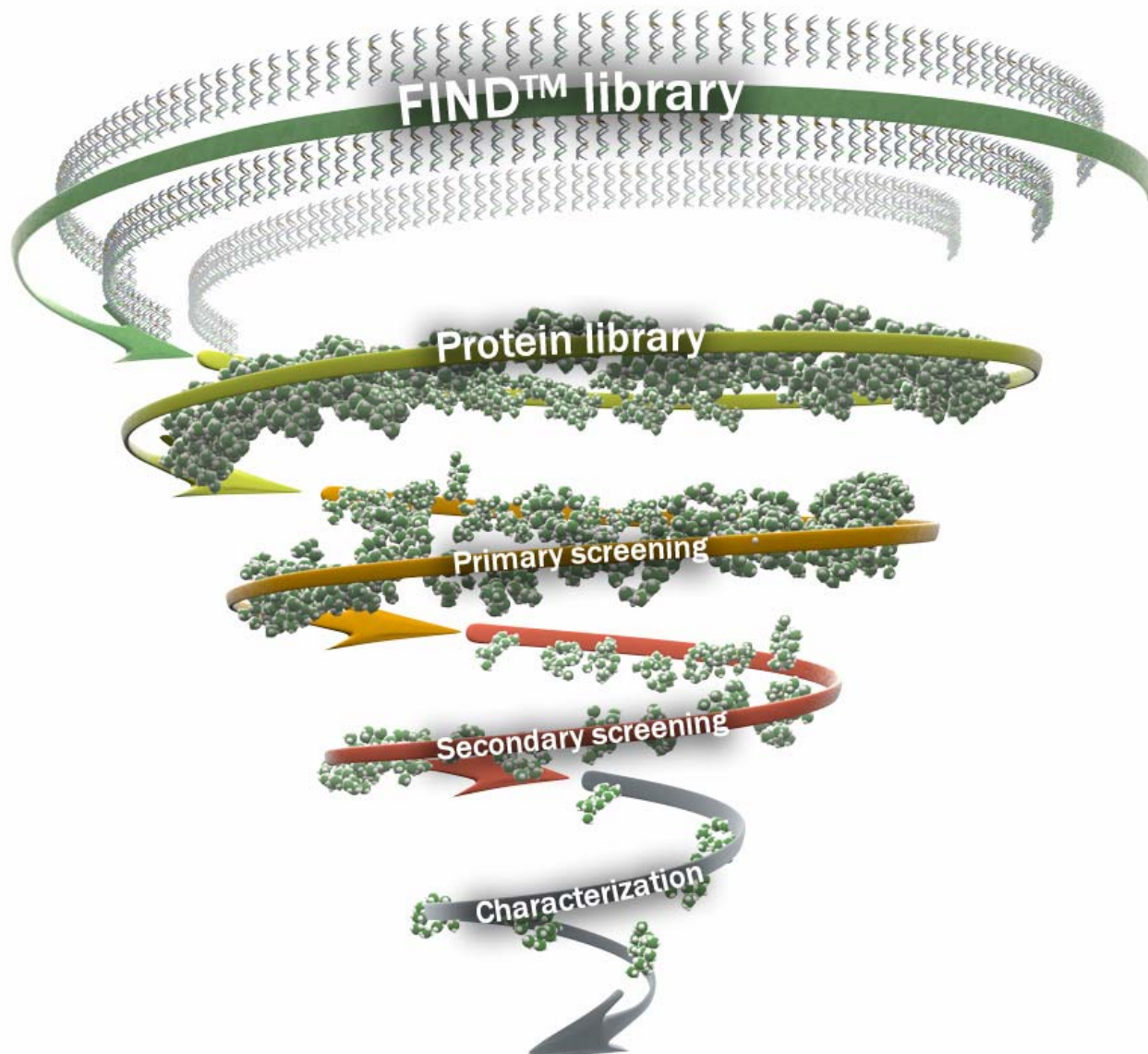


How we work

PROTEIN PROPERTIES THAT CAN BE MODIFIED

- Affinity
- Activity
- Biological activity
- Longer biological half-life
- Stability
- pH optimum
- Specificity
- Reduced immunogenicity
- Reduced side effects





Projects

CUSTOMERS AND PARTNERS





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Conclusions

- ✓ Academic research can be combined well with commercialization
- ✓ Commercial “awareness” is growing among scientists
- ✓ “Läraryrket” should be kept
- ✓ The tech-transfer infra-structure is strong at Lund University

The logo features the word "CREATE" in a bold, dark blue, sans-serif font, with a large, stylized "C" on the left. Below "CREATE" is the word "Health" in a dark blue, italicized serif font. The text is centered within a light gray, irregular, textured shape that resembles a cell or a cluster of cells.

