

Needs Analysis & Benchmarking

IP management good practices at universities需求分析和基准化:

高校知识产权管理的良好做法
Managing IP at universities. From IP awareness building to commercialization of research results

大学知识产权管理: 从知识产权意识建设到研究成果商业化 Southwest University, Chongqing, China 西南大学,中国重庆 Online Event - 11 December 2020 在线活动 2020年12月11日

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OPnet is co-financed by the European Commission through the Erasmus+ Programms, under contract number 586103-EPP-1-2017-1-PL-EPPKA2-CBHE-IP. The contracts of this publication reflect only the views of the authors, and the European Commission cannot be



Overview 提纲/总览

- Objectives of Needs Analysis & Benchmarking Activities需求分析和基准活动 ✓ 的目标
- ▶ Analysis of the level of IP awareness and use of IP tools within CN HEIs 分析中国高校知识产权意识水平和知识产权工具的使用
 - ✓ Objective & work methodology目标与工作方法
 - ✓ Main results & findings主要结果与发现
 - ✓ Conclusions结论
- Benchmarking of TT&IP good practices 技术转化&知识产权的良好实践基准
 - ✓ Objective & work methodology目标与工作方法
 - ✓ EU & CN Good practices欧盟和加拿大的良好实践







Objectives of Needs Analysis & Benchmarking Activities

需求分析和基准化的目标



Objectives目标



- to **analyse** the current status of:分析现状
 - IP and TT practices 知识产权和技术转化实践
 - TTO structures and related knowledge and skills within CN HEIs中国高校内部技术转化办公室的结构和相关知识与技能
- to benchmark EU-China experiences中欧经验基准化



for defining critical project implementation aspects
(workshops, materials, Network development..)
用于界定项目实施的关键方面
(工作坊,材料,网络开发..)





Analysis of the level of IP awareness and use of IP tools within CN HEIs

分析中国高校的知识产权意识和知识产权工具的使用



Objective & work methodology目标与工作方法



- <u>Objective</u>: to carry out a survey on **IP & TT within Chinese HEIs**, with a special focus on **TTO and researchers**, in order to asses the starting point of the network activities, define areas of improvement/training and detect existing good practices.目的:对中国高校进行知识产权和技术转化的调查,特别关注技术转化办公室和研究人员,以评估网络活动的起点,界定改进/培训领域并发现现有的良好做法。
- Responsible: University of Alicante 负责机构: 阿利坎特大学
 - Work methodology:工作方法
 - Development of Analysis Methodology (guidelines & questionnaire) 分析方法(指南和问卷)
 - Preparation of the survey (paper-based)<u>准备调查问卷(纸质)</u>
 - Survey translation to Chinese by CN partner 中国合作伙伴将调查问卷翻译成中文
 - Dissemination of the survey through formal and informal channels (e-mail, WeChat and QQ instant messaging software service)通过正式和非正式渠道(电子邮件,微信和QQ)传播调查问卷
 - **Data collection** from identified HEIs relevant staff (TTO leaders/managers and researchers...) within CN partners and other CN HEIs<u>从中国合作伙伴和其他高校中确定的相关人员(技术转化办公室/研究人员...)收集数据</u>
 - Consolidation of information, analysis of the results and preparation of Report on the level of TT&IP
 Awareness and training needs整合信息,分析结果并准备有关技术转化&知识产权意识和培训需求的
 报告

Main results & findings: geographical area, number & type of respondents 主要结果与发现:地域、接受调查人数与类型



- Geographical area: the questionnaires were distributed to HEIs located in:
- 地理区域:问卷已分发以下区域的高校:
 - Beijing-Tianjin-Hebei region<u>京津冀地区</u>
 - Yangtze River Delta region<u>长三角地区</u>
 - Chongqing<u>重庆市</u>
 - Zhanjiang<u>湛江</u>
- Number & type of respondents:接受调查人数和类型
 - Responses from **86 CN HEIs**来自中国**86**所高校
 - **180** respondents: **180**名接受调查人员
 - 89 Technology Transfer leaders/managers 89名技术转让负责人
 - 91 researchers 91名研究人员



