IP Teaching in Science and Engineering Faculties

3rd Annual Meeting of the European Intellectual Property Teachers' Network

Queen Mary University of London

20 - 21 July 2009

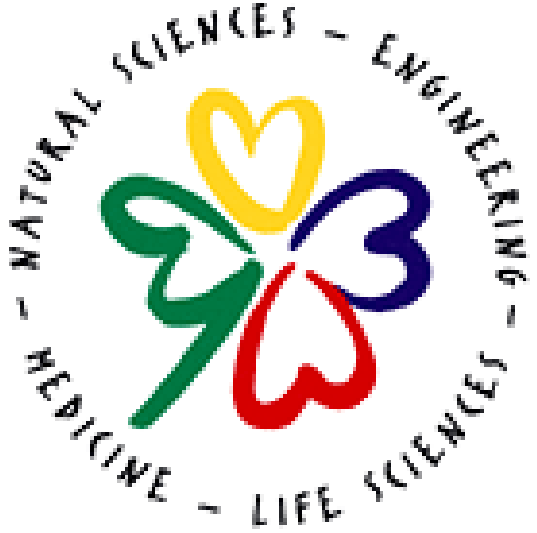
London

My background and my point of view:

- **natural scientist (not a lawyer!)**
- **working for a Technical University**
- **as a former researcher**
- **now as a Technology Transfer Officer**
- **and also as an Inventor Consultant**
- **one crucial personal experience…**

The Technische Universität München

- 13 faculties
- 23,338 students
- 18% students from abroad
- 3,616 teaching staff
- 2,962 non-academic staff



- total budget 2007: € 793.19 million
- research funding: € 179.1 million
- ø 116 Invention Reports per year
- ø 26 patent applications per year

TUM ForTe
Office for Research and Innovation

Research Support

- National / regional cooperative projects
- International / European cooperative projects
- Cluster projects (German Excellence Initiative)
- Office for young researchers

Research Database

- TUM Research Database
- Analyses (research)

in cooperation with:

- TUM Legal Office

Technology Transfer Industry Liaison Office

- Industry Liaison Office Centre for Knowledge Interchange (CKI)
- Patent and Licensing Office
- UnternehmerTUM GmbH: TUM's Entrepreneurship Centre
- gate: Garching Technology and Entrepreneur Centre

