

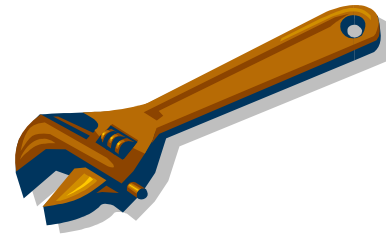
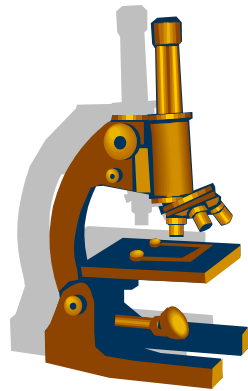
Interactions between academia and the pharmaceutical industry

Some experiences on understanding
the other side

Per J. Kraulis

Academia and Industry

- Pharmaceuticals, medicine, biotech
- In general: Good relations
- Last 10-15 years: Growing closer
- Many opportunities for collaboration



My background

- 1994-2000 Pharmacia & Upjohn
 - Drug discovery, target characterization
- 2000-2003 Stockholm University
 - Stockholm Bioinformatics Center
- 2003-2005 Biovitrum
 - Drug discovery, bioinformatics

Discovery Research

- Identification of potential drug target
 - Bioinformatics
 - Functional genomics
- Validation in disease model
- Identification of lead compounds
- Compound optimization
- Clinical aspects: limited experience



Collaboration experience

- Service for fee
- Consultant
- Academic project, company aspect
- Joint project

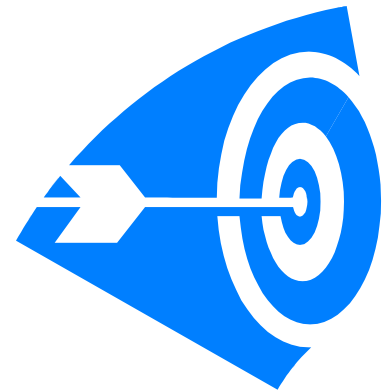


Advice and remarks

- To the academic considering entering a collaboration with a company
- Main focus: What can go wrong?
 - And how to avoid it
 - I am not sceptical about collaborations!

Collaboration? Consider...

1. Company goals vs. academic goals
2. Time frame of project
3. Company decision making
4. Legal aspects: contracts



Academia vs. Industry: Different ultimate goals!

- Academia
 - Knowledge
 - Publication
 - Grants, support
 - New research
- Industry
 - Information
 - Products
 - Sales
 - Market share
 - Share price
 - Profit

Collaboration: What does it mean?

- Many different variants
 - Service for fee
 - Purchase material/knowledge
 - Consultant
 - True joint project
 - ...
- Watch out! Avoid misunderstandings



Make expectations clear!

- Unstated expectations: source of conflict
- Dialog needed for understanding
- State requests clearly from start
 - Not: "I need X. Now I need Y... And Z..." *(JL)*
- Is the collaborator honest about goals?

Dialog essential

- What does the other party want?
- Discuss foreseeable problems
 - Publication
 - Failure
 - Quitting prematurely
 - ...



What do you want?



- Money
 - Support, payment, consultant
 - Salary for lab staff
- Resources
 - Access to machines, methods
 - Materials, samples
 - Expertise, network
- Results, data
- Publications

What does the company want?

- Service for fee
- Resources
 - Information
 - Access to methods
 - Expertise, network
 - Samples, materials
- Development of idea or method
- Goodwill, PR
 - Access to expertise, network



Shorter collaboration

- Time frame: weeks, months
- Well-defined task and result
- Simple agreement may work
 - Written (one page, email)
- If recurrent: Draw up contract

Longer collaboration 1

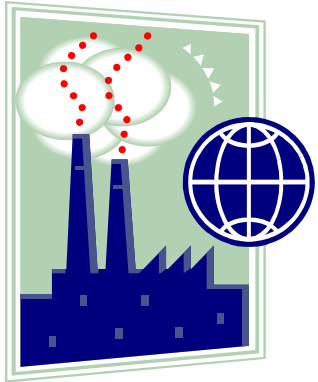
- Time frame: years
- Dialog to understand expectations
 - Non-Disclosure Agreement
 - Disclose awkward data
- Build trust: initial pre-project?

Longer collaboration 2



- Contract essential, and difficult
- Verbal agreement not good enough!
- Define:
 - Goals, milestones
 - Management
 - Ownership
 - Data and results
 - Methods
 - Publication policy

Time frames in industry



- Depends on company situation
 - Profitable, stable, large: longer
 - Startup, no product, small: shorter
- Usually < 3 years
 - Problem for Ph.D. student projects
- May change drastically
 - Change of focus
 - Adverse events

Company decision making

- Who negotiates for the company?
- Who signs the contract?
- Formal company contact
 - Committee or person?
 - Responsibilities and powers?
- Real company contact
 - Trust



The reality of company decision making

- Companies are not monoliths
- There are conflicts in companies
- Company policy may change abruptly
 - New CEO or CSO
 - Internal problems
 - Project failure
 - External pressure
 - Competition



Plan for change

- Minimize the risks of collaboration
 - Get payments in parts during lengthy project
 - Plan how to stop the project
- The contract: your safety net
 - Forces the discussion
 - Talk things through first, then agree
 - For "bad weather conditions"
 - But: reputation may be more important

Contracts are important

- Professional legal advice
 - Within University?
 - Consultant
- Standard contracts
- Help from other academics
- Friendly agreement: may work...