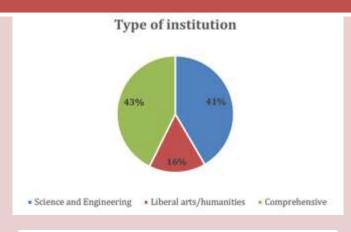
Main results & findings: type & level of the institution

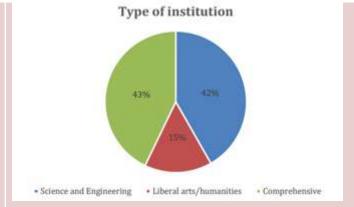
主要结果与发现: 机构类型与水平

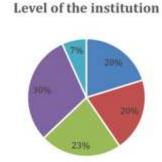


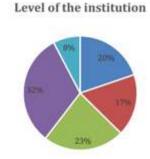


Researchers研究人员











Main results & findings: TT environment 主要结果和发现: 技术转让的环境



Technology Transfer leaders/managers 技术转让负责人/经理

- 79% of the investigated universities have a Technology Transfer Office or a functional department similar to a TTO
- 92% have a department or office for IPR management
- Most of them have intellectual property management policies
- 被调查大学中有79%设有技术转让办公室或类似于技术转让的职能部门
- 92%拥有负责知识产权管理的部门或办公室
- 他们大多数都有知识产权管理政策

Researchers研究人员

- 71% of the investigated universities have a Technology Transfer Office
- 84% have a department or office for IPR management
- Most of them have intellectual property management policies.
- 被调查大学中有**71**%设有技术转让办 公室
- 84%的人拥有知识产权管理部门
- 他们中的大多数都有知识产权管理政策。

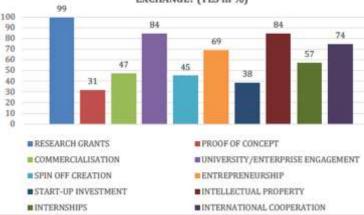
Main results & findings: Strategy主要结果与发现:策略



<u>Technology Transfer leaders/managers</u> <u>技术转让负责人/经理</u>

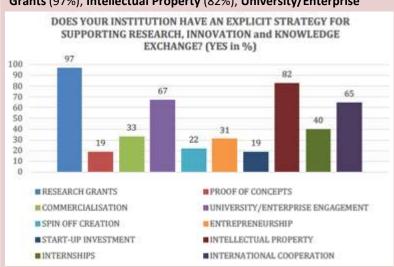
Researchers 研究人员

In most of the institutions an explicit strategy for supporting Research Grants (99%), University/enterprise Engagement (84%), Intellectual Property (84%), International Cooperation (74%) and Entrepreneurship (69%) is in place. More than half of institutions DOES YOUR INSTITUTION HAVE AN EXPLICIT STRATEGY FOR SUPPORTING RESEARCH, INNOVATION and KNOWLEDGE EXCHANGE? (YES in %)



However, in terms of Commercialisation (47%), Spin-off creation (45%), Start-up Investment (38%) and Proof of Concept (31%), less than half of the institutions surveyed have an explicit strategy.

In most of the institutions an explicit strategy for supporting **Research Grants** (97%), **Intellectual Property** (82%), **University/Enterprise**



In terms of Internships (40%), Commercialisation (33%), Entrepreneurship (31%), Spin-off Creation (22%), Start-up Investment (19%) and Proof of Concept (19%), less than half of the institutions surveyed have an explicit strategy.