CREATE
Health

Clinical Cancer Research
using Emerging Advanced Technologies for
Health





Strategic Center for
Clinical Cancer Research

Mission and Vision:

- To create an integrative approach to solve complex clinical problems, by developing novel techniques - "from bedside to bench and back again"
- To create a substantial social impact for the patient through direct application of research for selection of an optimal, individually-based, cancer treatment





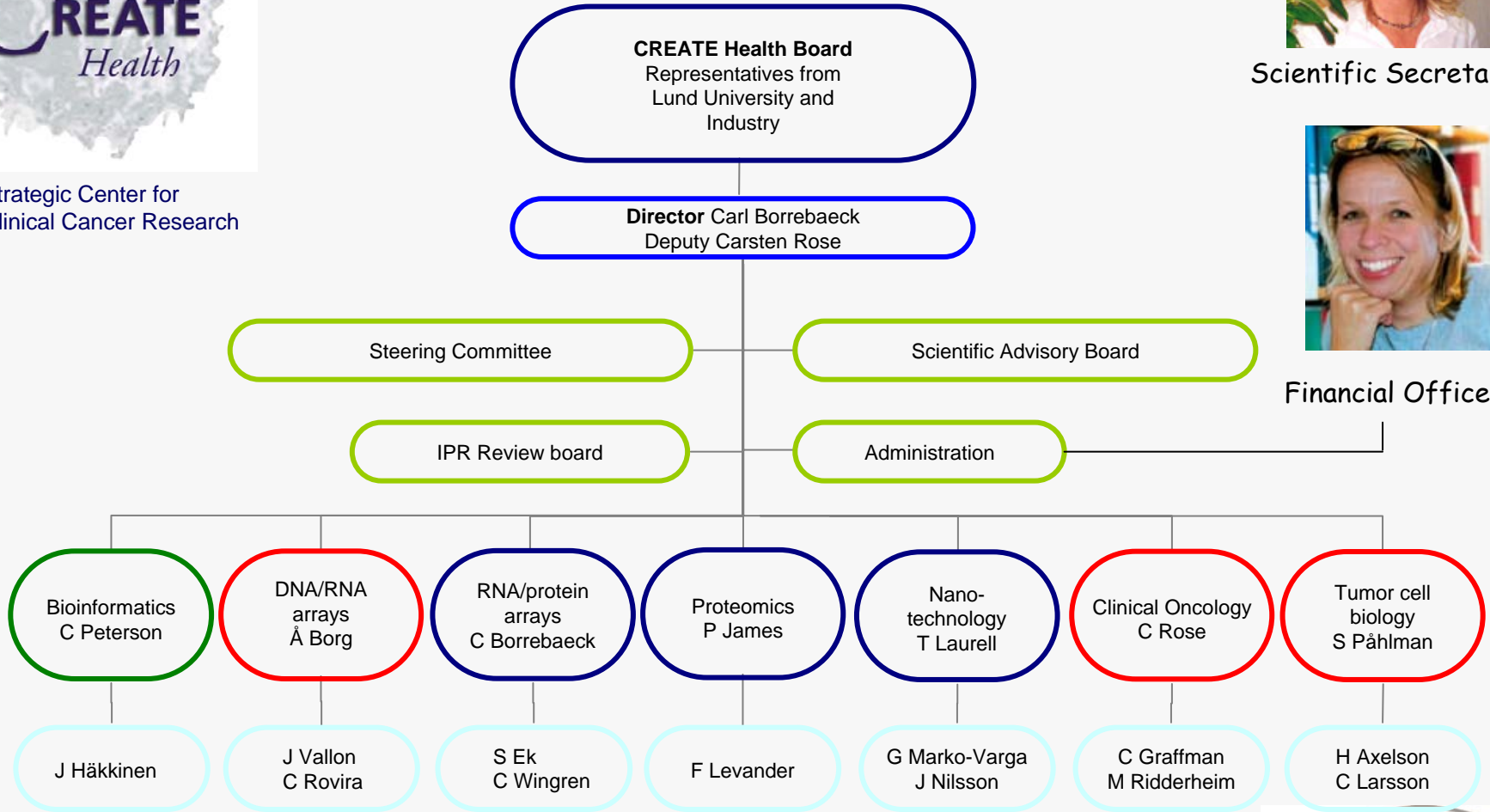
Strategic Center for
Clinical Cancer Research



