IP Teaching in Science and Engineering Faculties

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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
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

- provide funds and infrastructure
- promote and intensify the IPR culture
- raise awareness for the importance of IPR

Revenues:
- Inventor
- Institute

University

- commercial exploitation

patent application

- claiming ownership

generation and reporting of inventions

evaluation

release to inventors

Dr. Alexandros Papaderos  TUM ForTe  Patent and Licensing Office
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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