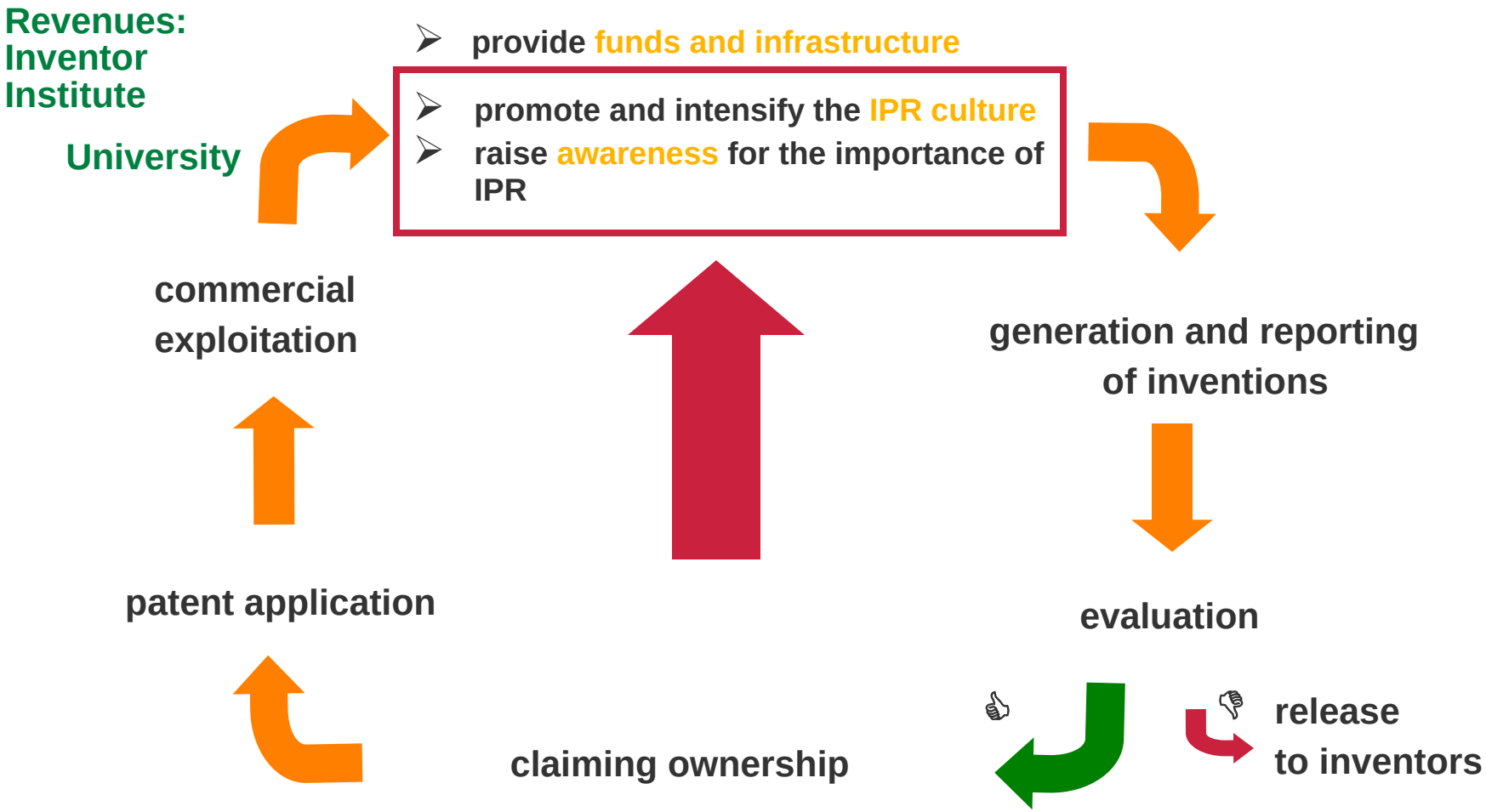
Technology Transfer and Universities

Primary role of universities:

- **Educate its students**
- **Generate knowledge through research: scientific, technological, professional, “meaning-giving” knowledge**
- **Ensure that knowledge developed on a public funded research base is utilised effectively for the benefit of economy and society**

All three missions have strong connections to IP issues!

Life cycle of an invention



The challenges

- **my personal experience: first contact to IPR system during my doctoral thesis**
- **students/Researchers (inventors) are key players in the generation, protection and commercial exploitation of IPR**
- **fail to recognize the potentials of their research results**
- **traditionally they concentrate on their academic responsibilities of teaching and research and on publishing**
- **lack knowledge of the legal and especially the IPR system and**
- **lack of entrepreneurial skills**

☠ Reasons for releasing inventions:
not new, no inventive step, no commercial application

What do we need?

- **A culture/environment that supports and encourages both invention disclosure and the inventor(s) participation in the technology transfer process**
- **A university patent strategy which includes information and training support**

⇨ There are many ingredients to create a culture which allows technology transfer to thrive

- **incorporate technology transfer issues into the curricula**
- **publicize success stories about how TT can have a positive impact on the persons and the institute**
- **facilitate access to technical information contained in patent documents to support research and development projects**
- **provide possibilities for students/researchers to learn both worlds (offer internships in patent offices/patent departments)**

Lessons (to be) learnt

- **Don’t start work without a contract - prioritise contract negotiations**
- **Define, document and secure (background) rights**
- **Consider IPR that is owned by students and that is maybe needed for your research**
- **Involve always (and at the earliest) the legal staff of your organization**
- **Don’t rely (only) on personal relationships**

Summary - Appeal

My very personal, ideal IPR lecture for students of a Technical university contains:

- **IPR issues**
- **Technology Transfer examples (best cases!)**
- **other Legal issues (e.g. Civil Law, contract governing issues etc.)**
- **business elements (e.g. issues of spin-off and start-up companies)**

Thank you for your attention!

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