

The Swedish Life Science Industry Organization  
**swedenBIO**

# Sweden – the Country of Life Science

BioPartnering Europe October 2011

You can download this presentation at  
<http://www.swedenbio.se/en/Press/SwedenBIO-Press-Room/Documents/>

The Swedish Life Science Industry Organization **swedenBIO**

“ ...working for a strong life science industry that contribute to healthier life, create jobs and build prosperity for the future ... ”

Meet SwedenBIO at BioPartnering Europe:

**Dr Johan Järte**  
 CEO  
[johan.jarte@swedenbio.com](mailto:johan.jarte@swedenbio.com)  
 +46 70 652 45 32

**Dr Jonas Ekstrand**  
 Senior Manager Business & Finance  
[jonas.ekstrand@swedenbio.com](mailto:jonas.ekstrand@swedenbio.com)  
 +46 70 302 08 96

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SwedenBIO Mission and Strategy **swedenBIO**

- ✓ **Improve** the conditions for the Life Science industry in Sweden
- ✓ **Promote** industry competence and network
- ✓ **Educate** the public, decision makers and media on how Life Science can improve quality of life and contribute to society

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About SwedenBIO **swedenBIO**

- ✓ Close to 200 member companies with > 20.000 employees
  - ✓ 42% less than 10 employees
  - ✓ 34% more than 10 employees
  - ✓ 24% service providers
- ✓ From Start-Ups to Big Pharma
- ✓ Founded 2002
- ✓ The only national organisation
- ✓ Close collaboration with regional BIO-organisations and related national organisations as well as EuropaBIO and BIO (US)

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Sweden - a world leader in research and development **swedenBIO**

- ✓ Highest R&D spending in the OECD
- ✓ Third most patents in the world
- ✓ Most innovative country in the world
- ✓ A strong innovative power and innovation-driven economy

Maria Strömme, Professor of nanotechnology

Håkan Lans, Swedish investor in computer technology

Arvid Carlsson, Nobel Prize winner in physiology or medicine

Mathias Uhlen, Professor of microbiology

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A strong tradition in science and engineering **swedenBIO**

Celsius  
 The temperature scale

Scheele  
 Oxygene, Chlorine

Ericsson  
 The propeller

Johansson  
 The adjustable wrench

1700
1800
1900

Linnæus  
 The binominal nomenclature

Berzelius  
 The father of modern chemistry

Nobel  
 Dynamite and 359 other patents

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**Innovation paved the ground for today's Life Science Industry**

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- ✓ **Xylocain™**, local anesthetics (Astra) 1943
- ✓ **L-dopa** (Arvid Carlsson) 1958
- ✓ **Aptin™**, non-selective betablocker (Astra) 1967
- ✓ **Omnipaque™**, nonionic x-ray contrast medium (Nyegaard) 1970s
- ✓ **Bricanyl™**, selective beta 2 agonist (Astra) 1970s
- ✓ **Thromboxanes**, (Bengt Samuelsson, Hans Bergström) 1975
- ✓ **Pulmicort™**, corticosteroid (Astra) 1980s
- ✓ **Fragmin™**, low-molecular-weight heparin (Pharmacia) 1980s
- ✓ **Genotropin™**, human growth hormone (KabiVitrum and Genentech U.S.) 1987
- ✓ **Losec™/Prilosec™**, anti-ulcer medicine (Astra) 1988
- ✓ **Piendil™**, calcium antagonist (Astra) 1988
- ✓ **Refacto™**, recombinant factor VIII (Biovitrum, Wyeth) 1990s
- ✓ **Xalatan™**, prostaglandin analog (Pharmacia) 1990s
- ✓ **Nexium™**, proton pump inhibitor (AstraZeneca) 2000
- ✓ **Xerclear®/Xerese™**, cold sores (Medivir) 2000s




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**Research built the Swedish Life Science Industry**

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- ✓ Unique teacher's exemption (lärarundantaget)
- ✓ Symbiotic relationship between Swedish academia and industry drives entrepreneurship
- ✓ Selected Swedish Medtech innovations:
  - ✓ Ventilator (Engström)
  - ✓ Pacemaker (Elema Schönander)
  - ✓ Dialysis (Gambro)
  - ✓ Radiation therapy and radiosurgery (Elekta)



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**Life science - a key industry in Sweden with a great potential to expand further!**

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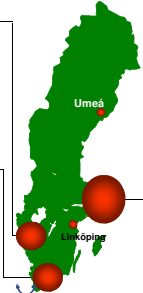
- ✓ Sweden is a Life Science country!
  - ✓ 4th place in Europe and 9th in the world of Life Science companies
  - ✓ + 38% employment in the Life Science industry 1997 to 2009
  - ✓ A robust, diverse and at all phases pipeline with 250 ongoing clinical trials
  - ✓ 0.7% of the global pharmaceutical industry, by 1.4 % of the world's population
- ✓ Approx 20% of Swedish net export
  - ✓ 1983: 400 (SEK million)
  - ✓ 2007: 35 000 (SEK million)
- ✓ World leading companies
  - ✓ AstraZeneca
  - ✓ Gambro
  - ✓ Phadia
  - ✓ GE Healthcare (f. Amersham Biosciences)




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**Top Three Swedish Life Science Clusters - In Close Proximity to Major Universities**

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**Gothenburg**

- 17 percent of Swedish Life Science companies

<b>Academia</b>	<b>Companies</b>
• Göteborg University	• AstraZeneca
• Sahlgrenska	• Cellartis
• Chalmers	• VitroLife
	• Nobel Biocare

**Lund - Malmö**

- 20 percent of Swedish Life Science companies
- Swedish part of Medicin Valley

<b>Academia</b>	<b>Companies</b>
• Lund University	• Active Biotech
• Malmö University	• Alligator
	• Bioinvent
	• Cellavision

**Stockholm - Uppsala**

- 54 percent of Swedish Life Science companies
- Major players in Uppsala, Stockholm and Södertälje-Strängnäs

<b>Academia</b>	<b>Companies</b>
• Karolinska Institute	• AstraZeneca
• Uppsala University	• GE Healthcare
• Stockholm University	• Pfizer
• Biovitrum	• Affibody
• Gyros	• Biovitrum
• Royal Institute of Technology (KTH)	• Karo Bio
• SLU	• Medivir
	• Neuronova
	• Orsso
	• Phadia
	• Q-Med

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**Save the Date !**

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**Life Science Investment Day Scandinavia**

**Malmö, Sweden, March 27, 2012**




[www.swedenbio.com/Life-Science-Investment-Day-Scandinavia](http://www.swedenbio.com/Life-Science-Investment-Day-Scandinavia)

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**Welcome to Stockholm!**

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**Tentative location of BioPartnering Europe 2014 or 2015**

For more information about Sweden and Stockholm, please see [www.swedenbio.se](http://www.swedenbio.se) who also helped out with some of the pictures