



**SVENSKT NÄRINGSLIV**

CONFEDERATION OF SWEDISH ENTERPRISE

**Forskningsssamverkan akademi – näringsliv**

Maria Anvret Prof, PhD, FRCPath

Senior Executive Scientific Expert and Advisor

2009 03 10

# Knowledge Transfer

- Do we need to take a broader view on knowledge transfer?
- Do we need new models for knowledge transfer in order to reflect demands and needs?
- Are there enough and good incentives for knowledge transfer?
- Are there different attitudes and cultures?
- Are there different reasons for making contact?
- Are there enough knowledge around IPR? When is it good to have? When is it a prerequisite?

# Knowledge Transfer and Co-operation

- Start-ups, licensing and research projects in collaboration
- Large companies versus SMEs
- Commercialization and knowledge transfer – external income for the universities
- Different incentives for researchers and companies
- Different agendas

# Knowledge Transfer and Companies

- Size distribution of Swedish companies:

- 99.9 % are SME
- 0.1 % are large

80% of R&D

- Knowledge transfer – from the SME perspective:

- Big interest from SMEs to get access to universities
- Different needs and demands
- The simple way for knowledge transfer which can make a difference for SMEs is low risk, non-financial interactions with short term return
  - Students – PhDs, BScs
  - Networking, meetings and conferences
  - Joint research projects – sharing
- Respect and ignorance

# Knowledge Transfer, Co-operation and Commercialization

- Strategic areas
  - University
  - Industry
- Innovation offices
  - Seven + one universities
  - Collaborations
- Holding companies
  - Focus
  - Start-ups
  - Collaboration
- Research institutes
  - Large companies and SMEs
- Other models for knowledge transfer/commercialization

# European Innovation Scoreboard 2008

- Overall innovation
  - 29 indicators covering 7 dimensions of innovation
- Three main blocks
  - Enablers
  - Firm activities
  - Outputs
- Enablers
  - Human resources
  - Finance and support
- Firm activities
  - Firm investments
  - Linkages & entrepreneurship
  - Throughputs
- Outputs
  - Innovators
  - Economic effects

# European Innovation Scoreboard 2008

- Switzerland, **Sweden**, Finland, Germany, Denmark and the UK are the **Innovation leaders**, with scores well above that of the EU27 and all other countries.
- Austria, Luxembourg, Ireland, France, Belgium and the Netherlands are the **Innovation followers**, with scores below those of the innovation leaders but equal to or above that of the EU27. Austria is close to moving from the innovation followers to the innovation leaders.
- Cyprus, Estonia, Slovenia, Iceland, Czech Republic, Norway, Spain, Portugal and Italy are the **Moderate innovators** with scores below that of the EU27, except for Cyprus. Recent improvements in innovation performance for Cyprus, Estonia, Slovenia and Iceland suggest that these countries could move to the innovation followers in the near future.
- Malta, Greece, Hungary, Slovakia, Poland, Lithuania, Romania, Latvia, Bulgaria and Turkey are the **Catching-up countries**. Although their scores are significantly below the EU average, these scores are increasing towards the EU average over time with the exception of Greece and Lithuania.
- Independent expert analysis of developments in national innovation policies and governance, building on independent country reports, was published in the Innovation Progress Report 2008, which is available on the internet site of the PRO INNO initiative (<http://www.proinno-europe.eu/metrics>)

# Improve Knowledge Transfer

- Universities

- Complement the current model with a broader perspective
  - Make up-to-date information on research, research groups and collaborations available on-line
  - Create a good knowledge management system for handling research information – of strategic importance for universities
- Develop IPR strategies

- Companies

- Be more active in seeking interactions. Shared responsibility
- Take the time to visit and give lectures at universities – open up for contacts and recruitment
- Living labs
- Accept undergraduates and graduates for BScs, PhDs and projects – make a big difference for SMEs by bringing in new thinking and knowledge
- Don't have too much respect – unnecessary barrier

- Government

- Governance of knowledge transfer (education, research, innovation)
- Competition based university funding system should take into account a broad nature of the concept knowledge transfer, not only the financial parts
- Output indicators have to be developed, implemented and applied
- Facilitate for SMEs to access research results from universities



# Knowledge Transfer

- We do need to take a broader view on knowledge transfer
- Current knowledge transfer models need to be complemented
  - To better reflect needs and demands
- Yes there are different cultures and attitudes
- Yes there are different reasons for making contact
- More and better incentives for knowledge transfer are needed
- Better understanding of IPR