Main results & findings: Indicators

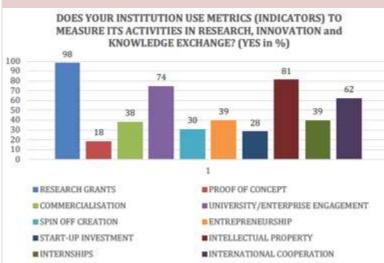
主要结果和结果: 指标



Technology Transfer leaders/managers 技术转让负责人

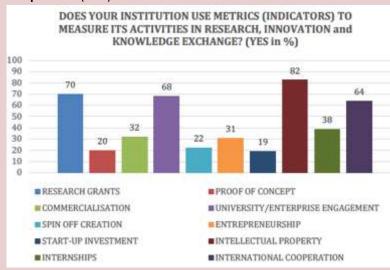
Researchers 研究人员

Most institutions have adopted relevant indicators for measuring their activities in Research Grants (98%), Intellectual Property (81%), University/Enterprise Engagement (74%) and International Cooperation (62%).



In terms of Internship (39%), Entrepreneurship (39%), Commercialisation (38%), Spin-off creation (30%), Start-up Investment (28%) and Proof of Concept (18%), less than half of the institutions have adopted indicators for measuring their activities.

Most institutions have adopted relevant indicators for measuring their activities in Intellectual Property (82%), Research Grants (70%), University/Enterprise Engagement (68%) and International Cooperation (64%).



In terms of Internship (38%), Commercialisation (32%), Entrepreneurship (31%), Spin-off Creation (22%), Proof of Concept (20%) and Start-up Investment (19%) less than half of the institutions have adopted indicators for measuring their activities.



Conclusions结论



- TTO leaders/managers and researchers have recognised the importance of IP management and technology transfer and have clearer understanding of IP and Technology Transfer environment compared to researchers.与研究人员相比,TTO领导者/管理者和研究人员已经认识到知识产权管理和技术转让的重要性,对知识产权和技术转让环境有了更清晰的了解。
 - Researchers have their core competitiveness in funding of R&D projects, preparing research project proposals and international cooperation but need more knowledge and pragmatic skills in technology transfer研究人员在资助研发项目、编制研究项目提案和国际合作方面具有核心竞争力,但在技术转让方面需要更多的知识和实用技能
 - Further training on research evaluation, exploitation and commercialization, how to translate your research to market, spin-off creation, patent writing, business incubation and creation of incubators sector is needed by researchers.研究人员需要进一步培训研究评估、开发与商业化、如何将研究推向市场、分拆创造、专利写作、企业孵化和孵化器部门的创建。
 - In order to provide more professional services to researchers, TTO managers and leaders need training in topics such as technology audit, commercialization and business incubation.为了向研究人员提供更专业的服务,TTO 经理和领导者需要接受技术审计、商业化和业务孵化等主题的培训。
 - TTO leaders and managers are mainly engaged in administrative work and lack complex knowledge and practical experience that professional technology transfer requires → Professionalisation of TTO leaders and managers is highly requested. TTO领导和管理者主要从事行政工作,缺乏复杂的知识和实践经验,专业技术转让需要图对TTO领导和经理的专业化要求很高。
 - In terms of metrics (indicators) to measure activities in research, innovation and knowledge exchange, indicators for measuring proof of concept, spin-off creation, entrepreneurship and start-up investment should be developed and improved.在衡量研究、创新和知识交流活动活动的指标(指标)方面,应制定和改进衡量概念证明、分拆创造、创业和创业投资的指标。
 - The **incentive mechanisms** for researchers involved in Technology Transfer or Knowledge Exchange at colleges and universities still needs **to be improved**.高校参与技术转让或知识交流的研究人员的激励机制仍需要改进。
 - The current activities supporting research and innovation and the training supporting technology transfer and intellectual property management are too theoretical. 目前支持研究和创新的活动以及支持技术转让和知识产权管理的培训活动过于