Scientific Secretary



Financial Officer





Strategic Center for
Clinical Cancer Research

- Research and Development

Clinical focus

- To associate specific gene and/or protein signatures with**
 - ✓ *Treatment induced drug resistance*
 - ✓ *Treatment response & optimization*
 - ✓ *Tumor relapse & survival time*

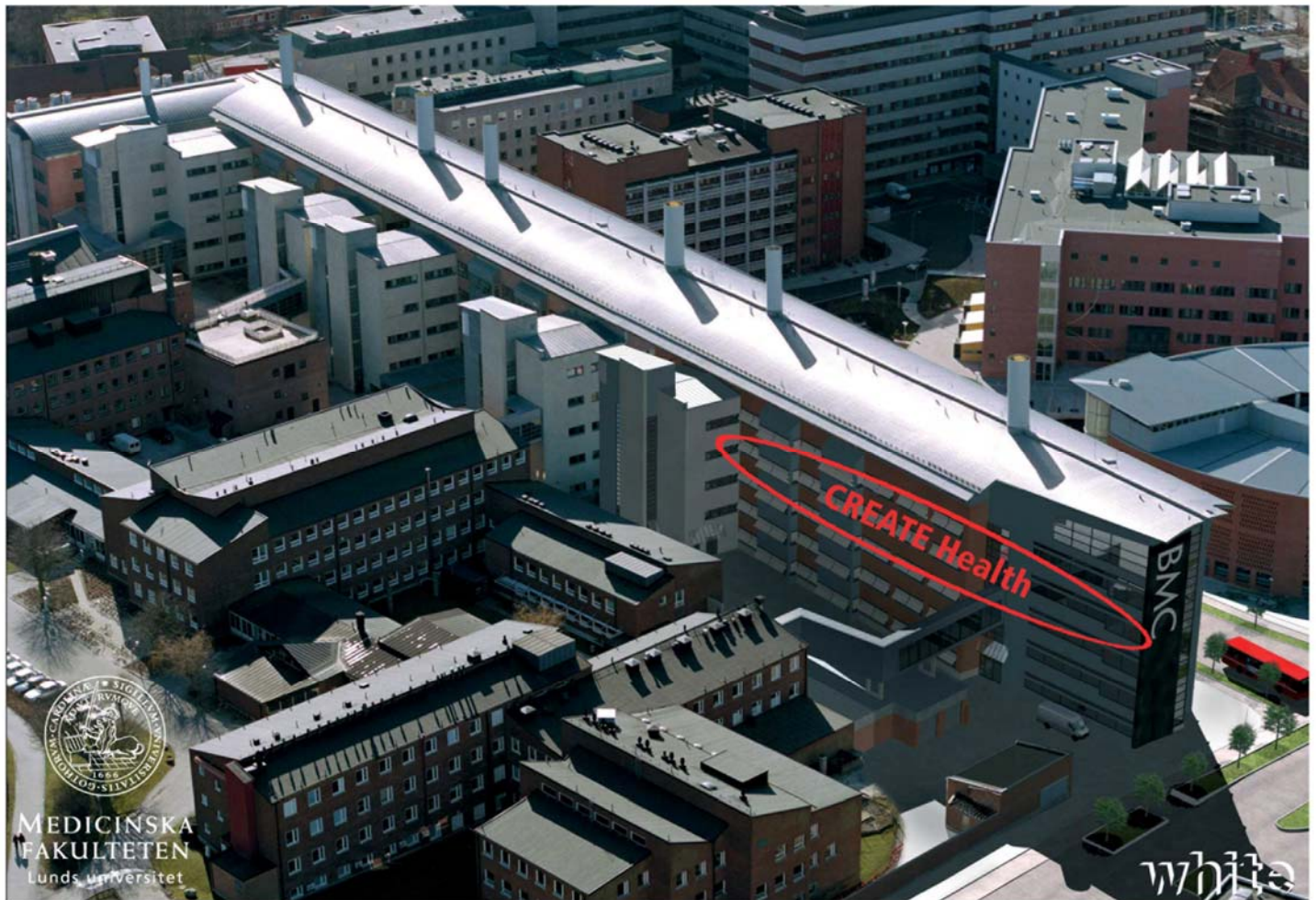
- To identify novel targets for antibody-based therapy**





- Localization

Strategic Center for
Clinical Cancer Research



Department of Immunotechnology



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