Report on the level of TT & IP awareness and training needs

有关技术转让和知识产权意识和培训需求的报告







技术成果转化水平和知识产权意识

及培训需求报告

REPORT ON THE LEVEL OF TECHNOLOGY TRANSFER AND INTELLECTUAL PROPERTY AWARENESS AND TRAINING NEEDS

D1.1.2

网站 Project website (Resources -> Publications)

www.cipnet.eu/tt-ip-resources/publications







Benchmarking of TT&IP good practices 技术转让&知识产权良好实践基准化

Objective & work methodology目标与工作方法



• <u>Objective</u>: identify already existing **TT&IP** good practices in **EU & CN** HEIs that could be replicated by the members of the network. <u>目标:确定欧盟和中国高校已经存在的技术转让与知识产权的良好实践,知识产权管理网络成员可以借鉴。</u>

Responsible: University of Alicante负责人: 阿利坎特大学

- Work methodology:工作方法:
 - Development of Benchmarking Methodology Guidelines, case study template & Questions for face-to-face interviews 制定基准测试方法指南,案例研究模板和用于面对面访谈的提纲
 - Selection of 14 Chinese HEIs (out of the consortium) to benchmark with.
 选择14个中国高校(联盟意外)
 作为基准。
 - Conducting face-to-face interviews to collect relevant information (14). 进行面对面的访谈以收集相关信息(14)。
 - Preparing 14 national case studies<u>准备14个国家案例研究</u>
 - Submission of 3 case studies by EU partners<u>欧盟合作伙伴提交了3个案例研究</u>
 - Consolidation of information & preparation of benchmarking report.<u>整合信息并准备基准报告。</u>



Methodology方法论



- The Good practices Guide for TT&IP management in HEIs includes 18 good practices identified during the interviews conducted by Chinese partners and those detected at EU partners that could be implemented by Chinese HEIs.
 - 高校技术转让和知识产权管理的良好实践指南包括18个在中国合作伙伴进行的访谈中确定的 良好实践,以及在欧盟合作伙伴中发现的可以由中国高校实施的良好实践。

The identified good practices have been presented in a reader-friendly format and using a transparent structure that includes a **short description** of the case study, an **introduction of the HEI** and information allowing to establish the **context** of the good practice (background), the **main outcomes achieved** as a result of the good practice (achievements), **awards** received and the **positive impact** on the target groups and final beneficiaries.

所确定的良好实践以易于阅读的方式呈现,并使用透明的结构,其中包括案例研究的简短说明,高校介绍以及可以建立良好实践环境(背景)的信息,主要是通过良好做法(成就)取得的成果,获得的奖励以及对目标群体和最终受益者的积极影响。



EU partners good practices欧盟合作伙伴的良好实践

	harmon Secretarian Mark Mark Store			
	Jagiellonian University 雅盖隆大学	University of Alicante 阿里坎特大学	Maastricht University 马斯特里赫特大学	
Name 名称	Proof of concept grants	ua:emprende	Chemelot InSciTe-Biomedical Accelerator Matrix	
Description描述	Small grants (up to 25,000 EUR) for development of promising research results which are susceptible to industrial application 小额资助(高达 25000 欧元),开发容易被工业应用前景看好的研究成果	Institutional program that supports and encourages entrepreneurship at the University of Alicante支持和鼓励阿利坎特大学创业的机构计划	A common IP guidelines framework driving re-engineered (university, industry and government) collaborations in the Limburg Province.在林堡省推动重新设计(大学、工业和政府)合作的共同知识产权准则框架。	
Achievements 成就	22 proof of concept projects for development of technologies from the Jagiellonian University have been financed 雅盖隆大学资助了22个技术开发概念项目	-Number of entrepreneurs advised: 500 -Number of entrepreneurs trained: 150 -Number of companies incubated: 36 -Number of spin-off companies created: 7 -建议创业者人数: 500人 -接受培训的企业家人数: 150人 -孵化公司数量: 36 -创建分拆公司的数量: 7	A young health technology validation unit (3 years of age) with 8 ongoing university-industry-government collaborative research programs in the fields of ophthalmology, cardiovascular disease and orthopaedics.一个刚成立不久的健康技术机构(3年),在眼科、心血管疾病和骨科领域有8个正在进行的"大学-行业-政府"合作研究项目。	
Impact 影响	The number of new results submitted to Centre for Technology Transfer has increased提交技术转让中心的新成果数目有所增加	Awareness raised and positive attitudes towards entrepreneurship promoted More spin-off and start-up companies coming out of the University of Alicante created. Employment created提高认识,提高对创业的积极态度 从阿利坎特大学更创建更多的分拆和	Governmental authorities and policy makers acknowledge the efficacy of the Biomedical Accelerator Matrix model 政府当局和决策者承认生物医学加速器矩阵模型的有效性	

CN partners good practices中国合作伙伴的良好实践

Cit part	iners good practices	I A I I I I I I I I I I I I I I I I I I		
Beijing Institute of Technology 北京理工大学	Renmin University of China 中国人民大学	Lingnan Normal University 岭南师范学院	Nankai University 南开大学	
Establishing Office of Industry, Education and Research Cooperation, and Local Research Institutes with local governments and industries in TT 与地方政府和工业界合作建立产业、教育与研究合作办公室以及地方研究机构	The technology transfer case study of Beijing Technology and Business University北京工商大学技术转让案例研究	Hebei University: Hebei University Science Park 河北大学:河北大学科技园	Baoding University: Knowledge transfer in the field of electronic commerce保定学院: 电子商务领域的知识转移	
A "Five-One" working system for technology transfer and intellectual property management 技术转让和知识产权管理的"五个一"工作系统	The technology transfer case study of Renmin University of China 中国人民大学技术转让案例研究	Shanghai Polytechnic University: Shanghai Collaborative Innovation Center for WEEE Recycling 上海理工大学:废弃物资源 化协同创新中心	Nantong University: Technology transfer system with three departments cooperation 南通大学:与三部门合作的技术转让系统	
	The technology transfer case study of Tsinghua University清华大学技术转让案例研究			



CN partners good practices 中国合作伙伴的良好实践



	Southwest University 西南大学	Chongqing Three Gorges University 重庆三峡学院	East China University of Political Science and Law华东政法大学
Good Practice of Research and Innovation & Technology Transfer at Baoshan University 保山学院研究与 创新和技术转让的良好实践		A Case Study of IP Training Base in Chongqing University of Technology重庆理工大学知识产权培训基地案例研究	Shanghai University of Electric Power: Good Practice of Research and Innovation & Technology Transfer in SUEP 上海电力大学: 研究与创新和技术转让的良好实践
	Good Practice of Research and Innovation & Technology Transfer at Southwest Medical University西南医科 大学研究与创新和技术转让 的良好实践	Southwest University of Political Science and Law: A Case Study on SUPSL's IP Practice Forum 西南政法大学知识产权实 践论坛案例研究	University of Shanghai for Science and Technology: Strategic Cooperation of TT & IP Management 上海理工大学技术转让和知识 产权管理的战略合作



Good Practices Guide for TT & IP management in HEIs

高校技术转让和知识产权管理的良好实践指南





GOOD PRACTICES GUIDE FOR TECHNOLOGY TRANSFER AND INTELLECTUAL PROPERTY MANAGEMENT IN HIGHER EDUCATION INSTITUTIONS

D1.2.3

网址Project website (Resources -> Publications)

www.cipnet.eu/tt-ip-resources/publications







Thank you!

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CPriet is co-financed by the European Commission through the Enames+ Programme, under context, number 596:193-EPP-1-2017-1-TH_EPPROZ-CBHE-IP. The contexts of this publication reflect only the views of the authors, and the European Commission cannot be held responsible for any use which may be made of the information context therein.